

Hampden Coal, LLC
Washington No. 2 Gas Deep Mine

Washington No. 2 Gas Screening Facility

ID No. - Pending

General Permit Application

October, 2015

Prepared for:

Hampden Coal, LLC

3228 Summit Square Place
Suite 180
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Prepared by:

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WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
601 57th Street, SE
Charleston, WV 25304
Phone: (304) 926-0475 • www.dep.wv.gov/daq

**APPLICATION FOR GENERAL
PERMIT REGISTRATION**
CONSTRUCT, MODIFY, RELOCATE OR
ADMINISTRATIVELY UPDATE
A STATIONARY SOURCE OF AIR POLLUTANTS

- CONSTRUCTION MODIFICATION RELOCATION CLASS I ADMINISTRATIVE UPDATE
 CLASS II ADMINISTRATIVE UPDATE

CHECK WHICH TYPE OF GENERAL PERMIT REGISTRATION YOU ARE APPLYING FOR:

- | | |
|---|---|
| <input checked="" type="checkbox"/> G10-D – Coal Preparation and Handling | <input type="checkbox"/> G40-C – Nonmetallic Minerals Processing |
| <input type="checkbox"/> G20-B – Hot Mix Asphalt | <input type="checkbox"/> G50-B – Concrete Batch |
| <input type="checkbox"/> G30-D – Natural Gas Compressor Stations | <input type="checkbox"/> G60-C – Class II Emergency Generator <input type="checkbox"/> |
| <input type="checkbox"/> G33-A – Spark Ignition Internal Combustion Engines | <input type="checkbox"/> G65-C – Class I Emergency Generator |
| <input type="checkbox"/> G35-A – Natural Gas Compressor Stations (Flare/Glycol Dehydration Unit) | <input type="checkbox"/> G70-A – Class II Oil and Natural Gas Production Facility |

SECTION I. GENERAL INFORMATION

1. Name of applicant (as registered with the WV Secretary of State's Office): Hampden Coal, LLC		2. Federal Employer ID No. (FEIN): 30-0838241	
3. Applicant's mailing address: 3228 Summit Square Place, Suite 180 Lexington, KY 25601		4. Applicant's physical address: Route 16/1, Amherstdale, WV	
5. If applicant is a subsidiary corporation, please provide the name of parent corporation:			
6. WV BUSINESS REGISTRATION. Is the applicant a resident of the State of West Virginia? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> IF YES , provide a copy of the Certificate of Incorporation/ Organization / Limited Partnership (one page) including any name change amendments or other Business Registration Certificate as Attachment A . <input type="checkbox"/> IF NO , provide a copy of the Certificate of Authority / Authority of LLC / Registration (one page) including any name change amendments or other Business Certificate as Attachment A .			

SECTION II. FACILITY INFORMATION

7. Type of plant or facility (stationary source) to be constructed, modified, relocated or administratively updated (e.g., coal preparation plant, primary crusher, etc.): Coal Screening Facility	8a. Standard Industrial Classification (SIC) code: 1222	AND	8b. North American Industry Classification System (NAICS) code: 212112
9. DAQ Plant ID No. (for existing facilities only): Pending	10. List all current 45CSR13 and other General Permit numbers associated with this process (for existing facilities only): None		

A: PRIMARY OPERATING SITE INFORMATION

11A. Facility name of primary operating site: Washington No. 2 Gas Screening Facility	12A. Address of primary operating site: Route 16/1, Amherstdale, WV	
13A. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> IF YES , please explain: Owner and Operator <input type="checkbox"/> IF NO , YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.		
14A. <input type="checkbox"/> For Modifications or Administrative Updates at an existing facility, please provide directions to the present location of the facility from the nearest state road; — For Construction or Relocation permits, please provide directions to the proposed new site location from the nearest state road. Include a MAP as Attachment F . From Amherstdale travel west on Route 16. Turn left on West Virginia secondary Route 16/1 and Travel 3.4 miles to the mine facility. (See Attachment F)		
15A. Nearest city or town: Amherstdale	16A. County: Logan	17A. UTM Coordinates: Northing (KM): 4179.262 Easting (KM): 56.917 Zone: 44S
18A. Briefly describe the proposed new operation or change (s) to the facility: Coal Screening Facility		19A. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits): Latitude: 37.75806 Longitude: 81.78528

B: 1ST ALTERNATE OPERATING SITE INFORMATION (only available for G20, G40, & G50 General Permits)

11B. Name of 1 st alternate operating site: _____ _____	12B. Address of 1 st alternate operating site: Mailing: _____ Physical: _____ _____	
13B. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> IF YES , please explain: _____ _____ <input type="checkbox"/> IF NO , YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.		

