

# Fact Sheet



## *For Final Renewal Permitting Action Under 45CSR30 and Title V of the Clean Air Act*

Permit Number: **R30-08100012-2007**  
Application Received: **January 27, 2007**  
Plant Identification Number: **081-000012**  
Permittee: **Pocahontas Coal Company, LLC**  
Facility Name: **East Gulf Preparation Plant**  
Mailing Address: **109 Appalachian Drive, Beckley, WV 25801**

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Physical Location: Rhodell, Raleigh County, West Virginia  
UTM Coordinates: 474.80 km Easting • 4164.16 km Northing • Zone 17  
Directions: Take WV State Route 16 South of Beckley, WV. Turn left on Coal City Road (Raleigh County # 33). Plant is located on the South side of Raleigh County Road # 33, approximately 1 mile east, of East Gulf, WV.

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### **Facility Description**

Pocahontas Coal Company LLC's (formerly Left Fork Processing Company) East Gulf Plant is a 600 tons per hour coal preparation plant with a thermal dryer. The facility operates under SIC Code 1221 and has the potential to operate seven (7) days per week, twenty-four (24) hours per day and fifty-two (52) weeks per year.

### **Emissions Summary**

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<b>Plantwide Emissions Summary [Tons per Year]</b>		
<b>Regulated Pollutants</b>	<b>Potential Emissions</b>	<b>2005 Actual Emissions</b>
Carbon Monoxide (CO)	78.84	19.75
Nitrogen Oxides (NO <sub>x</sub> )	201.83	28.02

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Particulate Matter (PM <sub>10</sub> )	1,744.78	17.96
Total Particulate Matter (TSP)	4,632.12	48.21
Sulfur Dioxide (SO <sub>2</sub> )	588.68	30.09
Volatile Organic Compounds (VOC)	137.36	19.09

*PM<sub>10</sub> is a component of TSP.*

Hazardous Air Pollutants	Potential Emissions	2005 Actual Emissions
Hydrochloric Acid*	24.97	0.0469
Total HAPs (* HCL Included)	36.38	0.529

*Some of the above HAPs may be counted as PM or VOCs.*

### Title V Program Applicability Basis

This facility has the potential to emit 201.8 tons per year of NO<sub>x</sub>, 1,744.8 tons per year of PM<sub>10</sub>, 588.7 tons per year SO<sub>2</sub>, 137.4 tons per year of VOCs, 24.97 tons of a single HAP and 36.38 tons of aggregated HAPs. Due to this facility's potential to emit over 100 tons per year of a criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Pocahontas Coal Company, LLC is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

### Legal and Factual Basis for Permit Conditions

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR5	Operation of Coal Preparation Plants
	45CSR6	Open burning prohibited.
	45CSR10	Control of Sulfur Dioxide Emissions from Indirect Heat Exchangers
	45CSR11	Standby plans for emergency episodes.
	45CSR13	Permits for Construction, Modification, Relocation and Operation of Stationary Sources
	45CSR16	Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60
	WV Code § 22-5-4 (a) (14)	The Secretary can request any pertinent information such as annual emission inventory reporting.
	45CSR30	Operating permit requirement.
	40 C.F.R. Part 60 Subpart Y	Standards of Performance for Coal Preparation Plants
	40 C.F.R. Part 61	Asbestos inspection and removal
	40 C.F.R. Part 64	Compliance Assurance Monitoring
	40 C.F.R. Part 82, Subpart F	Ozone depleting substances
State Only:	45CSR4	No objectionable odors.

Each State and Federally-enforceable condition of the draft Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of

the draft Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

### Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
R13-2484B	June 5, 2007	

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the "General Requirement Comparison Table B," which may be downloaded from DAQ's website.

### Determinations and Justifications

The changes to the October 11, 2002 Title V Permit and Fact Sheet and subsequent minor modifications *MM01* consist of the following:

**45CSR13 – Permit R13-2484A** – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation.*

This permit establishes a sulfur content limit for the thermal dryer fuel and thermal dryer emission limits for VOCs, SO<sub>2</sub>, NO<sub>x</sub>, CO, PM and PM<sub>10</sub>. Operating parameters for the venturi scrubber are also established as well as maximum throughput limits for most of the plant equipment, conveyor belts and storage.

