

## Division of Air Quality Permit Application Submittal

Please find attached a permit application for :

[Company Name; Facility Location]

- DAQ Facility ID (for existing facilities only):
- Current 45CSR13 and 45CSR30 (Title V) permits associated with this process (for existing facilities only):

• Type of NSR Application (check all that apply):

- ☐ Construction
- ☐ Modification
- ☐ Class I Administrative Update
- ☐ Class II Administrative Update
- ☐ Relocation
- ☐ Temporary
- ☐ Permit Determination

• Type of 45CSR30 (TITLE V) Application:

- ☐ Title V Initial
- ☒ Title V Renewal
- ☐ Administrative Amendment\*\*
- ☐ Minor Modification\*\*
- ☐ Significant Modification\*\*
- ☐ Off Permit Change

**\*\*If the box above is checked, include the Title V revision information as ATTACHMENT S to the combined NSR/Title V application.**

• Payment Type:

- ☒ Credit Card (Instructions to pay by credit card will be sent in the Application Status email.)
- ☐ Check (Make checks payable to: WVDEP – Division of Air Quality)

Mail checks to:  
WVDEP – DAQ – Permitting  
Attn: NSR Permitting Secretary  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304

**Please wait until DAQ emails you the Facility ID Number and Permit Application Number. Please add these identifiers to your check or cover letter with your check.**

• If the permit writer has any questions, please contact (all that apply):

☐ Responsible Official/Authorized Representative

- Name:
- Email:
- Phone Number:

☒ Company Contact

- Name:
- Email:
- Phone Number:

☒ Consultant

- Name:
- Email:
- Phone Number:

August 29 2024

Ms. Laura Crowder  
Director  
WV DEP – Division of Air Quality  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304  
[Laura.M.Crowder@WV.gov](mailto:Laura.M.Crowder@WV.gov)

*RE: Marion County Coal Resources, Inc. – The Marion County Preparation Plant  
R30 Renewal Application*

Dear Ms. Crowder:

Marion County Coal Resources, Inc. (MCCR) operates a coal preparation plant in Marion County, West Virginia (The Marion County Preparation Plant). The Marion County Preparation Plant currently operates in accordance with the terms and conditions of Title V Operating Permit R30-04900019-2020 effective March 17, 2020, and expiring March 3, 2025. In accordance with 40 CSR§30-4.1.a.3, MCCR is required to have submitted a complete Title V renewal application at least six (6) months prior to the date of permit expiration (i.e., not later than September 3, 2024). Please find enclosed the Title V Renewal application with the required attachments and forms, as specified in the Division of Air Quality's (DAQ's) General Instructions for Title V Renewal Permit Applications.

Should you have any questions on this renewal application, please do not hesitate to contact either me at 740-213-1884.

Sincerely,

MARION COUNTY COAL RESOURCES, INC.



Ryan Burns  
Manager, Permit Applications

# **MARION COUNTY COAL RESOURCES, INC**

## **R30 Renewal Application**

**Marion County Coal Resources, Inc. / The Marion County  
Preparation Plant**

**Prepared By:**

**TRINITY CONSULTANTS**

3601 Green Rd.  
Suite 102  
Beachwood, OH 44122  
(216) 278-0500

August 2024

Project 243602.0058



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## GENERAL APPLICATION FORM

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**WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL  
PROTECTION**

**DIVISION OF AIR QUALITY**

601 57<sup>th</sup> Street SE

Charleston, WV 25304

Phone: (304) 926-0475

[www.dep.wv.gov/daq](http://www.dep.wv.gov/daq)

**INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS**

**Section 1: General Information**

<b>1. Name of Applicant (As registered with the WV Secretary of State's Office):</b> The Marion County Coal Company	<b>2. Facility Name or Location:</b> Marion County Preparation Plant
<b>3. DAQ Plant ID No.:</b>  0 4 9 — 0 0 0 1 9	<b>4. Federal Employer ID No. (FEIN):</b>  1 3 2 5 6 6 5 9 4
<b>5. Permit Application Type:</b>  <input type="checkbox"/> Initial Permit <input checked="" type="checkbox"/> Permit Renewal <input type="checkbox"/> Update to Initial/Renewal Permit Application  When did operations commence? Pre 1974 What is the expiration date of the existing permit? 03/03/2025	
<b>6. Type of Business Entity:</b>  <input checked="" type="checkbox"/> Corporation <input type="checkbox"/> Partnership <input type="checkbox"/> Governmental Agency <input type="checkbox"/> Limited Partnership <input type="checkbox"/> LLC	<b>7. Is the Applicant the:</b>  <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input checked="" type="checkbox"/> Both  If the Applicant is not both the owner and operator, please provide the name and address of the other party.  _____  _____
<b>8. Number of onsite employees:</b>  50	
<b>9. Governmental Code:</b>  <input checked="" type="checkbox"/> Privately owned and operated; 0 <input type="checkbox"/> Federally owned and operated; 1 <input type="checkbox"/> State government owned and operated; 2 <input type="checkbox"/> County government owned and operated; 3 <input type="checkbox"/> Municipality government owned and operated; 4 <input type="checkbox"/> District government owned and operated; 5	
<b>10. Business Confidentiality Claims</b>  Does this application include confidential information (per 45CSR31)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No  If yes, identify each segment of information on each page that is submitted as confidential, and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's "PRECAUTIONARY NOTICE-CLAIMS OF CONFIDENTIALITY" guidance.	

<b>11. Mailing Address</b>		
<b>Street or P.O. Box:</b> 1 Bridge St.		
<b>City:</b> Monongah	<b>State:</b> WV	<b>Zip:</b> 26554
<b>Telephone Number:</b> (304) 534 - 4748	<b>Fax Number:</b> (304) 534-4726	

<b>12. Facility Location (Physical Address)</b>		
<b>Street:</b> 1 mile NW of Fairview on County Road 17, Turn Left on Sugar Run Road	<b>City:</b> Fairview	<b>County:</b> Marion
<b>UTM Easting:</b> 561.6 km	<b>UTM Northing:</b> 4,409 km	<b>Zone:</b> <input checked="" type="checkbox"/> 17 or <input type="checkbox"/> 18
<b>Directions:</b> 1 mile NW of Fairview on County Road 17, Turn Left on Sugar Run Road		
<b>Portable Source?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
<b>Is facility located within a nonattainment area?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	<b>If yes, for what air pollutants?</b>	
<b>Is facility located within 50 miles of another state?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, name the affected state(s).</b> Pennsylvania Maryland Virginia	
<b>Is facility located within 100 km of a Class I Area<sup>1</sup>?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No  <b>If no, do emissions impact a Class I Area<sup>1</sup>?</b> <input type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, name the area(s).</b> Otter Creek Wilderness Area	
<sup>1</sup> Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.		

<b>13. Contact Information</b>		
<b>Responsible Official:</b> Ryan Burns		<b>Title:</b> Manager, Permit Applications
<b>Street or P.O. Box:</b> 46226 National Road		
<b>City:</b> St. Clairsville	<b>State:</b> Ohio	<b>Zip:</b> 43950
<b>Telephone Number:</b> 740.338.3263	<b>Cell Number:</b> 740.213.1884	
<b>E-mail address:</b> rburns@acnrinc.com		
<b>Environmental Contact:</b> Ryan Burns		<b>Title:</b> Manager, permit applications
<b>Street or P.O. Box:</b> 46226 National Rd		
<b>City:</b> St. Clairsville	<b>State:</b> OH	<b>Zip:</b> 43950
<b>Telephone Number:</b> 740.338.3263	<b>Cell Number:</b> 740.213.1884	
<b>E-mail address:</b> rburns@acnrinc.com		
<b>Application Preparer:</b> Mike Burr		<b>Title:</b> Manager of Consulting Services
<b>Company:</b> Trinity Consultants		
<b>Street or P.O. Box:</b> 3601 Green Rd., Suite 102		
<b>City:</b> Beachwood	<b>State:</b> Ohio	<b>Zip:</b> 44122
<b>Telephone Number:</b> (216) 278-0500	<b>Cell Number:</b> (440) 477-3156	
<b>E-mail address:</b> mburr@trinityconsultants.com		



**14. Facility Description**

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Coal Preparation w Thermal Dryer	Bituminous Coal	212112	1222

**Provide a general description of operations.**

The Marion County Preparation Plant consists of coal mining and a preparation plant with a thermal dryer.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**. See attached.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."  
See attached

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships. See attached.

**Section 2: Applicable Requirements**

18. Applicable Requirements Summary	
Instructions: Mark all applicable requirements.	
<input checked="" type="checkbox"/> SIP	<input type="checkbox"/> FIP
<input checked="" type="checkbox"/> Minor source NSR (45CSR13)	<input type="checkbox"/> PSD (45CSR14)
<input type="checkbox"/> NESHAP (45CSR15)	<input type="checkbox"/> Nonattainment NSR (45CSR19)
<input checked="" type="checkbox"/> Section 111 NSPS	<input type="checkbox"/> Section 112(d) MACT standards
<input type="checkbox"/> Section 112(g) Case-by-case MACT	<input type="checkbox"/> 112(r) RMP
<input type="checkbox"/> Section 112(i) Early reduction of HAP	<input type="checkbox"/> Consumer/commercial prod. reqts., section 183(e)
<input type="checkbox"/> Section 129 Standards/Reqts.	<input type="checkbox"/> Stratospheric ozone (Title VI)
<input type="checkbox"/> Tank vessel reqt., section 183(f)	<input type="checkbox"/> Emissions cap 45CSR§30-2.6.1
<input type="checkbox"/> NAAQS, increments or visibility (temp. sources)	<input type="checkbox"/> 45CSR27 State enforceable only rule
<input checked="" type="checkbox"/> 45CSR4 State enforceable only rule	<input type="checkbox"/> Acid Rain (Title IV, 45CSR33)
<input type="checkbox"/> Emissions Trading and Banking (45CSR28)	<input checked="" type="checkbox"/> Compliance Assurance Monitoring (40CFR64)
<input type="checkbox"/> CAIR NO <sub>x</sub> Annual Trading Program (45CSR39)	<input type="checkbox"/> CAIR NO <sub>x</sub> Ozone Season Trading Program (45CSR40)

19. Non Applicability Determinations
<p><b>List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.</b></p> <p>N/A</p>
<input type="checkbox"/> Permit Shield

## 20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).

	Rule/ Regulation/ R13 Permit	Existing R30 Permit Condition	Name	Requirement
1	45CSR§6-3.1.	3.1.1.	Open Burning	The open burning of refuse by any person, firm, corporation, association or public agency is prohibited except as noted in 45CSR§6-3.1.
2	45CSR§6-3.2.	3.1.2.	Open Burning Exemptions	The exemption listed in 45CSR§6-3.1. are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible.
3	40CFR§61.145(b) and 45CSR34	3.1.3.	Asbestos	The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health require a copy of this notice to be sent to them.
4	45CSR§4-3.1 State-Enforceable only.	3.1.4.	Odor	No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.
5	45CSR§11-5.2.	3.1.5.	Standby Plan for Reducing Emissions	When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11.
6	W. Va. Code§22-5-4(a)(14)	3.1.6.	Emission Inventory	The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality.
7	40CFR82, Subpart F	3.1.7.	Ozone-depleting Substances	For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B: a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156. b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158. c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.
8	40CFR68	3.1.8.	Risk Management Plan	Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.

☒ Permit Shield

**20. Facility-Wide Applicable Requirements (Continued) - Attach additional pages as necessary.**

**List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).**

	Rule/ Regulation/ R13 Permit	Existing R30 Permit Condition	Name	Requirement
9	W. Va. Code§22-5-4(a)(15) and 45CSR13	3.3.1.	Stack Testing	<p>As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:</p> <p>a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.</p> <p>b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.</p> <p>c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.</p> <p>d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:</p> <ol style="list-style-type: none"><li>1. The permit or rule evaluated, with the citation number and language.</li><li>2. The result of the test for each permit or rule condition.</li><li>3. A statement of compliance or non-compliance with each permit or rule condition.</li></ol>

☒ Permit Shield

**20. Facility-Wide Applicable Requirements (Continued) - Attach additional pages as necessary.**

**List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).**

	Rule/ Regulation/ R13 Permit	Existing R30 Permit Condition	Name	Requirement
10	45CSR§30-5.1.c.2.A.; 45CSR13, R13-2306D, 4.4.1.	3.4.1.	Monitoring Information	The permittee shall keep records of monitoring information that include the following: a. The date, place as defined in this permit and time of sampling or measurements; b. The date(s) analyses were performed; c. The company or entity that performed the analyses; d. The analytical techniques or methods used; e. The results of the analyses; and f. The operating conditions existing at the time of sampling or measurement.
11	45CSR§30-5.1.c.2.B	3.4.2.	Record Retention	The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
12	40CSR§30-5.1.c. State-Enforceable only.	3.4.3.	Odors	For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
13	45CSR§§30-4.4. and 5.1.c.3.D.	3.5.1.	Responsible Official	Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
14	45CSR§30-5.1.c.3.E.	3.5.2.	Confidential Information	A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
15	NA	3.5.3.	Addresses	All notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate: <b>If to the DAQ:</b> Director WVDEP Division of Air Quality 601 57th Street SE Charleston, WV 25304 <b>If to the US EPA:</b> Section Chief U. S. Environmental Protection Agency, Region III Enforcement and Compliance Assurance Division Air Section (3ED21) 1650 Arch Street Philadelphia, PA 19103-2029 <b>DAQ Compliance and Enforcement:</b> DEPAirQualityReports@wv.gov

☒ Permit Shield

**20. Facility-Wide Applicable Requirements (Continued) - Attach additional pages as necessary.**

**List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).**

	Rule/ Regulation/ R13 Permit	Existing R30 Permit Condition	Name	Requirement
16	45CSR§30-8.	3.5.4.	Certified Emissions Statement	The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
17	45CSR§30-5.3.e.	3.5.5.	Compliance Certification	The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification. The annual certification shall be submitted in electronic format by e-mail to the following addresses: <b>DAQ</b> DEPAirQualityReports@wv.gov <b>US EPA</b> R3_APD_Permits@epa.gov
18	45CSR§30-5.1.c.3.A.	3.5.6.	Semi-annual Monitoring Reports	The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4. The semi-annual monitoring reports shall be submitted in electronic format by e-mail to the following address:  DEPAirQualityReports@wv.gov
19	NA	3.5.7.	Emergencies	For reporting emergency situations, refer to Section 2.17 of this permit.
20	45CSR§30-5.1.c.3.C. 45CSR§30-5.1.c.3.B.	3.5.8.	Deviations	a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following: 1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation. 2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation. 3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis. 4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.  b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
21	45CSR§30-4.3.h.1.B.	3.5.9.	New Applicable Requirements	If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.