14B. <input type="checkbox"/> For Modifications or Administrative Updates at an existing facility, please provide directions to the present location of the facility from the nearest state road; — For Construction or Relocation permits, please provide directions to the proposed new site location from the nearest state road. Include a MAP as Attachment F . _____ _____		
15B. Nearest city or town:	16B. County:	17B. UTM Coordinates: Northing (KM): _____ Easting (KM): _____ Zone: _____
18B. Briefly describe the proposed new operation or change (s) to the facility:		19B. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits): Latitude: _____ Longitude: _____

C: 2ND ALTERNATE OPERATING SITE INFORMATION (only available for G20, G40, & G50 General Permits):

11C. Name of 2 nd alternate operating site: _____ _____	12C. Address of 2 nd alternate operating site: Mailing: _____ Physical: _____ _____	
13C. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? <input type="checkbox"/> YES <input type="checkbox"/> NO <input type="checkbox"/> IF YES, please explain: _____ _____ <input type="checkbox"/> IF NO, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.		
14C. <input type="checkbox"/> For Modifications or Administrative Updates at an existing facility, please provide directions to the present location of the facility from the nearest state road; — For Construction or Relocation permits, please provide directions to the proposed new site location from the nearest state road. Include a MAP as Attachment F . _____ _____		
15C. Nearest city or town:	16C. County:	17C. UTM Coordinates: Northing (KM): _____ Easting (KM): _____ Zone: _____
18C. Briefly describe the proposed new operation or change (s) to the facility:		19C. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits): Latitude: _____ Longitude: _____

20. Provide the date of anticipated installation or change: ____ / ____ / ____ <input type="checkbox"/> If this is an After-The-Fact permit application, provide the date upon which the proposed change did happen: : ____ 07 ____ / ____ 07 ____ / ____ 2015 ____	21. Date of anticipated Start-up if registration is granted: ____ 07 ____ / ____ 07 ____ / ____ 2015 ____
22. Provide maximum projected Operating Schedule of activity/activities outlined in this application if other than 8760 hours/year. (Note: anything other than 24/7/52 may result in a restriction to the facility's operation). Hours per day ____ 24 ____ Days per week ____ 7 ____ Weeks per year ____ 52 ____ Percentage of operation __ 100% ____	

SECTION III. ATTACHMENTS AND SUPPORTING DOCUMENTS

23. Include a check payable to WVDEP – Division of Air Quality with the appropriate application fee (per 45CSR22 and 45CSR13).
24. Include a Table of Contents as the first page of your application package.
All of the required forms and additional information can be found under the Permitting Section (General Permits) of DAQ's website, or requested by phone.
25. Please check all attachments included with this permit application. Please refer to the appropriate reference document for an explanation of the attachments listed below. <ul style="list-style-type: none"> <input type="checkbox"/> ATTACHMENT A : CURRENT BUSINESS CERTIFICATE <input type="checkbox"/> ATTACHMENT B: PROCESS DESCRIPTION <input type="checkbox"/> ATTACHMENT C: DESCRIPTION OF FUGITIVE EMISSIONS <input type="checkbox"/> ATTACHMENT D: PROCESS FLOW DIAGRAM <input type="checkbox"/> ATTACHMENT E: PLOT PLAN <input type="checkbox"/> ATTACHMENT F: AREA MAP <input type="checkbox"/> ATTACHMENT G: EQUIPMENT DATA SHEETS AND REGISTRATION SECTION APPLICABILITY FORM <input type="checkbox"/> ATTACHMENT H: AIR POLLUTION CONTROL DEVICE SHEETS <input type="checkbox"/> ATTACHMENT I: EMISSIONS CALCULATIONS <input type="checkbox"/> ATTACHMENT J: CLASS I LEGAL ADVERTISEMENT <input type="checkbox"/> ATTACHMENT K: ELECTRONIC SUBMITTAL <input type="checkbox"/> ATTACHMENT L: GENERAL PERMIT REGISTRATION APPLICATION FEE <input type="checkbox"/> ATTACHMENT M: SITING CRITERIA WAIVER <input type="checkbox"/> ATTACHMENT N: MATERIAL SAFETY DATA SHEETS (MSDS) <input type="checkbox"/> ATTACHMENT O: EMISSIONS SUMMARY SHEETS <input type="checkbox"/> OTHER SUPPORTING DOCUMENTATION NOT DESCRIBED ABOVE (Equipment Drawings, Aggregation Discussion, etc.) <p style="font-size: small; margin-top: 10px;">Please mail an original and two copies of the complete General Permit Registration Application with the signature(s) to the DAQ Permitting Section, at the address shown on the front page of this application. Please DO NOT fax permit applications. For questions regarding applications or West Virginia Air Pollution Rules and Regulations, please refer to the website shown on the front page of the application or call the phone number also provided on the front page of the application.</p>

Hampden Coal, LLC
Washington No. 2 Gas Deep Mine
Permit No. U501907
GD10-D – Coal Preparation and Handling
HTA Project No. 15177

Attachment A

Current Business Certificate

State of West Virginia



Certificate

*I, Natalie E. Tennant, Secretary of State,
of the State of West Virginia, hereby certify that*

Hampden Coal, LLC

has filed the appropriate registration documents in my office according to the provisions of the West Virginia Code and hereby declare the organization listed above as duly registered with the Secretary of State's Office.

*Given under my hand and
the Great Seal of West Virginia
on this day of
September 04, 2014*



Natalie E. Tennant

Secretary of State

Attachment B

Detailed Process Description

Raw coal is transported from underground via TP-01 to belt BC-01(NC). TP-01 is positioned underground and has no dust control other than confinement in the mine. Belt BC-01 (NC) is covered and feeds screen SS-01 (FE) at TP-02 (TC-FE). TP-2 is enclosed and feeds into the top of the screen.

