



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.wvdep.org

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

PLEASE CHECK ALL THAT APPLY (IF KNOWN):  
 CONSTRUCTION     MODIFICATION     RELOCATION  
 ADMINISTRATIVE UPDATE     AFTER-THE-FACT

FOR AGENCY USE ONLY: PLANT I.D. # \_\_\_\_\_  
 PERMIT # \_\_\_\_\_ PERMIT WRITER: \_\_\_\_\_

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

- G10-C – Coal Preparation and Handling
- G20-B – Hot Mix Asphalt
- G30-D – Natural Gas Compressor Stations
- G33-A – Class I Spark Ignition Internal Combustion Engine
- G35-A – Natural Gas Compressor Stations (Flare/Glycol Dehydration Unit)

- G40-C – Nonmetallic Minerals Processing
- G50-B – Concrete Batch
- G60-C – Class II Emergency Generator
- G65-C – Class I Emergency Generator

ID. No. \_\_\_\_\_ Reg. \_\_\_\_\_  
 Company \_\_\_\_\_  
 Facility \_\_\_\_\_ Region \_\_\_\_\_  
 Initials \_\_\_\_\_

**SECTION I. GENERAL INFORMATION**

1. NAME OF APPLICANT (AS REGISTERED WITH THE WV SECRETARY OF STATE'S OFFICE):

Mid-Vol Coal Sales, Inc.

2. FEDERAL EMPLOYER ID NO. (FEIN):

55-0761501

3. APPLICANT'S MAILING ADDRESS:

640 Clover Dew Dairy Road

Princeton, WV 24740

4. IF APPLICANT IS A SUBSIDIARY CORPORATION, PLEASE PROVIDE THE NAME OF PARENT CORPORATION:

ArcelorMittal USA Holding II, LLC

5. WV BUSINESS REGISTRATION. IS THE APPLICANT A RESIDENT OF THE STATE OF WEST VIRGINIA?     YES     NO

⇒ IF YES, PROVIDE A COPY OF THE CERTIFICATE OF INCORPORATION / ORGANIZATION / LIMITED PARTNERSHIP (ONE PAGE) INCLUDING ANY NAME CHANGE AMENDMENTS OR OTHER BUSINESS CERTIFICATE AS ATTACHMENT A.

⇒ IF NO, PROVIDE A COPY OF THE CERTIFICATE OF AUTHORITY / AUTHORITY OF L.L.C. / REGISTRATION (ONE PAGE) INCLUDING ANY NAME CHANGE AMENDMENTS OR OTHER BUSINESS CERTIFICATE AS ATTACHMENT A.

**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.):

Wet Wash Coal Preparation Facility

8. STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE FOR THE FACILITY:

213113



Entire Document  
 NON-CONFIDENTIAL

9A. DAQ PLANT I.D. NO. (FOR AN EXISTING FACILITY):  <u>0 4 7 - 0 0 1 1 0</u>	10A. LIST ALL CURRENT 45CSR13 AND 45CSR30 (TITLE V) PERMIT NUMBERS ASSOCIATED WITH THIS PROCESS (FOR EXISTING FACILITY ONLY):  <u>G10-D095</u>
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**PRIMARY OPERATING SITE INFORMATION**

11A. NAME OF PRIMARY OPERATING SITE: <u>Eckman Preparation Plant</u>	12A. MAILING ADDRESS OF PRIMARY OPERATING SITE: <u>640 Clover Dew Dairy Road</u> <u>Princeton, WV 24740</u>
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13A. DOES THE APPLICANT OWN, LEASE, HAVE AN OPTION TO BUY, OR OTHERWISE HAVE CONTROL OF THE PROPOSED SITE?  
 YES     NO  
 ⇒ IF YES, PLEASE EXPLAIN: Site is leased from Imperial Resources, LLC  
Imperial and Mid-Vol share same parent company  
 ⇒ IF NO, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.

14A. ⇒ 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.  
From WV Route 52 at Eckman, turn onto County Route 52/9. Continue on county road through Eckman and onto gravel road approximately 1 mile to top of hill. Site is on right.  
 INCLUDE A MAP AS ATTACHMENT F.