Compliance with the aforementioned limits will be demonstrated through record keeping, testing, and fuel sampling.

This permit contains an administrative update which superseded and replaced permit R13-2484. The amendment modifies only Condition A.3 of the permit which changed the following monitoring parameters for the venturi scrubber:

- a. The temperature of the gas stream at the exit of the thermal dryer from less than 1400F to less than 1464F;
- b. The pressure loss through the scrubber from greater than 28-inch water gauge to greater than 23 inches of water and;
- c. The water supply pressure from greater than 7.0 p.s.i.g. to greater than 7.8 psig?

Compliance will be through continuous monitoring recorded on strip charts

**40 C.F.R. Part 64 - Compliance Assurance Monitoring (CAM)**

This facility has a pollutant specific emissions unit (PSEU) for sulfur dioxide (SO<sub>2</sub>) meeting the applicability requirements of 40 C.F.R. §64.2 and therefore has submitted a CAM plan in accordance with the CAM rule.

The submitted plan meets the requirements of the CAM rule for the venturi scrubber (0004) controlling SO<sub>2</sub> from the thermal dryer. The primary use of this scrubber is for particulate matter (PM) control. Its secondary function is for SO<sub>2</sub> control. Since the existing Title V permit specifies a continuous compliance determination method for PM emissions, the scrubber is exempt from 40 CFR Part 64 per §64.2(b)(vi) for PM.

Monitoring per the CAM Plan for SO<sub>2</sub> emissions will be as follows:

*Note: The corresponding permit conditions are italicized in parentheses.*

	<b>Indicator No. 1</b>	<b>Indicator No. 2</b>	<b>Indicator No. 3</b>	<b>Indicator No. 4</b>
<b>I. Indicator</b>	Sulfur content of 1.61% - (5.1.16. & 5.2.2.d.1.)	Maximum heat input of 80 MMBtu/hr - (5.2.2.c.1.)	Pressure drop - (5.3.1.)	Water pressure - (5.3.1.)
<b>Measurement Approach</b>	Coal is sampled daily; a composite is analyzed monthly for sulfur and heat content. - (5.2.2.)	Fuel usage is recorded and fuel samples are analyzed for heat content. - (5.4.4.)	Pressure drop is continuously monitored. - (5.1.9. & 5.2.1.)	Water pressure is continuously monitored. - (5.1.9. & 5.2.1.)
<b>II. Indicator Range</b>	Maximum sulfur content is 1.61%. - (5.2.2.d.1.)	Maximum heat input of 80 MMBtu/hr - (5.2.2.c.1.)	An excursion is defined as pressure drop below 23 inches of H <sub>2</sub> O. - (5.3.1.)	An excursion is defined as water pressure below 7.8 psi. - (5.3.1.)
<b>III. Performance Criteria</b>				
<b>A. Data Representativeness</b>	500 grams of coal will be sampled from a point where a representative sample can be obtained. - (5.2.2.)	Fuel usage is recorded and fuel samples are taken daily for heat content analysis - (5.2.2. & 5.4.4.)	Pressure drop measurements are taken at the inlet of the scrubber and at a location between the scrubber and the mist eliminator. - (5.1.9. & 5.3.1.)	Water pressure is recorded before the scrubber. - (5.1.9. & 5.3.1.)
<b>B. Verification of Operational Status</b>	<i>Does not apply to existing non-modified monitoring equipment.</i>	<i>Does not apply to existing non-modified monitoring equipment.</i>	<i>Does not apply to existing non-modified monitoring equipment.</i>	<i>Does not apply to existing non-modified monitoring equipment.</i>
<b>C. QA/QC Practices and Criteria</b>	Sample preparation done according to ASTM method D4239. - (5.2.2.)	Fuel analysis is done according to ASTM Method D5865 (5.2.2.)	Calibration performed on the pressure drop recorder/monitor is performed as needed but at least once annually. Pressure drop is accurate within 1 inch of H <sub>2</sub> O - (5.1.9.)	Calibration performed on the water pressure gauge is performed as needed but at least once annually. The water pressure gauge is accurate to within 5%. - (5.1.9.)
<b>D. Monitoring Frequency</b>	Daily - (5.2.2)	Total coal used is recorded at the end of each day. - (5.4.4.)	Continuously - (5.1.9.)	Continuously. - (5.1.9.)
<b>Data Collection Procedures</b>	Coal samples are collected at a point where a representative sample can be obtained. They are prepared according to ASTM method D3177 - (5.2.2.)	Fuel usage is compiled at the end of each day - (5.4.4.).	Continuously recorded by strip chart and manually recorded once every 12 hours. - (5.4.1. & 5.4.4.)	Continuously recorded by strip chart and manually recorded once every 12 hours. - (5.4.1. & 5.4.4.)
<b>Averaging Period</b>	Monthly composite coal samples. - (5.2.2.)	Daily - (5.2.2. & 5.4.4.)	3-hour rolling average. (5.3.1.)	3-hour rolling average. (5.3.1)