Material leaves the screen via TP-03 (TC-FE) at the bottom of the screen and drops onto Belts BC-02 (PE) and BC-03 (PE). TP-03 is enclosed and Belts BC-02 and BC-03 are covered.

The screen discharges to one of two product belts, depending on material being rock or coal. If coal, the material discharges through TP-03 to Belt BC-02 (PE). The material then discharges onto Belt BC-04 (PE) through TP-04 (FC-FE). TP-04 is enclosed and Belt BC-04 is covered. Belt BC-04 discharges through TP-06 (MDH) into the raw coal stockpile (OS-02). The raw coal is then loaded by endloader into trucks which is considered to be TP-08 (MDH).

If rock, the material discharges through TP-03 to Belt BC-03. The material then discharges onto Belt BC-05 through TP-05. TP-05 is enclosed and Belt BC-05 is covered. Belt BC-05 discharges through TP-07 (MDH) into the rock stockpile (OS-01). The rock is then loaded by endloader into trucks which is considered to be TP-09 (MDH).

When necessary, the roadway and the area where the endloader operates is watered to minimize dust creation.

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Attachment C

Description of Fugitive Emissions

Potential sources of fugitive particulate emissions for this facility include emissions, which are not captured by pollution control equipment and emissions from open stockpiles and vehicular traffic on unpaved haulroads and work areas. The haulroads and work areas will be controlled by a water truck in accordance with the general permit.

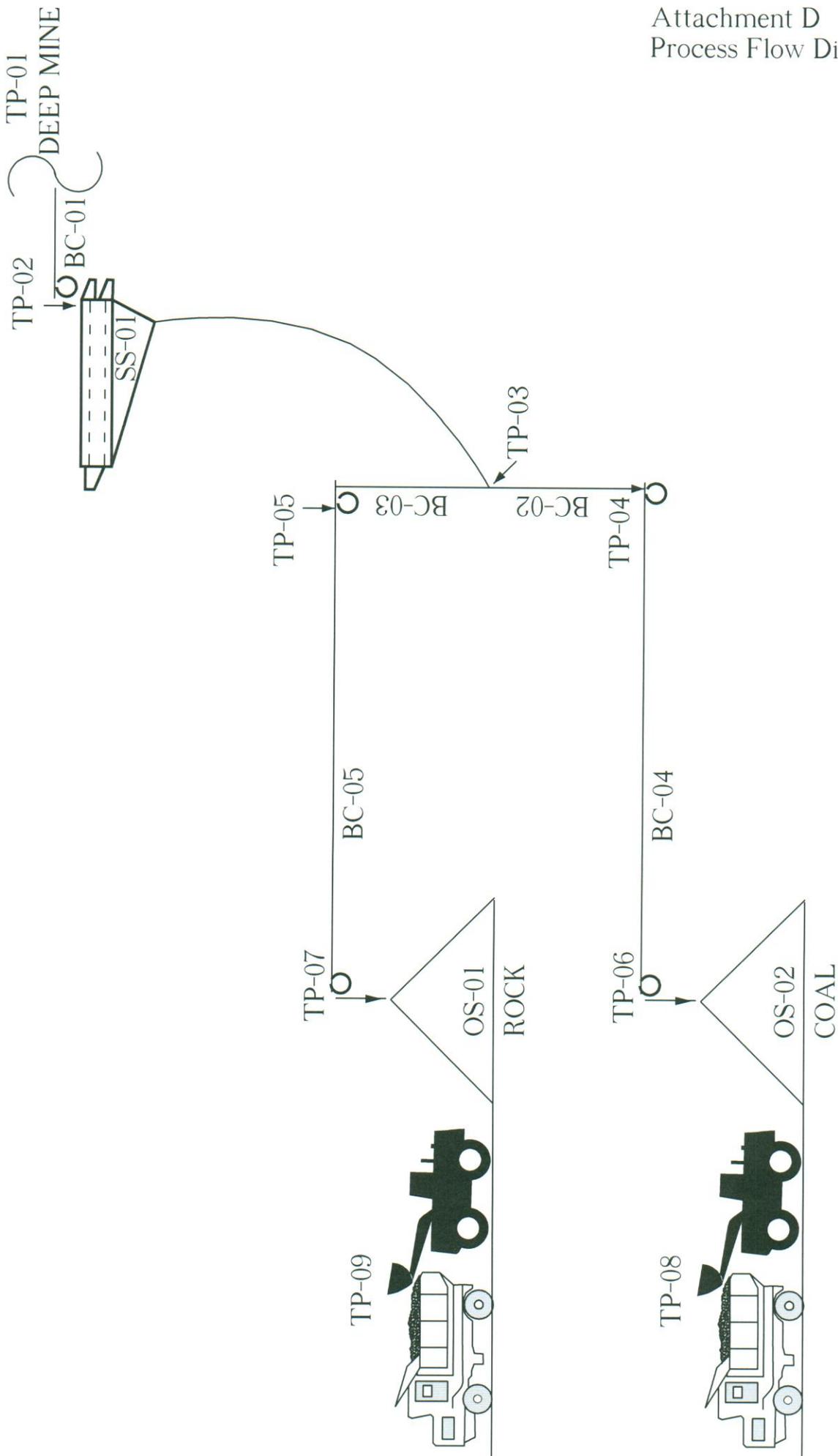
The water truck is equipped with pumps sufficient to maintain stockpiles, haulroads and work areas. The water truck will be operated three times daily and more as needed during dry periods. An additive to prevent freezing will be utilized in the winter months when freezing conditions are present.