15A. NEAREST CITY OR TOWN: <u>Eckman</u>	16A. COUNTY: <u>McDowell</u>	
17A. UTM NORTHING (KM): <u>4138.2</u>	18A. UTM EASTING (KM): <u>458.9</u>	19A. UTM ZONE: <u>17</u>

**1<sup>ST</sup> ALTERNATE OPERATING SITE INFORMATION (G20-B, G40-C, G50-C only) NA**

11B. NAME OF PRIMARY OPERATING SITE: <hr/> <hr/>	12B. MAILING ADDRESS OF PRIMARY OPERATING SITE: <hr/> <hr/>
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13B. DOES THE APPLICANT OWN, LEASE, HAVE AN OPTION TO BUY, OR OTHERWISE HAVE CONTROL OF THE PROPOSED SITE?  
 YES     NO

⇒ IF YES, PLEASE EXPLAIN: \_\_\_\_\_  
\_\_\_\_\_

⇒ IF NO, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.

14B. ⇒ 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 NORTHING (KM):

18B. UTM EASTING (KM):

19B. UTM ZONE:

2<sup>ND</sup> ALTERNATE OPERATING SITE INFORMATION (G20-B, G40-C, G50-C only) **NA**

11C. NAME OF PRIMARY OPERATING SITE:

12C. MAILING ADDRESS OF PRIMARY OPERATING SITE:

13C. DOES THE APPLICANT OWN, LEASE, HAVE AN OPTION TO BUY, OR OTHERWISE HAVE CONTROL OF THE PROPOSED SITE?  
 YES     NO

⇒ IF YES, PLEASE EXPLAIN: \_\_\_\_\_  
\_\_\_\_\_

⇒ IF NO, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.

14C. ⇒ 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 NORTHING (KM):	18C. UTM EASTING (KM):	19C. UTM ZONE:
20. PROVIDE THE DATE OF ANTICIPATED INSTALLATION OR CHANGE: ____/____/____ ⇨ IF THIS IS AN AFTER-THE-FACT PERMIT APPLICATION, PROVIDE THE DATE UPON WHICH THE PROPOSED CHANGE DID HAPPEN: ____/____/____		21. DATE OF ANTICIPATED START- UP IF REGISTRATION IS GRANTED: ____/____/____
22. PROVIDE MAXIMUM PROJECTED OPERATING SCHEDULE OF ACTIVITY/ ACTIVITIES OUTLINED IN THIS APPLICATION: HOURS PER DAY _____ DAYS PER WEEK _____ WEEKS PER YEAR _____ PERCENTAGE OF OPERATION _____		

**SECTION III. ATTACHMENTS AND SUPPORTING DOCUMENTS**

PLEASE CHECK ALL ATTACHMENTS INCLUDED WITH THIS PERMIT APPLICATION:  
 Please See the appropriate reference document for an explanation of the attachments listed below.

- ATTACHMENT A : CURRENT BUSINESS CERTIFICATE
- ATTACHMENT B: PROCESS DESCRIPTION
- ATTACHMENT C: DESCRIPTION OF FUGITIVE EMISSIONS
- ATTACHMENT D: PROCESS FLOW DIAGRAM
- ATTACHMENT E: PLOT PLAN
- ATTACHMENT F: AREA MAP
- ATTACHMENT G: AFFECTED SOURCE SHEETS
- ATTACHMENT H: BAGHOUSE AIR POLLUTION CONTROL DEVICE SHEET
- ATTACHMENT I: EMISSIONS CALCULATIONS
- ATTACHMENT J: CLASS I LEGAL ADVERTISEMENT
- ATTACHMENT K: ELECTRONIC SUBMITTAL DISKETTE
- CERTIFICATION OF INFORMATION
- ATTACHMENT L: GENERAL PERMIT REGISTRATION APPLICATION FEE
- ATTACHMENT M: SITING CRITERIA WAIVER

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. PLEASE DO NOT FAX PERMIT APPLICATIONS. FOR QUESTIONS REGARDING APPLICATIONS OR WEST VIRGINIA AIR POLLUTION RULES AND REGULATIONS PLEASE CALL (304) 926-0475.