☒ Permit Shield

**20. Facility-Wide Applicable Requirements (Continued) - Attach additional pages as necessary.**

**List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (Note: Title V permit condition numbers alone are not the underlying applicable requirements).**

	Rule/ Regulation/ R13 Permit	Existing R30 Permit Condition	Name	Requirement
22	NA	3.7.1.	Permit Shield	The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.
23	NA	3.7.2.	Permit Shield	The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.  None.

☒ Permit Shield

**For all facility-wide applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

	Rule/ Regulation/ R13 Permit	Existing R30 Permit Condition	Name	Method of Compliance
1	45CSR§6-3.1.	3.1.1.	Open Burning	NA. Facility does not conduct open burning
2	45CSR§6-3.2.	3.1.2.	Open Burning Exemptions	NA.
3	40CFR§61.145(b) and 45CSR34	3.1.3.	Asbestos	Inspections will occur as required
4	45CSR§4-3.1 State-Enforceable only.	3.1.4.	Odor	Recordkeeping of complaints
5	45CSR§11-5.2.	3.1.5.	Standby Plan for Reducing Emissions	When requested, plans will be prepared.
6	W. Va. Code§22-5-4(a)(14)	3.1.6.	Emission Inventory	Reporting submissions will be maintained for five (5) years.
7	40CFR82, Subpart F	3.1.7.	Ozone-depleting Substances	Requirement to follow: a. 40CFR§§82.154 & 82.156; b. 40CFR§82.158; c. 40CFR§82.161.
8	40CFR68	3.1.8.	Risk Management Plan	Submission if required
9	W. Va. Code§22-5-4(a)(15) and 45CSR13	3.3.1.	Stack Testing	There are no point source discharge stacks located at the facility
10	45CSR§30-5.1.c.2.A.; 45CSR13, R13-2306D, 4.4.1.	3.4.1.	Monitoring Information	Records of monitoring will include the required information
11	45CSR§30-5.1.c.2.B	3.4.2.	Record Retention	Monitoring records and support information will be kept for 5 years
12	40CSR§30-5.1.c. State-Enforceable only.	3.4.3.	Odors	A record of odor complaints, investigations, and responses will be kept
13	45CSR§§30-4.4. and 5.1.c.3.D.	3.5.1.	Responsible Official	All application forms, reports, and compliance certifications required by this permit will contain a certification by the Responsible Official
14	45CSR§30-5.1.c.3.E.	3.5.2	Confidential Information	NA
15	NA	3.5.3.	Addresses	NA
16	45CSR§30-8.	3.5.4.	Certified Emissions Statement	Facility will submit a Certified Emissions Statement and pay fees
17	45CSR§30-5.3.e.	3.5.5.	Compliance Certification	Compliance certifications will be submitted
18	45CSR§30-5.1.c.3.A.	3.5.6.	Semi-annual Monitoring Reports	Semi-annual monitoring reports will be submitted
19	NA	3.5.7.	Emergencies	The facility will refer to Section 2.17 for reporting emergencies
20	45CSR§30-5.1.c.3.C. 45CSR§30-5.1.c.3.B.	3.5.8.	Deviations	The facility will promptly submit supplemental reports and notices as required
21	45CSR§30-4.3.h.1.B.	3.5.9.	New Applicable Requirements	The facility will comply with new applicable requirements
22	NA	3.7.1.	Permit Shield	NA
23	NA	3.7.2.	Permit Shield	NA

**Are you in compliance with all facility-wide applicable requirements?** ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.



<b>21. Active Permits/Consent Orders</b>		
Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit <i>(if any)</i>
R13-0760J	3/1/2021	
R30-04900019-2020	3/3/2020	

<b>22. Inactive Permits/Obsolete Permit Conditions</b>		
Permit Number	Date of Issuance MM/DD/YYYY	Permit Condition Number
R13-0760H	04/07/2017	
R13-0760G	11/4/2016	
R13-0760F	8/1/2016	
R13-0760E	3/6/2015	
R13-0760D	5/12/2008	
R13-0760B	5/2/2006	
R13-0760A	8/13/1984	

**Section 3: Facility-Wide Emissions**

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	172.8
Nitrogen Oxides (NO <sub>x</sub> )	190.8
Lead (Pb)	5.48E-03
Particulate Matter (PM <sub>2.5</sub> ) <sup>1</sup>	137.9
Particulate Matter (PM <sub>10</sub> ) <sup>1</sup>	231.8
Total Particulate Matter (TSP)	456.4
Sulfur Dioxide (SO <sub>2</sub> )	586.0
Volatile Organic Compounds (VOC)	594.0
Hazardous Air Pollutants <sup>2</sup>	Potential Emissions
Total	6.9
Regulated Pollutants other than Criteria and HAP	Potential Emissions

<sup>1</sup>PM<sub>2.5</sub> and PM<sub>10</sub> are components of TSP.

<sup>2</sup>For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

**Section 4: Insignificant Activities**

<b>24. Insignificant Activities (Check all that apply)</b>	
<input checked="" type="checkbox"/>	1. Air compressors and pneumatically operated equipment, including hand tools.
<input checked="" type="checkbox"/>	2. Air contaminant detectors or recorders, combustion controllers or shutoffs.
<input checked="" type="checkbox"/>	3. Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
<input checked="" type="checkbox"/>	4. Bathroom/toilet vent emissions.
<input checked="" type="checkbox"/>	5. Batteries and battery charging stations, except at battery manufacturing plants.
<input checked="" type="checkbox"/>	6. Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
<input type="checkbox"/>	7. Blacksmith forges.
<input type="checkbox"/>	8. Boiler water treatment operations, not including cooling towers.
<input checked="" type="checkbox"/>	9. Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
<input type="checkbox"/>	10. CO <sub>2</sub> lasers, used only on metals and other materials which do not emit HAP in the process.
<input checked="" type="checkbox"/>	11. Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
<input checked="" type="checkbox"/>	12. Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
<input type="checkbox"/>	13. Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
<input type="checkbox"/>	14. Demineralized water tanks and demineralizer vents.
<input type="checkbox"/>	15. Drop hammers or hydraulic presses for forging or metalworking.
<input type="checkbox"/>	16. Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
<input type="checkbox"/>	17. Emergency (backup) electrical generators at residential locations.
<input checked="" type="checkbox"/>	18. Emergency road flares.
<input type="checkbox"/>	<p>19. Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO<sub>x</sub>, SO<sub>2</sub>, VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units.</p> <p>Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:</p>

24. Insignificant Activities (Check all that apply)	
<input type="checkbox"/>	<p>20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27.</p> <p>Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:</p>
<input type="checkbox"/>	21. Environmental chambers not using hazardous air pollutant (HAP) gases.
<input checked="" type="checkbox"/>	22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
<input type="checkbox"/>	23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
<input checked="" type="checkbox"/>	24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
<input type="checkbox"/>	25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
<input checked="" type="checkbox"/>	26. Fire suppression systems.
<input checked="" type="checkbox"/>	27. Firefighting equipment and the equipment used to train firefighters.
<input checked="" type="checkbox"/>	28. Flares used solely to indicate danger to the public.
<input checked="" type="checkbox"/>	29. Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
<input type="checkbox"/>	30. Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
<input checked="" type="checkbox"/>	31. Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
<input type="checkbox"/>	32. Humidity chambers.
<input type="checkbox"/>	33. Hydraulic and hydrostatic testing equipment.
<input checked="" type="checkbox"/>	34. Indoor or outdoor kerosene heaters.
<input checked="" type="checkbox"/>	35. Internal combustion engines used for landscaping purposes.
<input type="checkbox"/>	36. Laser trimmers using dust collection to prevent fugitive emissions.
<input type="checkbox"/>	37. Laundry activities, except for dry-cleaning and steam boilers.
<input checked="" type="checkbox"/>	38. Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
<input type="checkbox"/>	39. Oxygen scavenging (de-aeration) of water.
<input type="checkbox"/>	40. Ozone generators.

24. Insignificant Activities (Check all that apply)	
<input checked="" type="checkbox"/>	41. Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.)
<input checked="" type="checkbox"/>	42. Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
<input checked="" type="checkbox"/>	43. Process water filtration systems and demineralizers.
<input checked="" type="checkbox"/>	44. Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
<input checked="" type="checkbox"/>	45. Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
<input checked="" type="checkbox"/>	46. Routing calibration and maintenance of laboratory equipment or other analytical instruments.
<input type="checkbox"/>	47. Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
<input type="checkbox"/>	48. Shock chambers.
<input type="checkbox"/>	49. Solar simulators.
<input checked="" type="checkbox"/>	50. Space heaters operating by direct heat transfer.
<input checked="" type="checkbox"/>	51. Steam cleaning operations.
<input type="checkbox"/>	52. Steam leaks.
<input type="checkbox"/>	53. Steam sterilizers.
<input type="checkbox"/>	54. Steam vents and safety relief valves.
<input checked="" type="checkbox"/>	55. Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
<input type="checkbox"/>	56. Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
<input checked="" type="checkbox"/>	57. Such other sources or activities as the Director may determine.
<input checked="" type="checkbox"/>	58. Tobacco smoking rooms and areas.
<input checked="" type="checkbox"/>	59. Vents from continuous emissions monitors and other analyzers.

***Section 5: Emission Units, Control Devices, and Emission Points***

<b>25. Equipment Table</b>
Fill out the <b>Title V Equipment Table</b> and provide it as <b>ATTACHMENT D</b> .
<b>26. Emission Units</b>
For each emission unit listed in the <b>Title V Equipment Table</b> , fill out and provide an <b>Emission Unit Form</b> as <b>ATTACHMENT E</b> .
For each emission unit not in compliance with an applicable requirement, fill out a <b>Schedule of Compliance Form</b> as <b>ATTACHMENT F</b> .
<b>27. Control Devices</b>
For each control device listed in the <b>Title V Equipment Table</b> , fill out and provide an <b>Air Pollution Control Device Form</b> as <b>ATTACHMENT G</b> .
For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the <b>Compliance Assurance Monitoring (CAM) Form(s)</b> for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as <b>ATTACHMENT H</b> .