Hampden Coal, LLC
Buffalo No. 2 Gas Deep Mine
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Attachment D

Process Flow Diagram

Attachment D
Process Flow Diagram

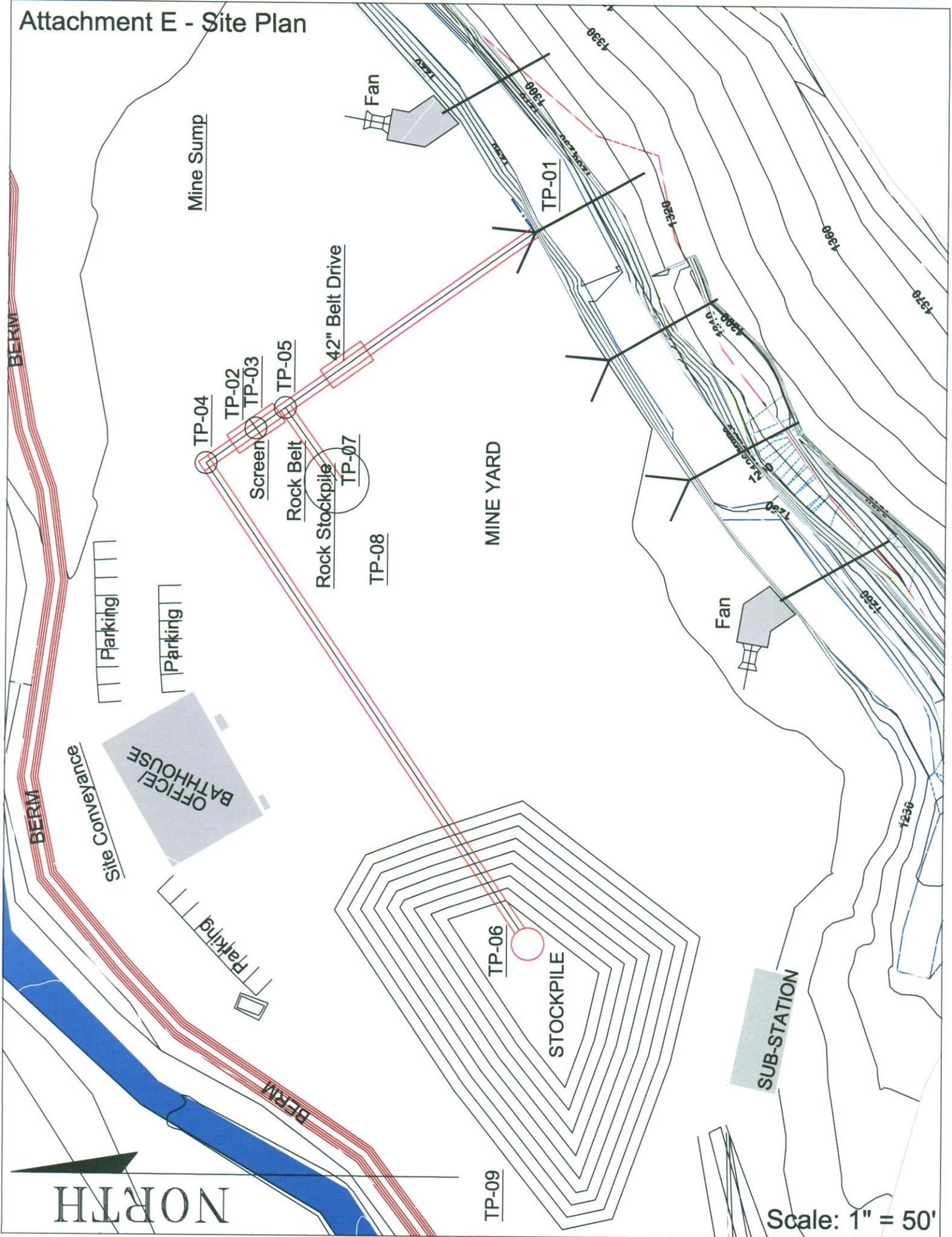


Hampden Coal, LLC
Buffalo No. 2 Gas Deep Mine
Permit No. U501907
GD10-D – Coal Preparation and Handling
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Attachment E