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)

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

I certify that I am a General Partner

FOR A LIMITED LIABILITY COMPANY

I certify that I am a General Partner or General Manager

FOR AN ASSOCIATION

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

FOR A JOINT VENTURE

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

FOR A SOLE PROPRIETORSHIP

I certify that I am the Owner and Proprietor

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 Chief 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

Date

Name & Title James Derrick Kegley - Manager of Engineering

(please print or type)

Signature \_\_\_\_\_

(please use blue ink)

Authorized Representative (if applicable)

Date

*James Derrick Kegley*

6-7-16

Applicant's Name Mid-Vol Coal Sales, Inc.

Phone & Fax (304) 325-5719

(304) 325-5724

Email derrick.kegley@arcelormittal.com

Phone

Fax



**Attachment A**  
**Current Business Certificate**

**WEST VIRGINIA  
STATE TAX DEPARTMENT  
BUSINESS REGISTRATION  
CERTIFICATE**

ISSUED TO:  
**MID-VOL COAL SALES INC  
640 CLOVER DEW DAIRY RD  
PRINCETON, WV 24740-6828**

BUSINESS REGISTRATION ACCOUNT NUMBER: **1045-3433**

This certificate is issued on: **09/10/2010**

*This certificate is issued by  
the West Virginia State Tax Commissioner  
in accordance with Chapter 11, Article 12, of the West Virginia Code*

*The person or organization identified on this certificate is registered  
to conduct business in the State of West Virginia at the location above.*

**This certificate is not transferrable and must be displayed at the location for which issued.**

This certificate shall be permanent until cessation of the business for which the certificate of registration was granted or until it is suspended, revoked or cancelled by the Tax Commissioner.

Change in name or change of location shall be considered a cessation of the business and a new certificate shall be required.

TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them.  
CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of this certificate displayed at every job site within West Virginia.

**Attachment B**  
**Process Description**

## **Attachment B**

### **Process Description**

#### **As Approved Original Description:**

The preparation plant may process 5,256,000 tons per year at 600 tons per hour. Plant process raw coal adjacent to site and from raw coal trucked in from elsewhere.

Raw Coal will be dumped to stockpile SP1 at TP1. Coal is loaded by endloader via TP2 and/or TP5 to a pair of feeder/breakers (CR2 and CR3). Coal from CR2 is transferred to conveyor BC1 at TP3, then to conveyor BC2 at TP4, then to a crusher (CR1) inside the plant at TP7. CR3 feeds directly onto BC2 via TP6. Crushed coal leaves CR1 at TP8 and enters the wet wash circuit. A magnetite bin (BS1) feeds the wet wash circuit and vents into the same circuit in a closed loop system. Clean coal leaves the plant onto conveyor BC3 at TP9. Coal leaves BC3 onto a radial stacker at TP10. Coal leaves the stacker onto stockpile SP2 at TP11. Clean coal is loaded onto trucks at TP12 for transport off-site.

Refuse from the plant leaves at TP13 onto BC5. From BC5 the coal is transferred into a bin (BS2) at TP14. From the bin refuse can be loaded onto trucks at TP15. Or it can be dropped to stockpile SP3 from a chute at TP16. From SP3 it is loaded into trucks at TP17.

#### **Modification 1 Description**

CR2 and BC1 as described above were not constructed and the corresponding transfer points TP1 through TP4 have been removed from the permit.

A double deck screen (SC1) has been added. Raw coal from existing SP1 is loaded by endloader into SC1 at TP5. From the screen coal either falls directly onto an existing conveyor (BC2) at TP19, or drops into an existing crusher (CR3) at TP20. From CR3, coal then either drops onto existing conveyor BC2, or drops onto a new conveyor (BC6) via a flop gate at TP6. Coal from BC6 enters the plant at TP18. Coal from BC2 enters the plant at TP7.