**Section 6: Certification of Information****28. Certification of Truth, Accuracy and Completeness and Certification of Compliance**

*Note: This Certification must be signed by a responsible official as defined in 45CSR§30-2.38.*

**a. Certification of Truth, Accuracy and Completeness**

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

**b. Compliance Certification**

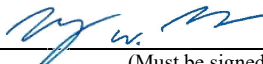
Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable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

**Responsible official (type or print)**

Name: Ryan Burns

Title: Manager, Permit Applications

**Responsible official's signature:**

Signature:  Signature Date: 8/29/24  
(Must be signed and dated in blue ink or have a valid electronic signature)

**Note: Please check all applicable attachments included with this permit application:**

<input checked="" type="checkbox"/>	ATTACHMENT A: Area Map
<input checked="" type="checkbox"/>	ATTACHMENT B: Plot Plan(s)
<input checked="" type="checkbox"/>	ATTACHMENT C: Process Flow Diagram(s)
<input checked="" type="checkbox"/>	ATTACHMENT D: Equipment Table
<input checked="" type="checkbox"/>	ATTACHMENT E: Emission Unit Form(s)
<input type="checkbox"/>	ATTACHMENT F: Schedule of Compliance Form(s)
<input checked="" type="checkbox"/>	ATTACHMENT G: Air Pollution Control Device Form(s)
<input checked="" type="checkbox"/>	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

**All of the required forms and additional information can be found and downloaded from, the DEP website at [www.dep.wv.gov/dag](http://www.dep.wv.gov/dag), requested by phone (304) 926-0475, and/or obtained through the mail.**

**Figure 1. Area Map for The Marion County Preparation Plant**

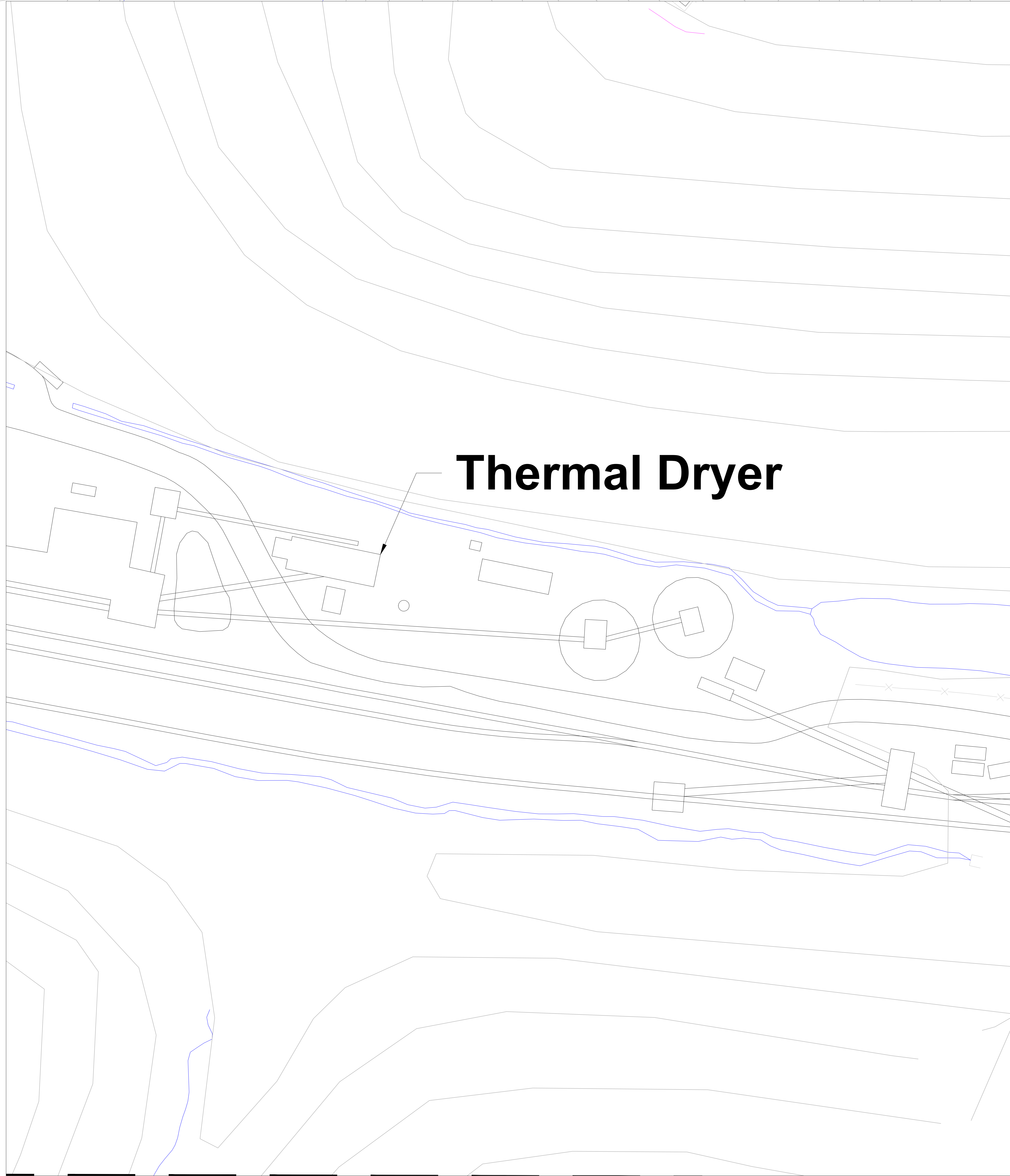




## **ATTACHMENT B. PLOT PLAN**

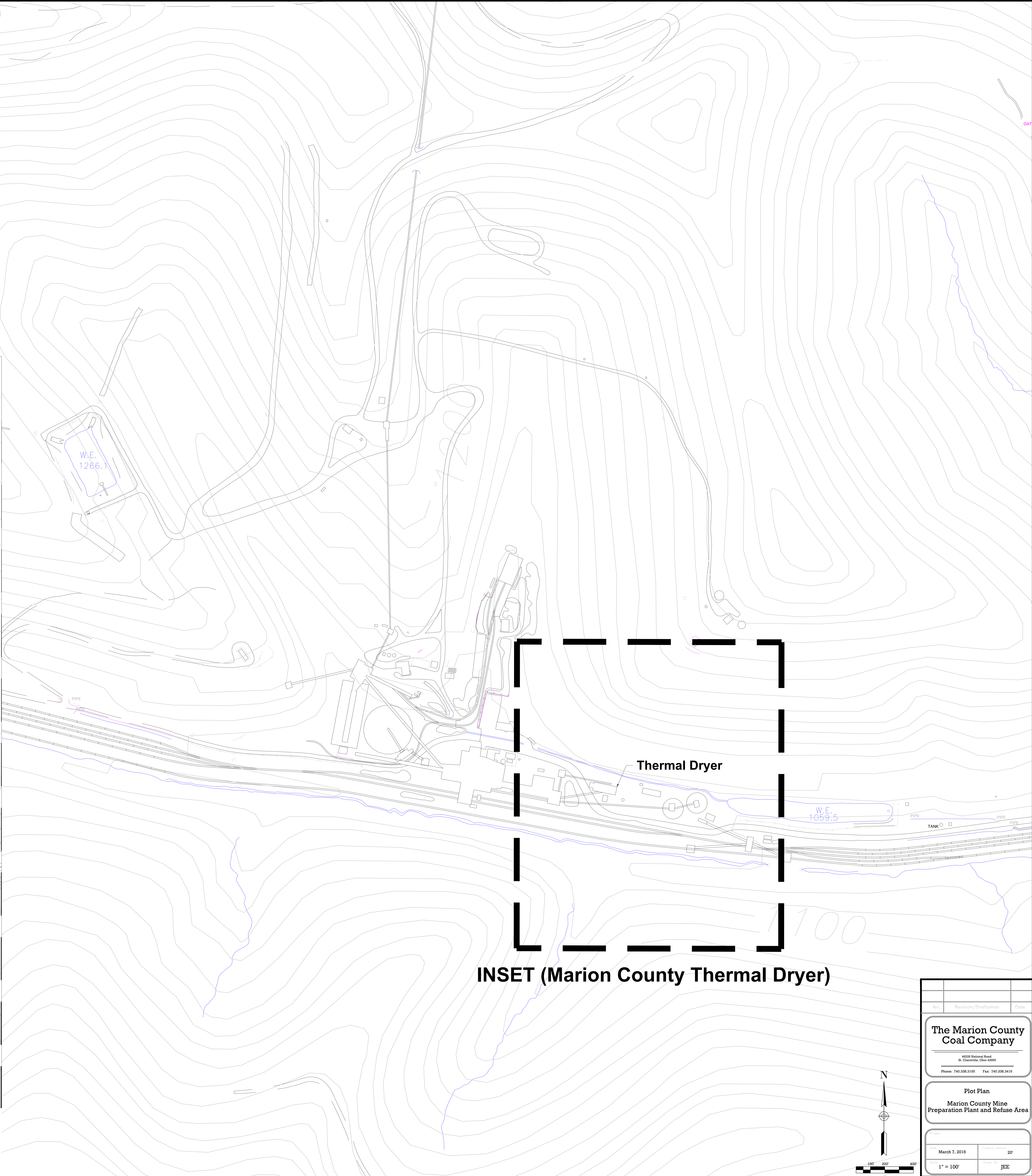
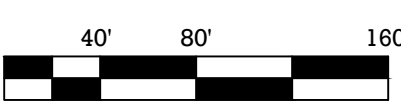
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INSET (Marion County Thermal Dryer)

Scale: 1" = 40'



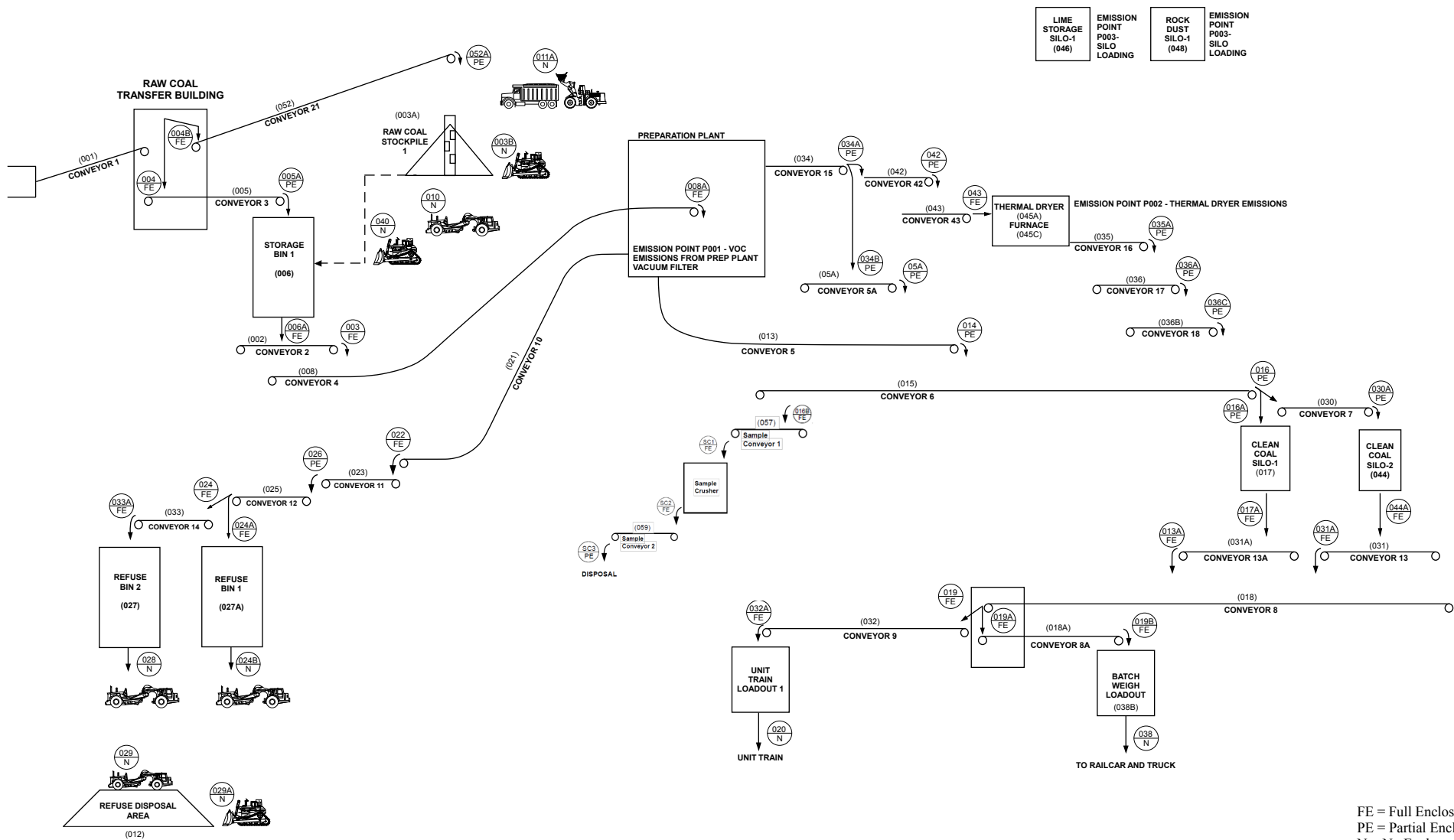
INSET (Marion County Thermal Dryer)

No.	Revision/Draftsman	Date
<b>The Marion County Coal Company</b>		
6020 National Road St. Clairsville, Ohio 43960		
Phone: 740.338.3100 Fax: 740.338.3416		
<b>Plot Plan</b>		
Marion County Mine Preparation Plant and Refuse Area		
Sheet	Sheet Number	Sheet
March 7, 2016	207	
1" = 100'	Drawn By	JEE



## **ATTACHMENT C. PROCESS FLOW DIAGRAM**

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FE = Full Enclosure  
PE = Partial Enclosure  
N = No Enclosure

Revised 7-21-14 SRK

Marion County Prep Plant  
Marion County Coal Resources, Inc.