Site Plan Map

Attachment E - Site Plan

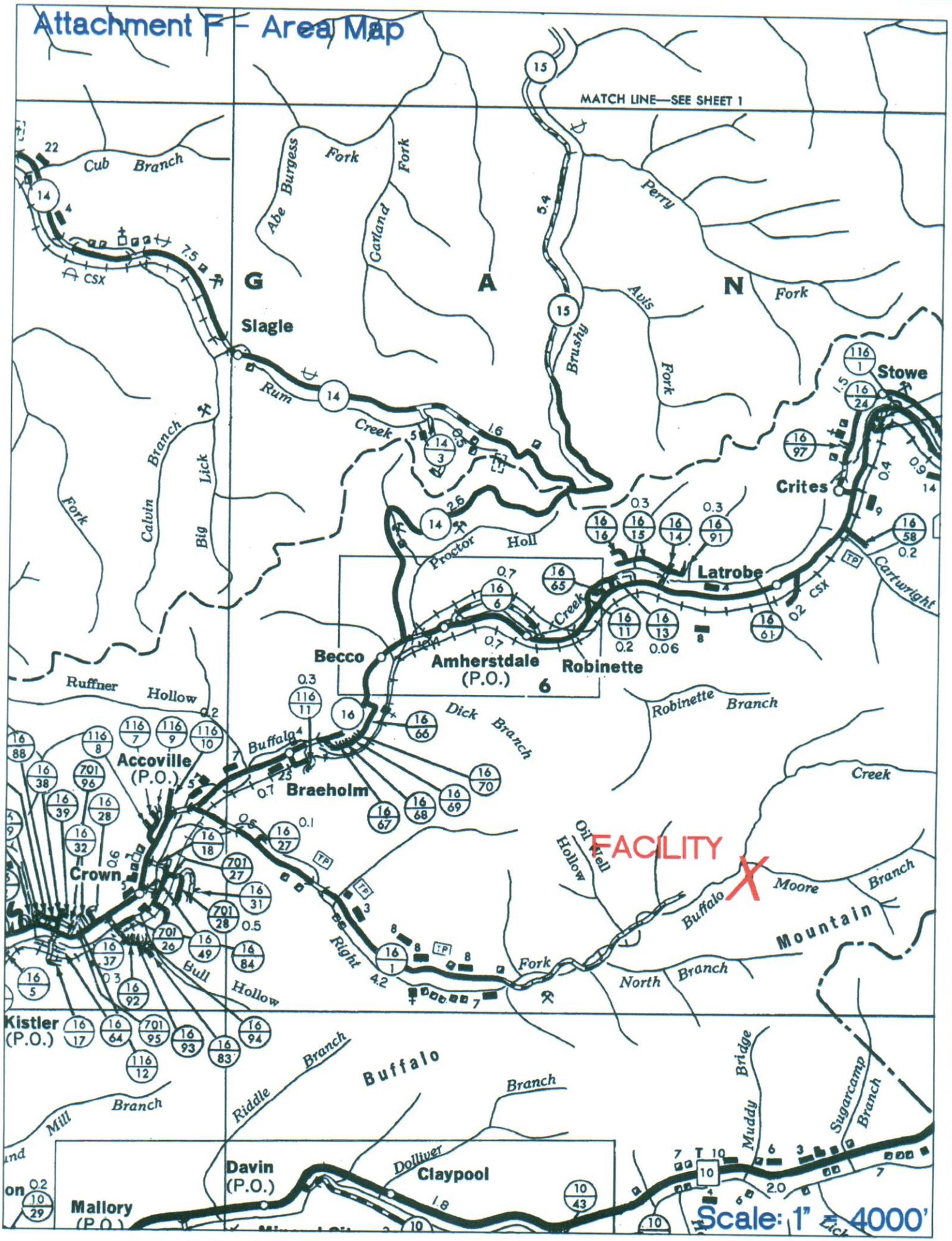


Hampden Coal, LLC
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Attachment F

Area / Location Map

Attachment F - Area Map



Hampden Coal, LLC
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Attachment G

Affected Source Sheets

CRUSHING AND SCREENING AFFECTED SOURCE SHEET

Source Identification Number ¹		SS-01					
Type of Crusher or Screen ²		SD (FE)					
Make, Model No., Serial No. ³		6"x16" Allis Chalmers Vibrating Screen					
Date of Construction, Reconstruction, or Modification (Month/Year) ⁴		7/7/15					
Maximum Throughput ⁵	tons/hour	450					
	tons/year	3,942,000					
Material sized from/to: ⁶		4x0					
Average Moisture Content (%) ⁷		4.11					
Control Device ID Number ⁸							
Baghouse Stack Parameters ⁹	height (ft)						
	diameter (ft)						
	volume (ACFM)						
	exit temp (F)						
	UTM Coordinates						
Maximum Operating Schedule ¹⁰	hours/day	24					
	days/year	365					
	hours/year	8,760					

1. Enter the appropriate Source Identification Number for each crusher and screen. For example, in the case of an operation which incorporates multiple crushers, the crushers should be designated CR-1, CR-2, CR-3 etc. beginning with the breaker or primary crusher. Multiple screens should be designated S-1, S-2, S-3 etc.
2. Describe types of crushers and screens using the following codes:

HM	Hammermill	SS	Stationary Screen	DR	Double Roll Crusher
SD	Single Deck Screen	BM	Ball Mill	DD	Double-Deck Screen
RB	Rotary Breaker	TD	Triple Deck Screen	JC	Jaw Crusher
GC	Gyratory Crusher	OT	Other		
3. Enter the make, model number, and serial number of the crusher/screen.
4. Enter the date that each crusher and screen was constructed, reconstructed, or modified.
5. Enter the maximum throughput for each crusher and screen in tons per hour and tons per year.
6. Describe the nominal material size reduction (e.g. +2" / -3/8").
7. Enter the average percent moisture content of the material processed.
8. Enter the appropriate Control Device Identification Number for each crusher and screen. Refer to Table A - *Control Device Listing and Control Device Identification Number Instructions* in the *Reference Document* for Control Device ID prefixes and numbering.
9. Enter the appropriate stack parameters if a baghouse control device is used.
10. Enter the maximum operating schedule for each crusher and screen in hours per day, days per year and hours per year.