#### **Modification 2 Description**

A new raw feed bin (BS3), belt conveyor (BC7), and a new magnetite bin (BS4) have been added to the permit. TP-8 has also been deleted from the permit due to the deletion of its associated structure. The modification also proposes to correct errors in the previously approved raw coal circuit.

The corrected raw coal circuit is as follows: Coal is loaded into the raw feed bin (BS3) via TP-5 where it is transferred to new belt conveyor (BC7) at new TP-21. New belt Conveyor (BC7) transfers coal to the existing Double Deck Screen (SC1) at new TP-22. From the double deck screen coal can either go to the refuse circuit by existing Belt Conveyor (BC6) at existing TP6 or to the plant feed circuit by falling into the existing Jeffries 56FT (CR3) at existing TP-20. The Crusher (CR3) then drops onto existing belt conveyor (BC2) at existing (TP-19). The existing belt conveyor (BC2) now falls into a double deck screen (SC1) via existing TP-7, instead of into the approved raw coal crusher (CR1) which was removed.

A new magnetite bin has (BS4) has been added inside the plant structure.

### **Proposed Modification 3 Description**

The purpose of this modification is to revise the preparation plant processing rate, add the proposed XMV No. 43 belt line. Multiple other structures, and more detail have been added. There are also changes in the coal parameters such as moisture content have been revised to reflect site conditions.

The preparation plant may process 3,057,600 tons per year. This is calculated from a rate of 650 tons per hour, for 16 hours a day, and 294 working days a year. This preparation plant processes raw coal from the adjacent site as well as raw coal trucked in from multiple other sites.

Raw coal will be dumped into stockpiles OS-1, OS-2, OS-3 at the respective transfer points TP01, TP02, TP03. In addition raw coal is proposed to be conveyed from the XMV No. 43 Deep Mine using BC14 to BC15 through TP34, then using BC15 to BC16 through TP35, then using BC16 to BC17 through TP36, and then using BC16 to BC17 through TP37 where a stationary conveyor stacks the coal in stockpile OS-7.

Stockpiles OS-1, OS-2, OS-3, and OS-7 will be loaded by their corresponding front end loaders, LO1, LO2, LO3, and LO7 and placed in a 100 Ton Raw Fed Bin, OT-1, through transfer points, TP07, TP08, TP09, and TP39. The raw coal exits the feed bins through TP10 which is a fixed height chute from the bins and lands on BC1 which takes the raw coal through TP11 to DD Screen, S1-FE. Once the raw coal makes it to the screen there are two options. The material (refuse) that makes it through the shaker and maintains a size larger than 8 inches exits through TP13 where it takes BC2 into the preparation plant. This material will not be washed and will be picked up on later. The remaining material that makes it through the screen exits through TP12 where it enters Jeffries 56ft Hammer Mill Crusher, HM1-FE. The coal will exit the hammer through TP14 and land on BC3 where the coal will enter the plant to be washed.

Once the material enters the plant the coal will be washed, and separated from the refuse. The coal and refuse will then exit the plant. While in the plant there are two 50 ton magnetite bins that will be utilized, BS-1 and BS-2.

Once the coal is washed the refuse material, including the previously mentioned material brought in from BC2, will exit the plant on BC4. This belt conveyor will take the refuse material to OT-2 Refuse Bin through TP15. Once the refuse makes it to OT-2 there are two options for this material. The refuse can exit through TP16 where it will be loaded directly into a truck and taken to the refuse pile or the refuse can exit through TP17 where it will be deposited onto BC5. Inline on BC5 is BS3 which is a Cement Kiln Dust (CKD) bin which mixes with the refuse. Once on BC5 the material will make its way to BC6 through TP18, then from BC6 to BC7 through TP19, then from BR7 to BC8 through TP20. Once the material is on BC8, BC9 from the Eckman Plate Press, WW2-FE, which is mixed with CKD from BS-4 is also deposited onto BC8. The refuse material on BC8 then is stored in a stockpile, OS-4. Once the material is in the stockpile it is gathered from a front end loader, LO4, and through TP24 loaded in a truck and hauled to the refuse pile.