PROCESS FLOW DIAGRAM

NOT TO SCALE

## **ATTACHMENT D. EMISSION UNIT TABLE**

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**ATTACHMENT D - Title V Equipment Table**  
(includes all emission units at the facility except those designated as  
insignificant activities in Section 4, Item 24 of the General Forms)

Emission Point ID <sup>1</sup>	Control Device <sup>1</sup>	Emission Unit ID <sup>1</sup>	Emission Unit Description	Design Capacity	Year Installed/Modified
<b>Raw Coal Circuit</b>					
Z01	FE	001	<b>Conveyor 1</b> – Mine slope belt to Raw Coal Transfer Building	3,000 tph 13,140,000 tpy	Pre 1974
Z01	FE	005	<b>Conveyor 3</b> – Belt from Raw Coal Transfer Building to Raw Coal Storage Bin 1	3,000 tph 13,140,000 tpy	Pre 1974
Z01	FE	006	<b>Storage Bin 1</b> – Raw Coal storage silo from Conveyor 3 and transfers to Conveyor 2; Storage capacity is 15,000 tons	1,500 tph 13,140,000 tpy	Pre 1974
Z01	FE	008	<b>Conveyor 4</b> – Belt from Conveyor 2 to Prep Plant	4401,500 tph 13,140,000 tpy	Pre 1974
Z01	FE	002	<b>Conveyor 2</b> – Belt from Raw Coal Storage Bin 1 to Conveyor 4	1,500 tph 13,140,000 tpy	1989
Z01	ST	003A	<b>Raw Coal Stockpile 1</b> – Stockpile equipped with Stacking Tube 1; Stockpile footprint is 20.5 acres with a storage capacity of 450,000 tons	3000 tph 13,140,000 tpy	2005
Z01	FE	052	<b>Conveyor 21</b> – Belt from Raw Coal Transfer Building to Raw Coal Stockpile	3,000 tph 13,140,000 tpy	2005
<b>Miscellaneous Storage Circuit</b>					
P003	None	046	<b>Lime Storage Silo 1</b>	N/A	Pre 1974
P004	None	048	<b>Rock Dust Silo 1</b>	N/A	Pre 1974
<b>Clean Coal Thermal Drying Circuit</b>					
Z01	FE	034	<b>Conveyor 15</b> – Belt from Prep Plant to Conveyor 42 or Conveyor 5A	600 tph 3,219,300 tpy	1985
Z01	FE	042	<b>Conveyor 42</b> – Belt from conveyor 15 to conveyor 43	600 tph 3,219,300 tpy	1985
Z01	FE	043	<b>Conveyor 43</b> – Belt from conveyor 42 to thermal dryer	600 tph 3,219,300 tpy	1985
P002	CYC1	045A	<b>Thermal Dryer</b> – ENI Eng. Co. Fluidized Bed Dryer rated at 130 MMBTU/hr Heat Input	600 tph 3,219,300 tpy	1985
Z01	SCR1	045C	<b>Thermal Dryer Furnace</b> - Bigelow Liptak forced draft burner rated at 130 MM BTU/hr Heat Input	4.35 tph 26,100 tpy	1985
Z01	FE	035	<b>Conveyor 16</b> – Belt from Thermal Dryer to Conveyor 17	600 tph 3,219,300 tpy	1985

Z01	FE	036	<b>Conveyor 17</b> – Belt from Conveyor 16 to Conveyor 18	600 tph 3,219,300 tpy	1985
Z01	FE	036B	<b>Conveyor 18</b> – Belt from Conveyor 17 to Conveyor 6	600 tph 3,219,300 tpy	1985
<b>Clean Coal Circuit</b>					
Z01	FE	013	<b>Conveyor 5</b> – Belt from Prep Plant to Conveyor 6	1,200 tph 5,978,700 tpy	Pre 1974
Z01	FE	05A	<b>Conveyor 5A</b> – Belt from Conveyor 15 to Conveyor 5	600 tph 3,219,300 tpy	1988-90
Z01	FE	015	<b>Conveyor 6</b> – Belt from Conveyor 5 and Conveyor 18 to Conveyor 7 or Sample Conveyor 1	1,200 tph 9,198,000 tpy	Pre 1974
Z01	FE	057	<b>Sample Conveyor 1</b> - Belt from Conveyor 6 to Sample Crusher	0.20 tph 1,752 tpy	2014
Z01	FE	058	<b>Sample Crusher</b>	0.20 tph 1,752 tpy	2014
Z01	FE	059	<b>Sample Conveyor 2</b> – Belt from Sample Crusher to dumpster	0.20 tph 1,752 tpy	2014
<b>Clean Coal Storage</b>					
Z01	FE	017	<b>Clean Coal Silo 1</b> – Clean Coal storage silo from Conveyor 7 and transfers to Conveyor 13A; Storage capacity is 10,500 tons	3,500 tph 9,198,000 tpy	Pre 1974
Z01	FE	030	<b>Conveyor 7</b> – Belt from Conveyor 6 to Clean Coal Silo 2	1,200 tph 9,198,000 tpy	1981
Z01	FE	044	<b>Clean Coal Silo 2</b> – Clean Coal storage silo from Conveyor 7 and transfers to Conveyor 13; Storage capacity is 10,500 tons	3,500 tph 9,198,000 tpy	1981
Z01	FE	031	<b>Conveyor 13</b> – Belt from Clean Coal Silo 2 to Conveyor 8	3,500 tph 9,198,000 tpy	1981
Z01	FE	031A	<b>Conveyor 13A</b> – Belt from Clean Coal Silo 1 to Conveyor 8	3,500 tph 9,198,000 tpy	2006
<b>Clean Coal Shipping by Truck and Railcar</b>					
Z01	FE	018	<b>Conveyor 8</b> – Belt from Conveyor 13 and Conveyor 13A to Conveyor 8A or Conveyor 9	3,500 tph 9,198,000 tpy	Pre 1974/2006
Z01	PE	018A	<b>Conveyor 8a</b> – Belt from Conveyor 8 to Batch Weigh Loadout	3,500 tph 9,198,000 tpy	2014
Z01	FE	038B	<b>Batch Weight Loadout Bin (BWL)</b> –220 tons capacity	3,500 tph 9,198,000 tpy	2014
Z01	FE	032	<b>Conveyor 9</b> – Belt from Conveyor 8 to Unit Train Loadout 1	3,500 tph 9,198,000 tpy	Pre 1974 /2006/2014

Refuse Circuit					
Z01	FE	021	<b>Conveyor 10</b> – Course refuse belt from Prep Plant to Conveyor 11	500 tph 3,942,000 tpy	Pre 1974
Z01	FE	023	<b>Conveyor 11</b> – Course refuse belt from Conveyor 10 to Conveyor 12	500 tph 3,942,000 tpy	Pre 1974
Z01	FE	027	<b>Refuse Bin 2</b> – Course refuse bin from Conveyor 14 to Pan Truck Loading	500 tph 3,942,000 tpy	Pre 1974
Z01	FE	025	<b>Conveyor 12</b> – Course refuse belt from Conveyor 11 to Conveyor 14 or Refuse Bin 1	500 tph 3,942,000 tpy	Pre 1974
Z01	FE	033	<b>Conveyor 14</b> – Course refuse belt from Conveyor 12 to Refuse Bin 2	500 tph 3,942,000 tpy	1983
Z01	FE	027A	<b>Refuse Bin 1</b> – Course refuse belt from Conveyor 12 to Pan Truck Loading	500 tph 3,942,000 tpy	1983
Z01	MC	012	<b>Refuse Disposal Area (RDA)</b>	500 tph 3,942,000 tpy	Pre 1974
Haulroads					
Z01	WT	049A	Unpaved Haulroad	N/A	Pre 1974
Z01	WT	049B	Unpaved Haulroad	N/A	Pre 1974
Z01	WT	049C	Unpaved Haulroad	N/A	Pre 1974
Z01	WT	049D	Unpaved Haulroad	N/A	Pre 1974
Z01	WT	049E	Unpaved Haulroad	N/A	Pre 1974
Z01	WT	049F	Unpaved Haulroad	N/A	Pre 1974
Z01	WT	049G	Unpaved Haulroad	N/A	1993
Z01	WT	049H	Unpaved Haulroad	N/A	1993
VOC Emission Sources					
Z01	None	009B	Froth Floatation Cell	N/A	1985
P001	None	009	Vacuum Filter	N/A	1985
Z01	None	047	Thickener	N/A	1985
Z01	None	038A	Railcar Anti-Freeze Spray	N/A	Pre 1974
Z01	None	051C	Stoker Coal Anti-Freeze Spray	N/A	Pre 1974
Z01	None	S050A	No. 2 Diesel Fuel Storage Tank 1	5,000 Gallons	1985
Z01	None	S050B	No. 2 Diesel Fuel Storage Tank 2	3,000 Gallons	1985
Z01	None	S050C	No. 2 Diesel Fuel Storage Tank 3	3,000 Gallons	1985
Z01	None	S050D	No. 2 Diesel Fuel Storage Tank 4	1,000 Gallons	1985
Z01	None	S050E	Froth Flotation Agent Storage Tank 1	5,000 Gallons	1985



Z01	None	S050F	Anionic Flocculant Storage Tank 1	1,000 Gallons	1985
Z01	None	S050G	Antifreeze Storage Tank 1	8,000 Gallons	1985
Z01	None	S050H	Antifreeze Storage Tank 2	8,000 Gallons	1985
Z01	None	S050I	Dustrol Storage Tank 1	1,600 Gallons	1985
Z01	None	S050J	Dustrol Storage Tank 2	1,600 Gallons	1985
Z01	None	S050K	30 wt. Motor Oil Storage Tank 1	580 Gallons	1985
Z01	None	S050L	30 wt. Motor Oil Storage Tank 2	580 Gallons	1985

<sup>1</sup>For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

<sup>2</sup>FE – Full Enclosure; PE – Partial Enclosure; WT – Water Truck; MC – Moisture Content; N – None.

## **ATTACHMENT E. EMISSION UNIT FORMS**

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## ATTACHMENT E - Emission Unit Form

**Emission Unit Description** CLEAN COAL CIRCUIT

<b>Emission unit ID number:</b> 034;042;;035;036;036B;013; 05A;015;017;030;044;031;031A ;018;018A;038B;032, 057, 058, 059	<b>Emission unit name:</b> Conveyor 15; Conveyor 42; Conveyor 16; Conveyor 17; Conveyor 18; Conveyor 5; Conveyor 5A; Conveyor 6; Clean Coal Silo 1; Conveyor 7; Clean Coal Silo 2; Conveyor 13; Conveyor13A; Conveyor 8; Conveyor 8A; Batch Weigh Loadout; Conveyor 9, Sample Conveyor 1, Sample Crusher, Sample Conveyor 2	<b>List any control devices associated with this emission unit:</b> See Attachment D
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Equipment used to transfer clean coal from the preparation plant to loadout.

<b>Manufacturer:</b> NA	<b>Model number:</b> NA	<b>Serial number:</b> NA
<b>Construction date:</b> See Attachment D	<b>Installation date:</b> See Attachment D	<b>Modification date(s):</b> See Attachment D
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> See Attachment D		
<b>Maximum Hourly Throughput:</b> See Attachment D	<b>Maximum Annual Throughput:</b> See Attachment D	<b>Maximum Operating Schedule:</b> 8760

**Fuel Usage Data (fill out all applicable fields)**

<b>Does this emission unit combust fuel?</b> ___ Yes <input checked="" type="checkbox"/> No	<b>If yes, is it?</b> ___ Indirect Fired ___ Direct Fired
<b>Maximum design heat input and/or maximum horsepower rating:</b>	<b>Type and Btu/hr rating of burners:</b>

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )	Refer to facility-wide emissions summary	Refer to facility-wide emissions summary
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Not Applicable		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b>  See facility-wide emissions summary.		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Refer to the existing Title V permit for the emission-unit specific applicable requirements and proposed compliance demonstration methods.

☒ **Permit Shield**

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

Refer to the existing Title V permit for the emission-unit specific applicable requirements and proposed compliance demonstration methods.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description* HAUL ROADS

<b>Emission unit ID number:</b> 049A-H	<b>Emission unit name:</b> Unpaved haul roads	<b>List any control devices associated with this emission unit:</b> Water Truck Sprays
-------------------------------------------	--------------------------------------------------	-------------------------------------------------------------------------------------------

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**  
Unpaved haul roads

<b>Manufacturer:</b> NA	<b>Model number:</b> NA	<b>Serial number:</b> NA
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<b>Construction date:</b> See Attachment D	<b>Installation date:</b> See Attachment D	<b>Modification date(s):</b> Not Applicable
-----------------------------------------------	-----------------------------------------------	------------------------------------------------

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** NA

<b>Maximum Hourly Throughput:</b> NA	<b>Maximum Annual Throughput:</b> NA	<b>Maximum Operating Schedule:</b> 8,760 hrs/year
-----------------------------------------	-----------------------------------------	------------------------------------------------------

### *Fuel Usage Data (fill out all applicable fields)*

<b>Does this emission unit combust fuel?</b> ___ Yes <u>X</u> No	<b>If yes, is it?</b>  ___ Indirect Fired    ___ Direct Fired
------------------------------------------------------------------	---------------------------------------------------------------------

<b>Maximum design heat input and/or maximum horsepower rating:</b>	<b>Type and Btu/hr rating of burners:</b>
--------------------------------------------------------------------	-------------------------------------------

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )	See facility-wide emissions summary	See facility-wide emissions summary
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Not Applicable		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b>  See facility-wide emissions summary		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Refer to the existing Title V permit for the emission-unit specific applicable requirements and proposed compliance demonstration methods.

☒ **X** Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Refer to the existing Title V permit for the emission-unit specific applicable requirements and proposed compliance demonstration methods.

Are you in compliance with all applicable requirements for this emission unit? ☒ **X** Yes ☐ No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.



## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description* MISCELLANEOUS

**Emission unit ID number:**

046; 048; 009B; 009; 047; 038A;  
051C; S050A-L

**Emission unit name:**

Lime Storage Silo 1; Rock Dust Silo 1;  
VOC- Froth flotation Cell; Vacuum Filter;  
Thickener; Railcar Anti-Freeze Spray;  
Stoker Coal Anti-Freeze Spray; Misc.  
Storage Tanks

**List any control devices associated with this emission unit:**

See Attachment D

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**

Miscellaneous sources

**Manufacturer:**

NA

**Model number:**

NA

**Serial number:**

NA

**Construction date:**

See Attachment D

**Installation date:**

See Attachment D

**Modification date(s):**

Not Applicable

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** See Attachment D

**Maximum Hourly Throughput:**

See Attachment D

**Maximum Annual Throughput:**

See Attachment D

**Maximum Operating Schedule:**

8,760 hrs/year

***Fuel Usage Data* (fill out all applicable fields)**

**Does this emission unit combust fuel?** \_\_\_ Yes X No

**If yes, is it?**

\_\_\_ Indirect Fired \_\_\_ Direct Fired

**Maximum design heat input and/or maximum horsepower rating:**

**Type and Btu/hr rating of burners:**

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See facility-wide emissions summary	See facility-wide emissions summary
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )		
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants		
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b>		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Refer to the existing Title V permit for the emission-unit specific applicable requirements and proposed compliance demonstration methods.