STORAGE ACTIVITY AFFECTED SOURCE SHEET

Source Identification Number ¹	OS-01	OS-02				
Type of Material Stored ²	R	RC				
Average Moisture Content (%) ³	4.11	4.11				
Maximum Yearly Storage Throughput (tons) ⁴	394,200	3,547,800				
Maximum Storage Capacity (tons) ⁵	470	5,089				
Maximum Base Area (ft ²) ⁶	855	6,361				
Maximum Pile Height (ft) ⁷	22	60				
Method of Material Load-in ⁸	SS	SS				
Load-in Control Device Identification Number ⁹	SL-MDH	SL-MDH				
Storage Control Device Identification Number ⁹	SW-WS	SW-WS				
Method of Material Load-out ⁸	FE	FE				
Load-out Control Device Identification Number ⁹	LR-MDH	LR-MDH				

1. Enter the appropriate Source Identification Number for each storage activity using the following codes. For example, if the facility utilizes three storage bins, four open stockpiles and one storage building (full enclosure), the Source Identification Numbers should be BS-1, BS-2, and BS-3; OS-1, OS-2, OS-3, and OS-4; and SB-1, respectively.

BS Bin or Storage Silo (full enclosure)	E3 Enclosure (three sided enclosure)
OS Open Stockpile	SB Storage Building (full enclosure)
SF Stockpiles with wind fences	OT Other
2. Describe the type of material stored or stockpiled. (e.g. clean coal (CC), raw coal (RC), refuse (R), sized coal (SC), other (O))
3. Enter the average percent moisture content of the stored material.
4. Enter the maximum yearly storage throughput for each storage activity.
5. Enter the maximum storage capacity for each storage activity in tons (e.g. silo capacity, maximum stockpile size, etc.)
6. For stockpiles, enter the maximum stockpile base area.
7. For stockpiles, enter the maximum stockpile height.
8. Enter the method of load-in or load-out to/from stockpiles or bins using the following codes:

CS Clamshell	SS Stationary Conveyor/Stacker
FC Fixed Height Chute from Bins	ST Stacking Tube
FE Front Endloader	TC Telescoping Chute from Bins
MC Mobile Conveyor/Stacker	TD Truck Dump
UC Under-pile or Under-Bin Reclaim Conveyor	PC Pneumatic Conveyor/Stacker
RC Rake or Bucket Reclaim Conveyor	OT Other
9. Enter the appropriate Control Device Identification Number for each storage activity. Refer to Table A - *Control Device Listing and Control Device Identification Number Instructions* in the *Reference Document* for Control Device ID prefixes and numbering.

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Attachment H

Baghouse Air Pollution Control Device Sheet

(Not applicable to this application)

BAGHOUSE AIR POLLUTION CONTROL DEVICE SHEET

Complete a Baghouse Air Pollution Control Device Sheet for each baghouse control device.

1. Baghouse Control Device Identification Number:
2. Manufacturer's name and model identification:
3. Number of compartments in baghouse:
4. Number of compartments online during normal operation and conditions:
5. Gas flow rate into baghouse: _____ ACFM @ _____ °F and _____ PSIA
6. Total cloth area: _____ ft²
7. Operating air to cloth ratio: _____ ft/min
8. Filter media type:
9. Stabilized static pressure drop across baghouse: _____ inches H₂O
10. Baghouse operation is:
 Continuous Automatic Intermittent
11. Method used to clean bags:
 Shaker Pulse jet Reverse jet Other
12. Emission rate of particulate matter entering and exiting baghouse at maximum design operating conditions:
Entering baghouse: _____ lb/hr and _____ grains/ACF
Exiting baghouse: _____ lb/hr and _____ grains/ACF
13. Guaranteed minimum baghouse collection efficiency: _____ %
14. Provide a written description of the capture system (e.g. hooding and ductwork arrangement), size of ductwork and hoods and air volume, capacity and operating horsepower of fan:
15. Describe the method of disposal for the collected material:

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Attachment I

Emissions Calculations

EMISSIONS SUMMARY

Name of applicant: Hampden Coal, LLC
 Name of plant: Washington No. 2 Gas

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

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

FUGITIVE EMISSIONS				
<i>Stockpile Emissions</i>	0.06	0.24	0.06	0.24
<i>Unpaved Haulroad Emissions</i>	24.67	288.78	7.40	86.63
<i>Paved Haulroad Emissions</i>	(0.01)	(0.15)	(0.00)	(0.04)
Fugitive Emissions Total	24.72	288.87	7.45	86.83

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	45.00	197.10	9.00	39.42
<i>Transfer Point Emissions</i>	1.42	6.23	0.47	2.08
Point Source Emissions Total*	46.42	203.33	9.47	41.50

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

Facility Emissions Total	71.14	492.20	16.93	128.33
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***Facility Potential to Emit (PTE) (Baseline Emissions) = 41.50**
 (Based on Point Source Total controlled PM TPY emissions from above) ENTER ON LINE 26 OF APPLICATION