The clean coal leaves the plant on BC10 and from this point there is two options. First if the clean coal from BC10 the coal can be deposited onto BC11 through TP25, then the coal will make its way from BC11 to BC12 through TP26, then the material will make it from BC12 and get stored into stockpile, OS-5. The coal will then be loaded with a front end loader, LO5, and placed in a coal truck and hauled to the loading facility. The second option is the clean coal from BC10 makes way to BC13, which is a radial stacker. Then BC13 will store the material in stockpile, OS-6, where it will be loaded with a front end loader, LO6, and placed in the coal truck and hauled to the loading facility.

## **Attachment C**

### **Description of Fugitive Emissions**

**Attachment C**  
**Description of Fugitive Emissions**

**Open Coal Stockpiles** – All stockpiles are now controlled by the used of compaction by the equipment on site (a dozer and the endloaders) that thus far has provided sufficient control. A water truck traverses through the stockpile area locations during the normal watering of the haulroads which also helps to control fugitive coal dust from loading and unloading activities at the piles.

**Haulroads** – Fugitive coal dust on the haulroads are now controlled by the use of a water truck that has thus far provided sufficient control.

**Other Structures** – The other structures are partially or fully enclosed and have provides sufficient control thus far.

**Attachment D**  
**Process Flow Diagram**

This document was too large to scan. If interested in viewing please contact: [depfoia@wv.gov](mailto:depfoia@wv.gov) or  
West Virginia Department of Environmental Protection Public Information Office

FOIA Request

601 57th St. S.E.

Charleston, WV 25304.

The fax number is 304-926-0447.

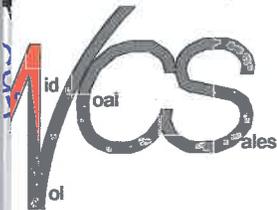
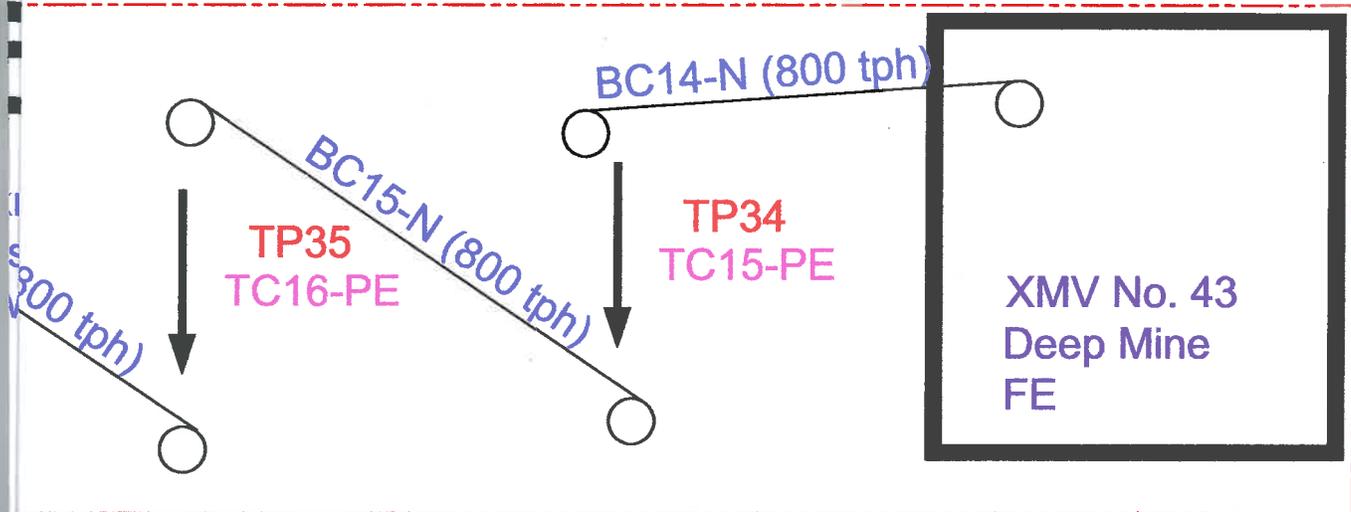
Thank you.