☒ **X** Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (*Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.*)

Refer to the existing Title V permit for the emission-unit specific applicable requirements and proposed compliance demonstration methods.

Are you in compliance with all applicable requirements for this emission unit? ☒ **X** Yes ☐ No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

<b>ATTACHMENT E - Emission Unit Form</b>			
<b><i>Emission Unit Description</i></b> RAW COAL CIRCUIT			
<b>Emission unit ID number:</b> 001;005;006;008;002;052	<b>Emission unit name:</b> Conveyor 1; Conveyor 3; Storage Bin 1; Conveyor 4; Conveyor 2; Conveyor 21	<b>List any control devices associated with this emission unit:</b> FE – See Attachment D	
<b>Provide a description of the emission unit (type, method of operation, design parameters, etc.):</b> Transfer of raw coal from the mine to the preparation plant			
<b>Manufacturer:</b> NA	<b>Model number:</b> NA	<b>Serial number:</b> NA	
<b>Construction date:</b> NA	<b>Installation date:</b> NA	<b>Modification date(s):</b> See Attachment D	
<b>Design Capacity (examples: furnaces - tons/hr, tanks - gallons):</b> See Attachment D			
<b>Maximum Hourly Throughput:</b> See Attachment D	<b>Maximum Annual Throughput:</b> See Attachment D	<b>Maximum Operating Schedule:</b> 8760	
<b><i>Fuel Usage Data (fill out all applicable fields)</i></b>			
<b>Does this emission unit combust fuel?</b> ___ Yes <u>X</u> No		<b>If yes, is it?</b> ___ Indirect Fired    ___ Direct Fired	
<b>Maximum design heat input and/or maximum horsepower rating:</b>		<b>Type and Btu/hr rating of burners:</b>	
<b>List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.</b>			
<b>Describe each fuel expected to be used during the term of the permit.</b>			
Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<b><i>Emissions Data</i></b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )	See facility-wide emissions summary	See facility-wide emissions summary
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Not Applicable		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b>  See facility-wide emissions summary.		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Refer to the existing Title V permit for the emission-unit specific applicable requirements and proposed compliance demonstration methods.

☒ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Refer to the existing Title V permit for the emission-unit specific applicable requirements and proposed compliance demonstration methods.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

### *Emission Unit Description* REFUSE CIRCUIT

<b>Emission unit ID number:</b> 021;023;027;025;033;027A;012	<b>Emission unit name:</b> Conveyor 10; Conveyor 11; Refuse Bin 2; Conveyor 12; Conveyor 14; Refuse Bin 1;Refuse Disposal Area	<b>List any control devices associated with this emission unit:</b> FE/MC – See Attachment D
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**  
Transfer of coal refuse

<b>Manufacturer:</b> NA	<b>Model number:</b> NA	<b>Serial number:</b> NA
<b>Construction date:</b> NA	<b>Installation date:</b> See Attachment D	<b>Modification date(s):</b> See Attachment D

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** See Attachment D

<b>Maximum Hourly Throughput:</b> See Attachment D	<b>Maximum Annual Throughput:</b> See Attachment D	<b>Maximum Operating Schedule:</b> 8760
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### *Fuel Usage Data* (fill out all applicable fields)

<b>Does this emission unit combust fuel?</b> ___ Yes <u>X</u> No	<b>If yes, is it?</b>  ___ Indirect Fired    ___ Direct Fired
<b>Maximum design heat input and/or maximum horsepower rating:</b>	<b>Type and Btu/hr rating of burners:</b>

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

### *Emissions Data*

Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)		
Nitrogen Oxides (NO <sub>x</sub> )		
Lead (Pb)		
Particulate Matter (PM <sub>2.5</sub> )	See facility-wide emissions summary	See facility-wide emissions summary
Particulate Matter (PM <sub>10</sub> )		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO <sub>2</sub> )		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Not Applicable		
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b>  See facility-wide emissions summary		



***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Refer to the existing Title V permit for the emission-unit specific applicable requirements and proposed compliance demonstration methods.

☒ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Refer to the existing Title V permit for the emission-unit specific applicable requirements and proposed compliance demonstration methods.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

**Emission Unit Description** Raw Coal Stockpile

**Emission unit ID number:**  
003A

**Emission unit name:**  
Raw Coal Stockpile 1

**List any control devices associated with this emission unit.**  
See Attachment D

**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**  
Raw coal stockpile

**Manufacturer:**  
NA

**Model number:**  
NA

**Serial number:**  
NA

**Construction date:**  
2005

**Installation date:**  
2005

**Modification date(s):**  
Not Applicable

**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 800,000 tons

**Maximum Hourly Throughput:**  
3000

**Maximum Annual Throughput:**  
13,140,000

**Maximum Operating Schedule:**  
8,760 hrs/year.

**Fuel Usage Data (fill out all applicable fields)**

**Does this emission unit combust fuel?** ☐ Yes ☒ No

**If yes, is it?**

☐ Indirect Fired ☐ Direct Fired

**Maximum design heat input and/or maximum horsepower rating:**

**Type and Btu/hr rating of burners:**

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value

<b>Emissions Data</b>				
Criteria Pollutants	Potential Emissions			
	PPH		TPY	
Carbon Monoxide (CO)				
Nitrogen Oxides (NO <sub>x</sub> )				
Lead (Pb)				
Particulate Matter (PM <sub>10</sub> )	See facility-wide emissions summary		See facility-wide emissions summary	
Total Particulate Matter (TSP)				
Sulfur Dioxide (SO <sub>2</sub> )				
Volatile Organic Compounds (VOC)				
Hazardous Air Pollutants	Potential Emissions			
	PPH		TPY	
Not Applicable				
Regulated Pollutants other than Criteria and HAP	Potential Emissions			
	Source	PPH	Source	TPY
<p><b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b></p> <p>See facility-wide emission summary.</p>				

***Applicable Requirements***

**List all applicable requirements for this emission unit. For each applicable requirement, include the rule citation and/or permit with the condition number. If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.**

Refer to the existing Title V permit for the emission-unit specific applicable requirements and proposed compliance demonstration methods.

  X   Permit Shield

**For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)**

Refer to the existing Title V permit for the emission-unit specific applicable requirements and proposed compliance demonstration methods.

**Are you in compliance with all applicable requirements for this emission unit?**   X   Yes      No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

## ATTACHMENT E - Emission Unit Form

**Emission Unit Description** THERMAL DRYER

<b>Emission unit ID number:</b> 045A/045C	<b>Emission unit name:</b> Thermal Dryer	<b>List any control devices associated with this emission unit:</b> Cyclones; Scrubber
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**Provide a description of the emission unit (type, method of operation, design parameters, etc.):**  
 Coal fired fluidized bed thermal dryer at a coal preparation plant.

<b>Manufacturer:</b> ENI Engineering, Inc.	<b>Model number:</b> NA	<b>Serial number:</b> NA
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<b>Construction date:</b> 1985	<b>Installation date:</b> 1985	<b>Modification date(s):</b> Not Applicable
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**Design Capacity (examples: furnaces - tons/hr, tanks - gallons):** 130 MMBtu/hr

<b>Maximum Hourly Throughput:</b> See Attachment D	<b>Maximum Annual Throughput:</b> See Attachment D	<b>Maximum Operating Schedule:</b> See Attachment D
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**Fuel Usage Data (fill out all applicable fields)**

<b>Does this emission unit combust fuel?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	<b>If yes, is it?</b>  <input checked="" type="checkbox"/> Indirect Fired <input type="checkbox"/> Direct Fired
------------------------------------------------------------------------------------------------------------------	-----------------------------------------------------------------------------------------------------------------------

<b>Maximum design heat input and/or maximum horsepower rating:</b> 130 MMBtu/hr	<b>Type and Btu/hr rating of burners:</b> Bigelow-Liptak 130 MMBtu/hr
------------------------------------------------------------------------------------	--------------------------------------------------------------------------

**List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.**

Coal: 4.35 tons/hr, 26,100 tons/yr  
 Coal Bed Methane: 130,000 cf/hr, 1,139 x 10<sup>6</sup> cf/yr  
 Propane: 500 gal/hr, 4.28 x 10<sup>6</sup> gallons/yr

**Describe each fuel expected to be used during the term of the permit.**

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Coal	3.9% daily average 3.40% rolling 365 daily weighted average	8.64%	13,208 Btu/lb

<b>Emissions Data</b>		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	57.6	172.8
Nitrogen Oxides (NO <sub>x</sub> )	63.6	172.8
Lead (Pb)	1.94E-03	5.48E-03
Particulate Matter (PM <sub>2.5</sub> )	40.0	120.0
Particulate Matter (PM <sub>10</sub> )	40.0	120.0
Total Particulate Matter (TSP)	40.0	120.0
Sulfur Dioxide (SO <sub>2</sub> )	195.0	586.0
Volatile Organic Compounds (VOC)	135.6	406.8
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY
<b>List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).</b>  See facility-wide emissions summary		

***Applicable Requirements***

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or **construction permit** with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

Refer to the existing Title V permit for the emission-unit specific applicable requirements and proposed compliance demonstration methods.

☒ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

Refer to the existing Title V permit for the emission-unit specific applicable requirements and proposed compliance demonstration methods.

Are you in compliance with all applicable requirements for this emission unit? ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as ATTACHMENT F.

## **ATTACHMENT G. AIR POLLUTION CONTROL DEVICE FORMS**

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<b>ATTACHMENT G - Air Pollution Control Device Form</b>		
<b>Control device ID number:</b> NA	<b>List all emission units associated with this control device.</b> 045A/045C	
<b>Manufacturer:</b> NA	<b>Model number:</b> NA	<b>Installation date:</b> MM/DD/YYYY
<b>Type of Air Pollution Control Device:</b>		
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"><input type="checkbox"/> Baghouse/Fabric Filter</div> <div style="width: 33%;"><input type="checkbox"/> Venturi Scrubber</div> <div style="width: 33%;"><input type="checkbox"/> Multiclone</div> <div style="width: 33%;"><input type="checkbox"/> Carbon Bed Adsorber</div> <div style="width: 33%;"><input type="checkbox"/> Packed Tower Scrubber</div> <div style="width: 33%;"><input type="checkbox"/> Single Cyclone</div> <div style="width: 33%;"><input type="checkbox"/> Carbon Drum(s)</div> <div style="width: 33%;"><input type="checkbox"/> Other Wet Scrubber</div> <div style="width: 33%;"><input type="checkbox"/> Cyclone Bank</div> <div style="width: 33%;"><input type="checkbox"/> Catalytic Incinerator</div> <div style="width: 33%;"><input type="checkbox"/> Condenser</div> <div style="width: 33%;"><input type="checkbox"/> Settling Chamber</div> <div style="width: 33%;"><input type="checkbox"/> Thermal Incinerator</div> <div style="width: 33%;"><input type="checkbox"/> Flare</div> <div style="width: 33%;"><input checked="" type="checkbox"/> Other (describe) <u>Caustic addition</u></div> <div style="width: 33%;"><input type="checkbox"/> Wet Plate Electrostatic Precipitator</div> <div style="width: 33%;"><input type="checkbox"/> Dry Plate Electrostatic Precipitator</div> </div>		
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Sulfur Dioxide	NA	NA
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
Caustic is added to the wet coal which feeds the fluidizing bed of the thermal dryer.		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No		
If Yes, <b>Complete ATTACHMENT H</b>		
If No, <b>Provide justification.</b>		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>		
N/A, caustic is applied when required as specified by the permit.		