Particulate Matter under 10 microns, or PM-10 (for 45CSR30 Major Source Determination)

Uncontrolled PM-10		Controlled PM-10	
lb/hr	TPY	lb/hr	TPY

FUGITIVE EMISSIONS				
<i>Stockpile Emissions</i>	0.03	0.11	0.03	0.11
<i>Unpaved Haulroad Emissions</i>	6.34	74.20	1.90	22.26
<i>Paved Haulroad Emissions</i>	(0.01)	(0.15)	(0.00)	(0.04)
Fugitive Emissions Total	6.35	74.17	1.92	22.33

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	21.15	92.64	4.23	18.53
<i>Transfer Point Emissions</i>	0.67	2.95	0.22	0.98
Point Source Emissions Total*	21.82	95.58	4.45	19.51

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

Facility Emissions Total	28.18	169.75	6.38	41.84
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1. Emissions From CRUSHING AND SCREENING (Continued)

EMISSION FACTORS

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

PM	
Primary Crushing	0.02
Tertiary Crushing	0.06
Screening	0.1

PM-10	
Primary Crushing	0.0094
Tertiary Crushing	0.0282
Screening	0.047

2. Emissions From TRANSFER POINTS (continued)

Transfer Point ID No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTALS	1.422	6.227	0.474	2.076	0.672	2.945	0.224	0.982

Source:

AP42, Fifth Edition, Revised 11/2006
13.2.4 Aggregate Handling and Storage Piles

Emissions From Batch Drop

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

Where:

		PM	PM-10
k =	Particle Size Multiplier (dimensionless)	0.74	0.35
U =	Mean Wind Speed (mph)		
M =	Material Moisture Content (%)		

Assumptions:

k - Particle size multiplier

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

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

Emission Factor

For PM E= $\$I\$88 \cdot (0.0032) \cdot (((\text{Inputs!}\$I\$72)/5)^{1.3}) / (((\text{Inputs!}G78 + 0.00000001)/2)^{1.4})$
=lb/ton

For PM-10 E= $\$J\$88 \cdot (0.0032) \cdot (((\text{Inputs!}\$I\$72)/5)^{1.3}) / (((\text{Inputs!}G78 + 0.00000001)/2)^{1.4})$
=lb/ton

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

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

3. Emissions From WIND EROSION OF STOCKPILES

Stockpile ID No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
OS1	0.007	0.029	0.007	0.029	0.003	0.014	0.003	0.014
OS2	0.049	0.214	0.049	0.214	0.023	0.101	0.023	0.101
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTALS	0.055	0.243	0.055	0.243	0.026	0.114	0.026	0.114

Source:

Air Pollution Engineering Manual

Storage Pile Wind Erosion (Active Storage)

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

Where:

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

Emission Factors

For PM

$$E = (1.7) * ((\text{Inputs!F147})/1.5) * ((365 - \text{Inputs!I139})/235) * ((\text{Inputs!I140})/15)$$

For PM-10

$$E = 0.47 * (1.7) * ((\text{Inputs!F147})/1.5) * ((365 - \text{Inputs!I139})/235) * ((\text{Inputs!I140})/15)$$

For lb/hr

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

For Ton/yr

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

4. Emissions From UNPAVED HAULROADS

Item No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1	8.77	114.03	2.63	34.21	2.25	29.30	0.68	8.79
2	10.84	140.88	3.25	42.27	2.78	36.20	0.84	10.86
3	0.97	12.67	0.29	3.80	0.25	3.26	0.08	0.98
4	1.20	15.65	0.36	4.70	0.31	4.02	0.09	1.21
5	2.41	4.62	0.72	1.39	0.62	1.19	0.19	0.36
6	0.48	0.92	0.14	0.28	0.12	0.24	0.04	0.07
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	24.67	288.78	7.40	86.63	6.34	74.20	1.90	22.26

Source:

AP42, Fifth Edition, Revised 11/2006
13.2.2 Unpaved Roads

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

$$E = k \cdot (s/12)^a \cdot (W/3)^b = \text{lb/vmt}$$

Where:

		PM	PM-10
k =	particle size multiplier	4.90	1.50
a =	empirical constant	0.7	0.9
b =	empirical constant	0.45	0.45

Emission Factors

For PM $E = ((S^{35}) \cdot ((\text{Inputs}!S^{163})/12)^{(S^{36})}) \cdot (((\text{Inputs}!H171)/3)^{S^{37}})$

For PM-10 $E = ((J^{35}) \cdot (((\text{Inputs}!S^{163})/12)^{(J^{36})}) \cdot (((\text{Inputs}!H171)/3)^{J^{37}})$

For lb/hr $(\text{lb/vmt}) \cdot (\text{miles per trip}) \cdot (\text{Max trips per hour})$

For Ton/yr $(\text{lb/vmt}) \cdot (\text{miles per trip}) \cdot (\text{Max trips per year}) \cdot (1/2000)$

5. Emissions From INDUSTRIAL PAVED HAULROADS

Item No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1	-0.01	-0.07	0.00	-0.02	-0.01	-0.07	0.00	-0.02
2	-0.01	-0.07	0.00	-0.02	-0.01	-0.07	0.00	-0.02
3	0.00	-0.01	0.00	0.00	0.00	-0.01	0.00	0.00
4	0.00	-0.01	0.00	0.00	0.00	-0.01	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	-0.01	-0.15	0.00	-0.04	-0.01	-0.15	0.00	-0.04