west virginia department of environmental protection



Clean Coal Truck 2



**MID-VOL COAL SALES, INC.**

640 Clover Dew Dairy Rd.

Princeton, WV 24740

# Eckman Preparation Plant

## Attachment D

### Progress Flow Diagram

# Permit No. G10-D095C

# Facility ID 047-00110

LOCATED NEAR ECKMAN IN THE BROWNS CREEK DISTRICT OF

MCDOWELL COUNTY, WEST VIRGINIA

DESIGNED BY: JDK	CHECKED BY: JDK
Not to Scale	DATE: 06/03/2016

# **Attachment E**

## **Plot Plan**

This document was too large to scan. If interested in viewing please contact: [depfoia@wv.gov](mailto:depfoia@wv.gov) or

West Virginia Department of Environmental Protection Public Information Office

FOIA Request

601 57th St. S.E.

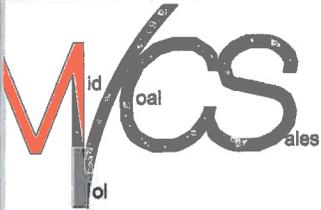
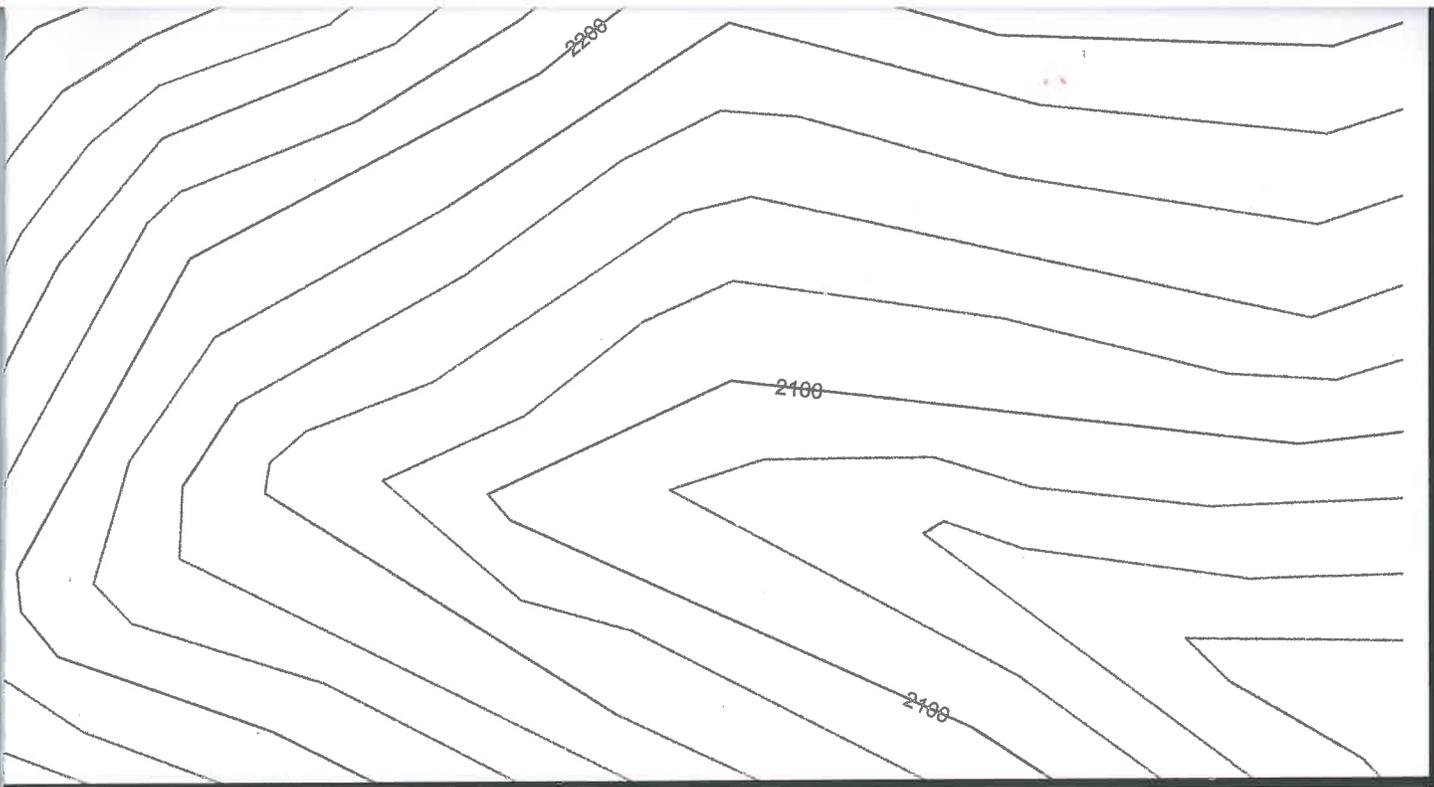
Charleston, WV 25304.