### **Streamlining discussion**

The opacity requirements from 40 CFR §60.252(a) & §60.11(c) (NSPS) allow opacity greater than 20-percent only during periods of startup, shutdown or malfunctions. The opacity requirements from WV Rule 45CSR5 (Rule 5) allow opacity greater than 20% but less than 60% for a period of up to (8) minutes in any operating day during periods of startup and for a period or periods aggregating no more than five (5) minutes in any sixty (60) minute period during operation.

The NSPS opacity requirements during periods of normal operation of the thermal dryer are more stringent than the Rule 5 requirements and therefore, the 45CSR§5-3.1 requirements are streamlined with the NSPS requirements in permit condition 5.1.3.

The 45CSR§5-3.3. opacity requirements during periods of startup are more stringent than the NSPS requirements and therefore, the 40 CFR§60.11(c) startup requirements are streamlined with the Rule 5 requirements in permit condition 5.1.4.

The 45CSR§5-3.2. opacity excursion requirements during operation of the thermal dryer combined with the 40 CFR §60.11(c) opacity exception during periods of shutdown or malfunction, are contained in permit condition 5.1.5. This permit condition allows for opacity greater than 20% but less than 60% for a period or periods aggregating no more than five (5) minutes in any sixty (60) minute period during shutdown or malfunction.

The 45 CSR10A “WVDAQ Approved” Monitoring Plan only requires monthly fuel sampling for sulfur content in the fuel. Permit R13-2482A contains a more stringent requirement of daily fuel sampling. Therefore the 45 CSR10A”WVDAQ Approved” Monitoring Plan requirements are streamlined with the permit R13-2484A requirements in permit condition 5.1.16.

### **Non-Applicability Determinations**

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. 45CSR1 (NOx Budget Trading Program for Non-EGUs) - does not meet the definition of NOx Budget Unit
- b. 45CSR19 (Non-attainment NSR) - Not located in a non-attainment area or will not contribute to a violation of section
- c. 45CSR26 (NOx Budget Trading Program for EGUs) - not an EGU.
- d. 45CSR27 (Toxic air pollutants - BAT) – does not meet definition of chemical processing unit.
- e. 45CSR28 (Emission Trading and Banking) - not involved in this program.
- f. Section 112 (Hazardous Air Pollutants) - no MACT standard has been promulgated for thermal dryers.
- g. Section 129 (Solid waste combustion) - facility does not combust solid waste.
- h. Section 183(f) (Tank vessel standards) - no tanks/vessels utilized at this facility.
- i. Section 183 (e) - facility is not a regulated entity as defined by Section 183 (e)(C).
- j. NAAQS increments or visibility (temp. sources) – facility has no temporary sources.
- k. Federal Implementation Plan (FIP) - none in place
- l. Title IV of the CAA (Acid Rain) - not an EGU.

### **Request for Variances or Alternatives**

None

### **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

### **Comment Period**

Beginning Date: August 31, 2007  
Ending Date: October 1, 2007

All written comments should be addressed to the following individual and office:

Frederick Tipane  
Title V Permit Writer  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304

### **Procedure for Requesting Public Hearing**

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

### **Point of Contact**

Frederick Tipane  
West Virginia Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone: 304/926-0499 ext. 1215 • Fax: 304/926-0478

### **Response to Comments (Statement of Basis)**

Not applicable.