Source:

AP42, Fifth Edition, Revised 11/2006
13.2.1 PAVED ROADS

Emission Estimate For Paved Haulroads

$$E = [k * (sL/2)^{0.65} * (W/3)^{1.5} - C] * (1 - (P/4 * N)) = \text{lb / Vehicle Mile Traveled (VMT)}$$

Where:

		PM	PM-10
k =	particle size multiplier	0.082	0.016
sL =	road surface silt loading, (g/ft ²)	0	
P =	number of days per year with precipitation >0.01 inch	0	
N =	number of days in averaging period	365	
C =	factor for exhaust, brake wear and tire wear	0.0047	0.0047

Emission Factors

For PM $E = (\$34 * (((\$35)/2)^{0.65}) * (((Inputs!G190)/3)^{1.5}) - (\$38)) * (1 - ((Inputs!\$18$

For PM-10 $E = (\$34 * (((\$35)/2)^{0.65}) * (((Inputs!G190)/3)^{1.5}) - (\$38)) * (1 - ((Inputs!\$18$

For lb/hr (lb/vmt)*(miles per trip)*(Max trips per hour)

For Ton/yr (lb/vmt)*(miles per trip)*(Max trips per year)*(1/2000)

Hampden Coal, LLC
Washington No. 2 Gas Deep Mine
Permit No. U501907
GD10-D – Coal Preparation and Handling
HTA Project No. 15177

Attachment J

Class I Legal Advertisement

Legal Advertisement

AIR QUALITY PERMIT NOTICE Notice of Application

Notice is hereby given that Hampden Coal, LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a General permit for a coal screening facility located off of County Route 16/1 on the Right Fork of Buffalo Creek near Accoville in Logan County, West Virginia. The facility coordinates are as follows: Latitude 37.633056° and Longitude 81.785278°.

The applicant estimates the potential to discharge the following regulated air pollutants will be: 41.50 TPY of particulate matter ("PM") and 19.51 TPY of particulate matter less than 10 microns ("PM10").

Startup of operation is planned to begin upon permit approval. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality ("DAQ"), 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1250, during normal business hours.

Dated this the ____ day of October, 2015.

By: Hampden Coal, LLC
D. Edward Brown
Vice President
3228 Summit Square Place, Suite 180
Lexington, KY 40509

Hampden Coal, LLC
Washington No. 2 Gas Deep Mine
Permit No. U501907
GD10-D – Coal Preparation and Handling
HTA Project No. 15177

Attachment K

Electronic Submittal CD

Hampden Coal, LLC
Washington No. 2 Gas Deep Mine
Permit No. U501907
GD10-D – Coal Preparation and Handling
HTA Project No. 15177

Attachment L

Certification

SECTION IV. CERTIFICATION OF INFORMATION

This General Permit Registration Application shall be signed below by a Responsible Official. A Responsible Official is a President, Vice President, Secretary, Treasurer, General Partner, General Manager, a member of a Board of Directors, or Owner, depending on business structure. A business may certify an Authorized Representative who shall have authority to bind the Corporation, Partnership, Limited Liability Company, Association, Joint Venture or Sole Proprietorship. Required records of daily throughput, hours of operation and maintenance, general correspondence, Emission Inventory, Certified Emission Statement, compliance certifications and all required notifications must be signed by a Responsible Official or an Authorized Representative. If a business wishes to certify an Authorized Representative, the official agreement below shall be checked off and the appropriate names and signatures entered. Any administratively incomplete or improperly signed or unsigned Registration Application will be returned to the applicant

FOR A CORPORATION (domestic or foreign)

G I certify that I am a President, Vice President, Secretary, Treasurer or in charge of a principal business function of the corporation

FOR A PARTNERSHIP

G I certify that I am a General Partner

FOR A LIMITED LIABILITY COMPANY

G I certify that I am a General Partner or General Manager

FOR AN ASSOCIATION

G I certify that I am the President or a member of the Board of Directors

FOR A JOINT VENTURE

G I certify that I am the President, General Partner or General Manager

FOR A SOLE PROPRIETORSHIP

G I certify that I am the Owner and Proprietor

G I hereby certify that (please print or type) **D. Edward Brown**

is an Authorized Representative and in that capacity shall represent the interest of the business (e.g., Corporation, Partnership, Limited Liability Company, Association Joint Venture or Sole Proprietorship) and may obligate and legally bind the business. If the business changes its Authorized Representative, a Responsible Official shall notify the Director of the Office of Air Quality immediately, and/or.

I hereby certify that all information contained in this General Permit Registration Application and any supporting documents appended hereto is, to the best of my knowledge, true, accurate and complete, and that all reasonable efforts have been made to provide the most comprehensive information possible

Signature

(please use blue ink)

Responsible Official

08/31/2015

Date

Name & Title **D. Edward Brown, Vice President**

(please print or type)

Signature

(please use blue ink)

Authorized Representative (if applicable)

08/31/2015

Date

Applicant's Name **Hampden Coal, LLC**

Phone & Fax

(304)-553-0027

Phone

(304)-553-0027

Fax

Email **ebrown@blackhawkmining.com**