The fax number is 304-926-0447.

Thank you.



west virginia department of environmental protection



**MID-VOL COAL SALES, INC.**

*640 Clover Dew Dairy Rd.*

*Princeton, WV 24740*

# **Eckman Preparation Plant**

## **Attachment E**

### **Plot Plan**

## **Permit No. G10-D095A**

## **Facility ID 047-00110**

**LOCATED NEAR ECKMAN IN THE BROWNS CREEK DISTRICT OF  
MCDOWELL COUNTY, WEST VIRGINIA**

**DRAWN BY: JDK**

**CHECKED BY: JDK**

**SCALE: 1" = 100'**

**DATE: 06/06/2016**

**Attachment F**  
**Area Map**

This document was too large to scan. If interested in viewing please contact: [depfoia@wv.gov](mailto:depfoia@wv.gov) or

West Virginia Department of Environmental Protection Public Information Office

FOIA Request

601 57th St. S.E.

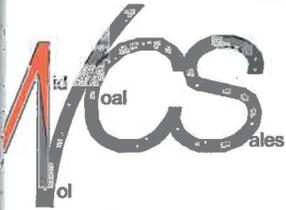
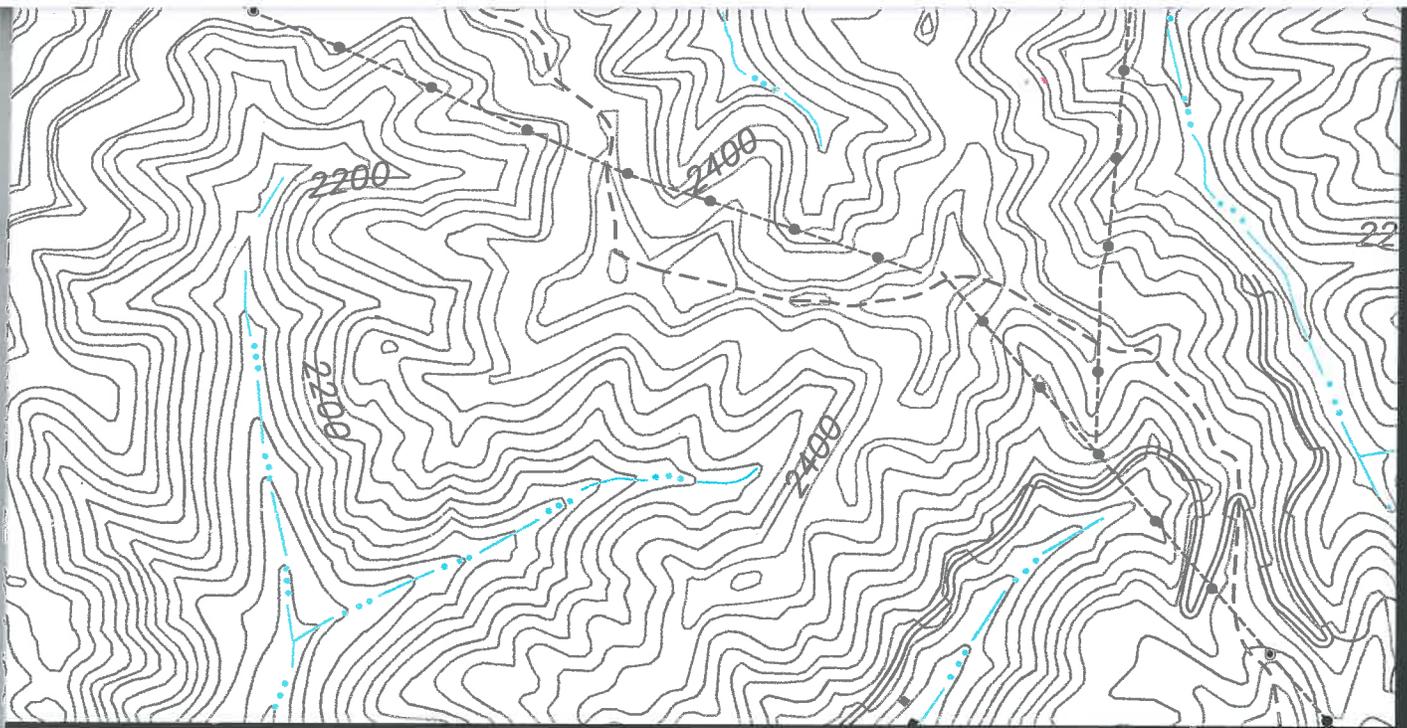
Charleston, WV 25304.