<b>ATTACHMENT G - Air Pollution Control Device Form</b>		
<b>Control device ID number:</b> CYC1	<b>List all emission units associated with this control device.</b> 045A/C Thermal Dryer	
<b>Manufacturer:</b> NA	<b>Model number:</b> NA	<b>Installation date:</b> 1985
<b>Type of Air Pollution Control Device:</b>		
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"><input type="checkbox"/> Baghouse/Fabric Filter</div> <div style="width: 33%;"><input type="checkbox"/> Venturi Scrubber</div> <div style="width: 33%;"><input checked="" type="checkbox"/> Multiclone</div> <div style="width: 33%;"><input type="checkbox"/> Carbon Bed Adsorber</div> <div style="width: 33%;"><input type="checkbox"/> Packed Tower Scrubber</div> <div style="width: 33%;"><input type="checkbox"/> Single Cyclone</div> <div style="width: 33%;"><input type="checkbox"/> Carbon Drum(s)</div> <div style="width: 33%;"><input type="checkbox"/> Other Wet Scrubber</div> <div style="width: 33%;"><input type="checkbox"/> Cyclone Bank</div> <div style="width: 33%;"><input type="checkbox"/> Catalytic Incinerator</div> <div style="width: 33%;"><input type="checkbox"/> Condenser</div> <div style="width: 33%;"><input type="checkbox"/> Settling Chamber</div> <div style="width: 33%;"><input type="checkbox"/> Thermal Incinerator</div> <div style="width: 33%;"><input type="checkbox"/> Flare</div> <div style="width: 33%;"><input type="checkbox"/> Other (describe) _____</div> <div style="width: 33%;"><input type="checkbox"/> Wet Plate Electrostatic Precipitator</div> <div style="width: 33%;"><input type="checkbox"/> Dry Plate Electrostatic Precipitator</div> </div>		
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100	
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>  NA		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes, <b>Complete ATTACHMENT H</b> If No, <b>Provide justification.</b>		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b>  N/A		

<b>ATTACHMENT G - Air Pollution Control Device Form</b>		
<b>Control device ID number:</b> SCR1	<b>List all emission units associated with this control device.</b> 045A/C Thermal Dryer	
<b>Manufacturer:</b> NA	<b>Model number:</b> NA	<b>Installation date:</b> 1984
<b>Type of Air Pollution Control Device:</b>		
<div style="display: flex; flex-wrap: wrap;"> <div style="width: 33%;"><input type="checkbox"/> Baghouse/Fabric Filter</div> <div style="width: 33%;"><input checked="" type="checkbox"/> Venturi Scrubber</div> <div style="width: 33%;"><input type="checkbox"/> Multiclone</div> <div style="width: 33%;"><input type="checkbox"/> Carbon Bed Adsorber</div> <div style="width: 33%;"><input type="checkbox"/> Packed Tower Scrubber</div> <div style="width: 33%;"><input type="checkbox"/> Single Cyclone</div> <div style="width: 33%;"><input type="checkbox"/> Carbon Drum(s)</div> <div style="width: 33%;"><input type="checkbox"/> Other Wet Scrubber</div> <div style="width: 33%;"><input type="checkbox"/> Cyclone Bank</div> <div style="width: 33%;"><input type="checkbox"/> Catalytic Incinerator</div> <div style="width: 33%;"><input type="checkbox"/> Condenser</div> <div style="width: 33%;"><input type="checkbox"/> Settling Chamber</div> <div style="width: 33%;"><input type="checkbox"/> Thermal Incinerator</div> <div style="width: 33%;"><input type="checkbox"/> Flare</div> <div style="width: 33%;"><input type="checkbox"/> Other (describe) _____</div> <div style="width: 33%;"><input type="checkbox"/> Wet Plate Electrostatic Precipitator</div> <div style="width: 33%;"><input type="checkbox"/> Dry Plate Electrostatic Precipitator</div> </div>		
<b>List the pollutants for which this device is intended to control and the capture and control efficiencies.</b>		
Pollutant	Capture Efficiency	Control Efficiency
Particulate Matter	100	
<b>Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).</b>		
<b>Is this device subject to the CAM requirements of 40 C.F.R. 64?</b> <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes, <b>Complete ATTACHMENT H</b> If No, <b>Provide justification.</b>		
<b>Describe the parameters monitored and/or methods used to indicate performance of this control device.</b> Refer to the suggested Title V permit language and the attached CAM plan.		



## ATTACHMENT H - Compliance Assurance Monitoring (CAM) Plan Form

For definitions and information about the CAM rule, please refer to 40 CFR Part 64. Additional information (including guidance documents) may also be found at <http://www.epa.gov/ttn/emc/cam.html>

### CAM APPLICABILITY DETERMINATION

1) Does the facility have a PSEU (Pollutant-Specific Emissions Unit considered separately with respect to **EACH** regulated air pollutant) that is subject to CAM (40 CFR Part 64), which must be addressed in this CAM plan submittal? To determine applicability, a PSEU must meet **all** of the following criteria (*If No, then the remainder of this form need not be completed*): ☐ YES ☒ NO

- a. The PSEU is located at a major source that is required to obtain a Title V permit;
- b. The PSEU is subject to an emission limitation or standard for the applicable regulated air pollutant that is **NOT** exempt;

#### LIST OF EXEMPT EMISSION LIMITATIONS OR STANDARDS:

- NSPS (40 CFR Part 60) or NESHAP (40 CFR Parts 61 and 63) proposed after 11/15/1990.
  - Stratospheric Ozone Protection Requirements.
  - Acid Rain Program Requirements.
  - Emission Limitations or Standards for which a WVDEP Division of Air Quality Title V permit specifies a continuous compliance determination method, as defined in 40 CFR §64.1.
  - An emission cap that meets the requirements specified in 40 CFR §70.4(b)(12).
- c. The PSEU uses an add-on control device (as defined in 40 CFR §64.1) to achieve compliance with an emission limitation or standard;
  - d. The PSEU has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than the Title V Major Source Threshold Levels; AND
  - e. The PSEU is **NOT** an exempt backup utility power emissions unit that is municipally-owned.

### BASIS OF CAM SUBMITTAL

2) Mark the appropriate box below as to why this CAM plan is being submitted as part of an application for a Title V permit:

☐ **RENEWAL APPLICATION.** **ALL** PSEUs for which a CAM plan has **NOT** yet been approved need to be addressed in this CAM plan submittal.

☐ **INITIAL APPLICATION** (submitted after 4/20/98). **ONLY** large PSEUs (i. e., PSEUs with potential post-control device emissions of an applicable regulated air pollutant that are equal to or greater than Major Source Threshold Levels) need to be addressed in this CAM plan submittal.

☐ **SIGNIFICANT MODIFICATION TO LARGE PSEUs.** **ONLY** large PSEUs being modified after 4/20/98 need to be addressed in this cam plan submittal. For large PSEUs with an approved CAM plan, **Only** address the appropriate monitoring requirements affected by the significant modification.

### 3) <sup>a</sup> BACKGROUND DATA AND INFORMATION

Complete the following table for **all** PSEUs that need to be addressed in this CAM plan submittal. This section is to be used to provide background data and information for each PSEU in order to supplement the submittal requirements specified in 40 CFR §64.4. If additional space is needed, attach and label accordingly.

PSEU DESIGNATION	DESCRIPTION	POLLUTANT	CONTROL DEVICE	<sup>b</sup> EMISSION LIMITATION or STANDARD	<sup>c</sup> MONITORING REQUIREMENT
N/A, an approved CAM plan is already in place for 045A/045C					
<u>EXAMPLE</u> Boiler No. 1	Wood-Fired Boiler	PM	Multiclone	45CSR§2-4.1.c.; 9.0 lb/hr	Monitor pressure drop across multiclone: Weekly inspection of multiclone

<sup>a</sup>If a control device is common to more than one PSEU, one monitoring plan may be submitted for the control device with the affected PSEUs identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a). If a single PSEU is controlled by more than one control device similar in design and operation, one monitoring plan for the applicable control devices may be submitted with the applicable control devices identified and any conditions that must be maintained or monitored in accordance with 40 CFR §64.3(a).

<sup>b</sup>Indicate the emission limitation or standard for any applicable requirement that constitutes an emission limitation, emission standard, or standard of performance (as defined in 40 CFR §64.1).

<sup>c</sup>Indicate the monitoring requirements for the PSEU that are required by an applicable regulation or permit condition.

### CAM MONITORING APPROACH CRITERIA

Complete this section for EACH PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide monitoring data and information for EACH indicator selected for EACH PSEU in order to meet the monitoring design criteria specified in 40 CFR §64.3 and §64.4. If more than two indicators are being selected for a PSEU or if additional space is needed, attach and label accordingly with the appropriate PSEU designation, pollutant, and indicator numbers.

4a) PSEU Designation:	4b) Pollutant:	4c) <sup>a</sup> Indicator No. 1:	4d) <sup>a</sup> Indicator No. 2:
<b>5a) GENERAL CRITERIA</b> Describe the <u>MONITORING APPROACH</u> used to measure the indicators:			
<sup>b</sup> Establish the appropriate <u>INDICATOR RANGE</u> or the procedures for establishing the indicator range which provides a reasonable assurance of compliance:			
<b>5b) PERFORMANCE CRITERIA</b> Provide the <u>SPECIFICATIONS FOR OBTAINING REPRESENTATIVE DATA</u> , such as detector location, installation specifications, and minimum acceptable accuracy:			
<sup>c</sup> For new or modified monitoring equipment, provide <u>VERIFICATION PROCEDURES</u> , including manufacturer's recommendations, <u>TO CONFIRM THE OPERATIONAL STATUS</u> of the monitoring:			
Provide <u>QUALITY ASSURANCE AND QUALITY CONTROL (QA/QC) PRACTICES</u> that are adequate to ensure the continuing validity of the data, (i.e., daily calibrations, visual inspections, routine maintenance, RATA, etc.):			
<sup>d</sup> Provide the <u>MONITORING FREQUENCY</u> :			
Provide the <u>DATA COLLECTION PROCEDURES</u> that will be used:			
Provide the <u>DATA AVERAGING PERIOD</u> for the purpose of determining whether an excursion or exceedance has occurred:			

<sup>a</sup> Describe all indicators to be monitored which satisfies 40 CFR §64.3(a). Indicators of emission control performance for the control device and associated capture system may include measured or predicted emissions (including visible emissions or opacity), process and control device operating parameters that affect control device (and capture system) efficiency or emission rates, or recorded findings of inspection and maintenance activities.

<sup>b</sup> Indicator Ranges may be based on a single maximum or minimum value or at multiple levels that are relevant to distinctly different operating conditions, expressed as a function of process variables, expressed as maintaining the applicable indicator in a particular operational status or designated condition, or established as interdependent between more than one indicator. For CEMS, COMS, or PEMS, include the most recent certification test for the monitor.

<sup>c</sup> The verification for operational status should include procedures for installation, calibration, and operation of the monitoring equipment, conducted in accordance with the manufacturer's recommendations, necessary to confirm the monitoring equipment is operational prior to the commencement of the required monitoring.

<sup>d</sup> Emission units with post-control PTE ≥ 100 percent of the amount classifying the source as a major source (i.e., Large PSEU) must collect four or more values per hour to be averaged. A reduced data collection frequency may be approved in limited circumstances. Other emission units must collect data at least once per 24 hour period.

### ***RATIONALE AND JUSTIFICATION***

Complete this section for EACH PSEU that needs to be addressed in this CAM plan submittal. This section may be copied as needed for each PSEU. This section is to be used to provide rationale and justification for the selection of EACH indicator and monitoring approach and EACH indicator range in order to meet the submittal requirements specified in 40 CFR §64.4.

6a) PSEU Designation:

6b) Regulated Air Pollutant:

7) **INDICATORS AND THE MONITORING APPROACH:** Provide the rationale and justification for the selection of the indicators and the monitoring approach used to measure the indicators. Also provide any data supporting the rationale and justification. Explain the reasons for any differences between the verification of operational status or the quality assurance and control practices proposed, and the manufacturer's recommendations. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

8) **INDICATOR RANGES:** Provide the rationale and justification for the selection of the indicator ranges. The rationale and justification shall indicate how EACH indicator range was selected by either a COMPLIANCE OR PERFORMANCE TEST, a TEST PLAN AND SCHEDULE, or by ENGINEERING ASSESSMENTS. Depending on which method is being used for each indicator range, include the specific information required below for that specific indicator range. (If additional space is needed, attach and label accordingly with the appropriate PSEU designation and pollutant):

- **COMPLIANCE OR PERFORMANCE TEST** (Indicator ranges determined from control device operating parameter data obtained during a compliance or performance test conducted under regulatory specified conditions or under conditions representative of maximum potential emissions under anticipated operating conditions. Such data may be supplemented by engineering assessments and manufacturer's recommendations). The rationale and justification shall INCLUDE a summary of the compliance or performance test results that were used to determine the indicator range, and documentation indicating that no changes have taken place that could result in a significant change in the control system performance or the selected indicator ranges since the compliance or performance test was conducted.
- **TEST PLAN AND SCHEDULE** (Indicator ranges will be determined from a proposed implementation plan and schedule for installing, testing, and performing any other appropriate activities prior to use of the monitoring). The rationale and justification shall INCLUDE the proposed implementation plan and schedule that will provide for use of the monitoring as expeditiously as practicable after approval of this CAM plan, except that in no case shall the schedule for completing installation and beginning operation of the monitoring exceed 180 days after approval.
- **ENGINEERING ASSESSMENTS** (Indicator Ranges or the procedures for establishing indicator ranges are determined from engineering assessments and other data, such as manufacturers' design criteria and historical monitoring data, because factors specific to the type of monitoring, control device, or PSEU make compliance or performance testing unnecessary). The rationale and justification shall INCLUDE documentation demonstrating that compliance testing is not required to establish the indicator range.

**RATIONALE AND JUSTIFICATION:**



## **ATTACHMENT I. SUPPORTING EMISSION CALCULATIONS**

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**Table 1. Facility Emissions Summary**

**POTENTIAL EMISSIONS**

	PM (tpy)	PM <sub>10</sub> (tpy)	PM <sub>2.5</sub> (tpy)	VOC (tpy)	SO <sub>2</sub> (tpy)	NO <sub>x</sub> (tpy)	CO (tpy)	HAPs (tpy)	CO <sub>2</sub> (tpy)	CH <sub>4</sub> (tpy)	N <sub>2</sub> O (tpy)	CO <sub>2</sub> e (tpy)
Transfers	66.4	31.4	4.8	--	--	--	--	--	--	--	--	--
Roads	258.7	74.7	7.5	--	--	--	--	--	--	--	--	--
Piles	11.3	5.7	5.7	--	--	--	--	--	--	--	--	--
Misc	--	--	--	187.2	--	--	--	--	--	--	--	--
Thermal Dryer	120.0	120.0	120.0	406.8	586.0	190.8	172.8	6.9	79,490	8.7	1.3	80,092
<b>Facility Wide PTE (w/o roads)</b>	<b>197.7</b>	<b>157.1</b>	<b>130.4</b>	<b>594.0</b>	<b>586.0</b>	<b>190.8</b>	<b>172.8</b>	<b>6.9</b>	<b>79,490</b>	<b>9</b>	<b>1.3</b>	<b>80,092</b>
<b>Facility Wide PTE</b>	<b>456.4</b>	<b>231.8</b>	<b>137.9</b>	<b>594.0</b>	<b>586.0</b>	<b>190.8</b>	<b>172.8</b>	<b>6.9</b>	<b>79,490</b>	<b>9</b>	<b>1.3</b>	<b>80,092</b>

**Table 2. Transfer Points**

**EMISSIONS CALCULATIONS**

Sources : Transfer Points										
Flow Diagram ID	Emission Source Description	Design Capacity (tph)	Potential Throughput (tpy)	PM			Potential to Emit			
				Emission Factor <sup>a,b</sup> (lb/ton)	Contr. Effic. <sup>c</sup> (%)	Moist. Content (%)	PM (lb/hr)		PM (tpy)	
							Controlled	Uncontrolled	Controlled	Uncontrolled
<b>Raw Coal</b>										
004	conveyor 1 to conveyor 3	3,000	13,140,000	0.0010	80	5.5	0.58	2.92	1.28	6.39
005A	conveyor 3 to storage bin 1	3,000	13,140,000	0.0010	80	5.5	0.58	2.92	1.28	6.39
006A	storage bin 1 to conveyor 2	1,500	13,140,000	0.0010	80	5.5	0.29	1.46	1.28	6.39
003	conveyor 2 to conveyor 4	1,500	13,140,000	0.0010	80	5.5	0.29	1.46	1.28	6.39
004B	conveyor 1 to conveyor 21	3,000	13,140,000	0.0010	80	5.5	0.58	2.92	1.28	6.39
008A	conveyor 4 to prep plant	1,500	13,140,000	0.0010	80	5.5	0.29	1.46	1.28	6.39
052A	conveyor 21 to raw coal stockpile	3,000	13,140,000	0.0010	50	5.5	1.46	2.92	3.20	6.39
003B	grading of raw coal stockpile	3,000	13,140,000	0.0010	0	5.5	2.92	2.92	6.39	6.39
040	bulldozer to storage bin 1	360	2,160,000	0.0010	0	5.5	0.35	0.35	1.05	1.05
010	pan to raw coal stockpile	1,800	210,000	0.0010	0	5.5	1.75	1.75	0.10	0.10
011A	endloader to truck	1,800	210,000	0.0010	0	5.5	1.75	1.75	0.10	0.10
<b>Refuse</b>										
022	conveyor 10 to conveyor 11	500	3,942,000	0.0009	80	6.0	0.09	0.43	0.34	1.70
026	conveyor 11 to conveyor 12	500	3,942,000	0.0009	50	6.0	0.22	0.43	0.85	1.70
024A	conveyor 12 to refuse bin 1	500	3,942,000	0.0009	80	6.0	0.09	0.43	0.34	1.70
024	conveyor 12 to conveyor 14	500	3,942,000	0.0009	80	6.0	0.09	0.43	0.34	1.70
033A	conveyor 14 to refuse bin 2	500	3,942,000	0.0009	80	6.0	0.09	0.43	0.34	1.70
028	refuse bin 2 to pan	500	3,942,000	0.0013	0	4.5	0.64	0.64	2.54	2.54
024B	refuse bin 1 to pan	500	3,942,000	0.0009	0	6.0	0.43	0.43	1.70	1.70
029	pan to refuse disposal area	500	3,942,000	0.0009	0	6.0	0.43	0.43	1.70	1.70
029A	grading of refuse disposal area	500	3,942,000	0.0009	0	6.0	0.43	0.43	1.70	1.70
<b>Clean Coal - Thermal Dryer</b>										
034A	conveyor 15 to conveyor 42	600	3,219,300	0.0003	50	12.8	0.09	0.18	0.24	0.48
042	conveyor 42 to conveyor 43	600	3,219,300	0.0003	50	12.8	0.09	0.18	0.24	0.48
043	conveyor 43 to thermal dryer furnace	600	3,219,300	0.0003	80	12.8	0.04	0.18	0.10	0.48
035A	conveyor 16 to conveyor 17	600	3,219,300	0.0020	50	3.3	0.60	1.19	1.60	3.20
036A	conveyor 17 to conveyor 18	600	3,219,300	0.0020	50	3.3	0.60	1.19	1.60	3.20
036C	conveyor 18 to conveyor 6	600	3,219,300	0.0020	50	3.3	0.60	1.19	1.60	3.20
016B	conveyor 6 to sample conveyor 1	0.20	1,752	0.0020	50	3.3	1.99E-04	3.98E-04	8.72E-04	1.74E-03
SC1	sample conveyor 1 to sample crusher	0.20	1,752	0.0020	50	3.3	1.99E-04	3.98E-04	8.72E-04	1.74E-03
SC	sample crusher	0.20	1,752	0.0004	80	3.3	1.60E-05	8.00E-05	7.01E-05	3.50E-04
SC2	sample crusher to sample conveyor 2	0.20	1,752	0.0020	50	3.3	1.99E-04	3.98E-04	8.72E-04	1.74E-03
SC3	sample conveyor 2 to dumpster	0.20	1,752	0.0020	50	3.3	1.99E-04	3.98E-04	8.72E-04	1.74E-03

**Table 2. Transfer Points**

**EMISSIONS CALCULATIONS**

Sources : Transfer Points										
Flow Diagram ID	Emission Source Description	Design Capacity (tph)	Potential Throughput (tpy)	PM			Potential to Emit			
				Emission Factor <sup>a,b</sup> (lb/ton)	Contr. Effic. <sup>c</sup> (%)	Moist. Content (%)	PM (lb/hr)		PM (tpy)	
							Controlled	Uncontrolled	Controlled	Uncontrolled
<b>Coarse Clean Coal</b>										
034B	conveyor 15 to conveyor 5A	600	3,219,300	0.0003	50	12.8	0.09	0.18	0.24	0.48
05A	conveyor 5A to conveyor 5	600	3,219,300	0.0003	50	12.8	0.09	0.18	0.24	0.48
014	conveyor 5 to conveyor 6	1,200	5,978,700	0.0013	50	4.5	0.77	1.55	1.93	3.85
016	conveyor 6 to conveyor 7	1,200	9,198,000	0.0013	50	4.5	0.77	1.55	2.96	5.93
030A	conveyor 7 to clean coal silo 2	1,200	9,198,000	0.0013	50	4.5	0.77	1.55	2.96	5.93
044A	clean coal silo 2 to conveyor 13	3,500	9,198,000	0.0013	80	4.5	0.90	4.51	1.19	5.93
031A	conveyor 13 to conveyor 8	3,500	9,198,000	0.0013	80	4.5	0.90	4.51	1.19	5.93
016A	conveyor 6 to clean coal silo 1	1,200	9,198,000	0.0013	50	4.5	0.77	1.55	2.96	5.93
017A	clean coal silo 1 to conveyor 13A	3,500	9,198,000	0.0013	80	4.5	0.90	4.51	1.19	5.93
013A	conveyor 13A to conveyor 8	3,500	9,198,000	0.0013	80	4.5	0.90	4.51	1.19	5.93
019A	conveyor 8 to conveyor 8a	3,500	9,198,000	0.0013	80	4.5	0.90	4.51	1.19	5.93
019B	conveyor 8 to batch weigh loadout	3,500	9,198,000	0.0013	80	4.5	0.90	4.51	1.19	5.93
019	conveyor 8 to conveyor 9	3,500	9,198,000	0.0013	80	4.5	0.90	4.51	1.19	5.93
032A	conveyor 9 to unit train loadout 1	3,500	9,198,000	0.0013	80	4.5	0.90	4.51	1.19	5.93
038	batch weigh loadout bin to railcar/truck	3,500	9,198,000	0.0013	0	4.5	4.51	4.51	5.93	5.93
020	unit train loadout to unit train	3,500	9,198,000	0.0013	0	4.5	4.51	4.51	5.93	5.93
<b>Total PM</b>							<b>34.88</b>	<b>82.70</b>	<b>66.39</b>	<b>161.47</b>
<b>Total PM<sub>10</sub><sup>d</sup></b>							<b>16.50</b>	<b>39.12</b>	<b>31.40</b>	<b>76.37</b>
<b>Total PM<sub>2.5</sub><sup>e</sup></b>							<b>2.50</b>	<b>5.92</b>	<b>4.75</b>	<b>11.56</b>

**EMISSION FACTORS AND ASSUMPTIONS \***

a. Transfer Points (batch and continuous ( AP42, Section 13.2.4.3

Particulate (lb/ton) =  $k \cdot (0.0032) \cdot (U/5)^{1.3} / ($  where:  $k$  = particle size multiplier (0.74 for TSP; 0.35 for PM10; 0.053 for PM2.5)  
 $U$  = mean wind speed (@ 7.5 mph for all sources)  
 $M$  = material moisture content (%)

b. Crushing emission factor based on a source specific test conducted at the Monongalia County Preparation Plant during January 2000.

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

d. Total PM<sub>10</sub> Emissions = Total PM Emissions \* ( $k_{PM10}/k_{PM}$ )

e. Total PM<sub>2.5</sub> Emissions = Total PM Emissions \* ( $k_{PM2.5}/k_{PM}$ )

**Table 3. Haulroads**

$E = k (s/12)^a (W/3)^b (365-P)/365$
$E = [k*(sL)^{0.91}*(W)^{1.02}]*[(1-P)/4N]$

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

AP-42 Section 13.2.1, Equation 2 (January 2011), Paved Roadways

### DIMENSIONAL ANALYSIS

Time Conversion	8760 hr/yr	NIST SP1038
Mass Conversion	2,000 lb/ton	

### POTENTIAL VEHICLE PARAMETERS

Path	Roadway Length - Round Trip (miles/trip)	Vehicle Traffic (trips/year)	Mean Vehicle Weight (tons)	Vehicle Capacity (tons)	Potential Throughput (tons)
Clean Coal Trucked Out (Unpaved)	1.60	95,813	50	83	2,299,500
Refuse Trucked to Pile (Unpaved)	0.87	99,337	86	77	3,942,000
Raw Coal to/from Main Stockpile (Paved)	1.50	3,500	125	77	210,000
Raw Coal to Storage Bin Via Dozer (Unpaved)	0.11	47,059	173	80	2,160,000

### OPERATING PARAMETERS

Potential VMT - Clean Coal Trucked Out (Unpaved)	153,300 miles/yr	= Roadway Length (miles/trip) * Vehicle Traffic (trips/year)
Potential VMT - Refuse Trucked to Pile (Unpaved)	86,543 miles/yr	= Roadway Length (miles/vehicle) * Vehicle Traffic (trips/year)
Potential VMT - Raw Coal to/from Main Stockpile (Paved)	5,250 miles/yr	= Roadway Length (miles/vehicle) * Vehicle Traffic (trips/year)
Potential VMT - Raw Coal to Storage Bin Via Dozer (Unpaved)	5,176 miles/yr	= Roadway Length (miles/vehicle) * Vehicle Traffic (trips/year)
Silt Content	9.0 %	
Silt Loading	0.6 g/m <sup>2</sup>	
Number of Days w/ at least 0.01" of Precipitation (P)	170 days	
Control Efficiency	75%	Control efficiency of 75% is taken due to type of water spray bar used.

### EMISSION FACTORS

#### Unpaved Roadways

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 <sub>10</sub> /PM <sub>2.5</sub> , a	0.9	AP-42 Section 13.2.2, Table 13.2.2-2 (11/06)
Empirical Constant - PM/PM <sub>10</sub> /PM <sub>2.5</sub> , b	0.45	AP-42 Section 13.2.2, Table 13.2.2-2 (11/06)

**Table 3. Haulroads**

$E = k (s/12)^a (W/3)^b (365-P)/365$
$E = [k*(sL)^{0.91}*(W)^{1.02}]*[(1-P/4N)]$

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

AP-42 Section 13.2.1, Equation 2 (January 2011), Paved Roadways

**Unpaved Roadway Emission Factors <sup>a</sup>**

	PM Emission Factor (lb/VMT)	PM <sub>10</sub> Emission Factor (lb/VMT)	PM <sub>2.5</sub> Emission Factor (lb/VMT)
Clean Coal Trucked Out (Unpaved)	7.56	2.18	0.22
Refuse Trucked to Pile (Unpaved)	9.68	2.80	0.28
Raw Coal to Storage Bin Via Dozer (Unpaved)	13.28	3.84	0.38

<sup>a</sup> AP-42 Section 13.2.2, Equation 2 (November 2006), Unpaved Roadways

**Paved Roadways**

Particle Size Multiplier - PM (k)	0.011 lb/VMT	AP-42 Section 13.2.1, Table 13.2.1-1 (1/11)
Particle Size Multiplier - PM <sub>10</sub> (k)	0.0022 lb/VMT	AP-42 Section 13.2.1, Table 13.2.1-1 (1/11)
Particle Size Multiplier - PM <sub>2.5</sub> (k)	0.00054 lb/VMT	AP-42 Section 13.2.1, Table 13.2.1-1 (1/11)

**Paved Roadway Emission Factors <sup>a</sup>**

	PM Emission Factor (lb/VMT)	PM <sub>10</sub> Emission Factor (lb/VMT)	PM <sub>2.5</sub> Emission Factor (lb/VMT)
Raw Coal to/from Main Stockpile (Paved)	0.8406	0.1681	0.0413

<sup>a</sup> AP-42 Section 13.2.1, Equation 2 (January 2011), Paved Roadways

**EMISSIONS CALCULATIONS**

**Uncontrolled**

Path	Potential Emissions - PM		Potential Emissions - PM <sub>10</sub>		Potential Emissions - PM <sub>2.5</sub>	
	lb/hr <sup>a</sup>	tpy <sup>b</sup>	lb/hr <sup>a</sup>	tpy <sup>b</sup>	lb/hr <sup>a</sup>	tpy <sup>b</sup>
Clean Coal Trucked Out (Unpaved)	132.25	579.24	38.22	167.40	3.82	16.74
Refuse Trucked to Pile (Unpaved)	95.65	418.96	27.64	121.08	2.76	12.11
Raw Coal to/from Main Stockpile (Paved)	0.50	2.21	0.10	0.44	0.02	0.11
Raw Coal to Storage Bin Via Dozer (Unpaved)	7.85	34.37	2.27	9.93	0.23	0.99
<b>TOTAL</b>	<b>236.25</b>	<b>1034.78</b>	<b>68.23</b>	<b>298.86</b>	<b>6.84</b>	<b>29.95</b>

<sup>a</sup> Potential uncontrolled Pollutant Emissions (lb/hr) = Potential uncontrolled Pollutant Emissions (tpy) x 2000 (lb/ton) / 8760 (hr/yr)

<sup>b</sup> Potential uncontrolled Pollutant Emissions (tpy) = Potential VMT (miles/yr) x Path Pollutant EF (lb/VMT) / 2,000 (lbs/ton)

**Table 3. Haulroads**

$E = k (s/12)^a (W/3)^b (365-P)/365$
$E = [k*(sL)^{0.91}*(W)^{1.02}]*[(1-P/4N)]$

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

AP-42 Section 13.2.1, Equation 2 (January 2011), Paved Roadways

**Controlled**

Path	Potential Emissions - PM		Potential Emissions - PM <sub>10</sub>		Potential Emissions - PM <sub>2.5</sub>	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
Clean Coal Trucked Out (Unpaved)	33.06	144.81	9.56	41.85	0.96	4.19
Refuse Trucked to Pile (Unpaved)	23.91	104.74	6.91	30.27	0.69	3.03
Raw Coal to/from Main Stockpile (Paved)	0.13	0.55	0.03	0.11	0.01	0.03
Raw Coal to Storage Bin Via Dozer (Unpaved)	1.96	8.59	0.57	2.48	0.06	0.25
<b>TOTAL</b>	<b>59.06</b>	<b>258.69</b>	<b>17.06</b>	<b>74.72</b>	<b>1.71</b>	<b>7.49</b>

<sup>a</sup> Potential uncontrolled Pollutant Emissions (lb/hr) = Potential uncontrolled Pollutant Emissions (tpy) x 2000 (lb/ton) / 8760 (hr/yr)

<sup>b</sup> Potential uncontrolled Pollutant Emissions (tpy) = Potential VMT (miles/yr) x Path Pollutant EF (lb/VMT) / 2,000 (lbs/ton)

<sup>c</sup> Potential controlled Pollutant Emissions = Potential uncontrolled Pollutant Emissions x (1 - Control Efficiency)

## Table 4. Stockpiles

### POTENTIAL PROCESS DATA

Raw Coal Stockpile	20.5 acres
Refuse Disposal Area	39 acres

### DIMENSIONAL ANALYSIS

Mass Conversion	2,000 lb/ton	NIST SP1038
Time Conversion	8,760 hrs/yr	
Time Conversion	24 hrs/day	

### EMISSION FACTORS

PM Emission Factor	760 lb/yr/acre	AP-42, 11.9 (7/98) Table 11.9-4 for Wind Erosion of Exposed Areas: $[0.38 \text{ (tons/acre-yr)} \times 2,000 \text{ (lb/ton)}]$ PM <sub>10</sub> EF scaled using FIRE Database, 09/2004-Source Classification Code 30501049 PM <sub>2.5</sub> EF assumed to equal PM10 (due to absence of published PM2.5 EF) Due to moisture content of stored material, assumed consistent with calculations for similar facilities
PM <sub>10</sub> Emission Factor	380 lb/yr/acre	
PM <sub>2.5</sub> Emission Factor	380 lb/yr/acre	
Clean Coal Stockpile Control Factor	50%	

### EMISSIONS CALCULATIONS

#### Uncontrolled

Pile	Potential Emissions - PM		Potential Emissions - PM <sub>10</sub>		Potential Emissions - PM <sub>2.5</sub>	
	lb/hr <sup>a</sup>	tpy <sup>b</sup>	lb/hr <sup>a</sup>	tpy <sup>b</sup>	lb/hr <sup>a</sup>	tpy <sup>b</sup>
Raw Coal Stockpile	1.78	7.79	0.89	3.90	0.89	3.90
Refuse Disposal Area	3.38	14.82	1.69	7.41	1.69	7.41
<b>TOTAL</b>	<b>5.16</b>	<b>22.61</b>	<b>2.58</b>	<b>11.31</b>	<b>2.58</b>	<b>11.31</b>

<sup>a</sup> Pollutant Emissions (lb/hr) = Pile Size (acres) \* Pollutant Emission Factor (lb/yr/acre) / 8760 (hrs/yr)

<sup>b</sup> Pollutant Emissions (tpy) = Pile Size (acres) \* Pollutant Emission Factor (lb/yr/acre) / 2,000 (lbs/ton)

#### Controlled

Pile	Potential Emissions - PM		Potential Emissions - PM <sub>10</sub>		Potential Emissions - PM <sub>2.5</sub>	
	lb/hr <sup>a</sup>	tpy <sup>b</sup>	lb/hr <sup>a</sup>	tpy <sup>b</sup>	lb/hr <sup>a</sup>	tpy <sup>b</sup>
Raw Coal Stockpile	0.89	3.90	0.44	1.95	0.44	1.95
Refuse Disposal Area	1.69	7.41	0.85	3.71	0.85	3.71
<b>TOTAL</b>	<b>2.58</b>	<b>11.31</b>	<b>1.29</b>	<b>5.65</b>	<b>1.29</b>	<b>5.65</b>

<sup>a</sup> Pollutant Emissions (lb/hr) = Pile Size (acres) \* Pollutant Emission Factor (lb/yr/acre) / 8,760 (hours/yr) \* (1-Pile Control Efficiency (%))

<sup>b</sup> Pollutant Emissions (tpy) = Pile Size (acres) \* Pollutant Emission Factor (lb/yr/acre) \* / 2,000 (lbs/ton) \* (1-Pile Control Efficiency (%))



**Table 5. Miscellaneous VOC Emissions**

**POTENTIAL PROCESS DATA**

Process	Reagent Density <sup>b</sup>	VOC Volatility <sup>c</sup>	Amount of VOC Retained by Solids	Potential Usage
	(lb/gal)	(%)	(%)	(gal/yr)
Thickener - anionic flocculant	8.9	45%	95%	34,387
Freeze treat1 - diethylene glycol	8.5	0%	0%	753,708
Dust Control	8.5	42%	0%	39,097
- Fine Coal Froth Flotation (Frother Reagent-Tetra944) <sup>a</sup>	7.7	12%	10%	20,404
- Fine Coal Froth Flotation (Diesel Fuel Reagent) <sup>a</sup>	7.3	9%	10%	353,812

<sup>a</sup> Fine coal froth flotation VOC emission calculations assume 90% of the volatile VOC content of the froth and diesel fuel reagents are released into the atmosphere. The remaining VOC is bound to the coal. Potential release locations include: the vacuum filtration exhaust vents, the plant roof vents, and the water treatment thickener. These values yield actual emissions consistent with measurements made on a Pennsylvania coal preparation plant which indicated that approximately 5% of the total frother and diesel fuel usage in pounds were emitted.

<sup>b</sup> Reagent densities are taken from the manufacturer's material safety data sheet.

<sup>c</sup> Diesel fuel VOC content is estimated using a modified Reference Method 24A; others are based on material safety data sheets.

**DIMENSIONAL ANALYSIS**

Mass Conversion	2,000 lb/ton	NIST SP1038
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**EMISSIONS CALCULATIONS**

Emission Point	Potential Emissions - VOC (Uncontrolled)	
	lb/hr <sup>a</sup>	tpy <sup>b</sup>
Storage tanks - working/breathing losses <sup>c</sup>	0.11	0.50
Thickener - anionic flocculant (047)	0.79	3.44
Freeze treat1 - diethylene glycol (038A & 051C)	0.00	0.00
Dust Control (038A & 051C)	15.93	69.79
Froth Cell (009B) <sup>d</sup>	12.95	56.74
Vacuum Filter (009) <sup>e</sup>	6.48	28.37
Thickener (047) <sup>f</sup>	6.48	28.37
<b>TOTAL</b>	<b>42.74</b>	<b>187.21</b>

<sup>a</sup> Pollutant Emissions (lb/hr) = Pollutant Emissions (tpy) \* 2000 (lb/ton) / 8,760 (hr/yr)

<sup>b</sup> Pollutant Emissions (tpy) = Potential Usage (gal/yr) \* Reagent Density (lb/gal) \* VOC Volatility (%) \* (1 - Amount of VOC Retained by Solids (%)) / 2,000 (lbs/ton)

<sup>c</sup> Storage tank losses are calculated using USEPA TANKS software.

<sup>d</sup> Assumes froth cell releases 50% of Frother VOCs and 50% of Diesel Fuel VOCs

<sup>e</sup> Assumes vacuum filter releases 50% of Frother VOCs and 50% of Diesel Fuel VOCs

<sup>f</sup> Assumes thickener releases 50% of Frother VOCs and 50% of Diesel Fuel VOCs

**Table 6. Thermal Dryer Potential Emissions**

**PROCESS DATA**

Heat Input (MMBtu/hr)	182 MMBtu/hr
Effective Capacity Factor	66.67 %
Primary Fuel:	Bituminous Coal
Coal Heat Input <sup>1</sup> :	120 MMBtu/hr
Coal HHV <sup>2</sup> :	26.0 MMBtu/ton
Coal Consumption <sup>1</sup> :	4.35 tons/hr
Coal Consumption <sup>1</sup> :	26,100 tons/yr
Potential Annual Hours of Operation on Primary Fuel:	5,655 hrs/yr
Secondary Fuel	Propane
Propane HHV:	91,500 MMBtu/1,000 gal
Propane Consumption <sup>1</sup> :	500 gal/hr
Propane Hours:	3,105 hrs/yr
Propane Heat Input:	142,054 MMBtu/yr

AP-42, Section 1.5, Table 1.5-1, footnote a  
Permit Limit  
Conservatively assumes dryer runs 8,760

1. Permit Limit 4.1.2

2. AP-42 Section 1.1.5

**POTENTIAL EMISSIONS**

<i>Pollutant</i>	<i>Emission Factor (lb/ton-coal)</i>	<i>(kg/MMBtu)</i>	<i>(lb/hr)</i>	<i>(tpy)</i>
NO <sub>x</sub> <sup>a</sup>			63.6	190.8
CO <sup>a</sup>			57.6	172.8
SO <sub>2</sub> <sup>a</sup>			195.0	586.0
PM <sup>a</sup>			40.0	120.0
PM <sub>10</sub> <sup>a</sup>			40.0	120.0
PM <sub>2.5</sub> <sup>a</sup>			40.0	120.0
Condensable PM <sup>f</sup>	0.0478		0.2	0.6
VOC <sup>a</sup>			135.6	406.8
Lead <sup>b</sup>	0.00042		1.94E-03	5.48E-03
CO <sub>2</sub> <sup>c</sup> (Bituminous Coal Firing)		93.4	24,709.4	69,866
CH <sub>4</sub> <sup>d</sup> (Bituminous Coal Firing)		0.011	2.91	8.23
N <sub>2</sub> O <sup>d</sup> (Bituminous Coal Firing)		0.0016	0.42	1.20
CO <sub>2</sub> <sup>c</sup> (Natural Gas Firing)		61.46		9,623.87
CH <sub>4</sub> <sup>d</sup> (Natural Gas Firing)		3.00E-03		4.70E-01
N <sub>2</sub> O <sup>d</sup> (Natural Gas Firing)		6.00E-04		9.40E-02
CO <sub>2</sub> e <sup>e</sup> (Total)				80,092

a. Permit limit 4.1.1

b. AP-42 Table 1.1-18 EFs for Trace Metals from Controlled Coal Combustion

c. Table C-1 of 40 CFR 98

d. Table C-2 of 40 CFR 99

e. CO<sub>2</sub>e is the sum of the products of greenhouse gases and their global warming potential, per Table A-1 of 40 CFR 98.

f. AP-42 Table 11.10-1 EFs for Coal Cleaning. Sum of organic and inorganic condensable PM.