The fax number is 304-926-0447.

Thank you.



west virginia department of environmental protection



**MID-VOL COAL SALES, INC.**  
640 Clover Dew Dairy Rd.  
Princeton, WV 24740

# Eckman Preparation Plant

## Attachment F

### Area Map

# Permit No. G10-D095C Facility ID 047-00110

LOCATED NEAR ECKMAN IN THE BROWNS CREEK DISTRICT OF  
MCDOWELL COUNTY, WEST VIRGINIA

DESIGNED BY: JDK	CHECKED BY: JDK
SCALE: 1" = 1,000'	DATE: 06/03/2016

**Attachment G**  
**Affected Source Sheets**

## CRUSHING AND SCREENING AFFECTED SOURCE SHEET

Source Identification Number <sup>1</sup>		CR1	S1			
Type of Crusher or Screen <sup>2</sup>		FB	DD			
Date of Construction, Reconstruction, or Modification (Month/Year) <sup>4</sup>		2006	2010			
Maximum Throughput <sup>5</sup>	tons/hour	650	650			
	tons/year	3,057,600	3,057,600			
Material sized from/to: <sup>6</sup>		8" x 0 to 2" x 0	8" x 0 to 2" x 0			
Average Moisture Content (%) <sup>7</sup>		6	6			
Control Device ID Number <sup>8</sup>		FE	FE			
Baghouse Stack Parameters <sup>9</sup>	height (ft)	-	-			
	diameter (ft)	-	-			
	volume (ACFM)	-	-			
	exit temp (F)	-	-			
	UTM Coordinates	-	-			
Maximum Operating Schedule <sup>10</sup>	hours/day	16	16			
	days/year	294	294			
	hours/year	4704	4704			

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.

## CONVEYING AFFECTED SOURCE SHEET

Source Identification Number <sup>1</sup>	Date of Construction, Reconstruction, or Modification (Month/Year) <sup>2</sup>	Type of Material Handled <sup>3</sup>	Size of Material Handled <sup>4</sup>	Maximum Material Transfer Rate <sup>5</sup>		Average Moisture Content (%) <sup>6</sup>	Control Device <sup>7</sup>
				tons/hour	tons/year		
BC1	2011	RC	>8"x0	650	3,057,600	6	N
BC2	2006	RC	>8"	50	30,576	6	N
BC3	2006	RC	2"x0	650	3,057,600	6	N
BC4	2006	R	>8"x0	300	1,411,200	18	N
BC5	2013	R	>8"x0	300	1,411,200	18	N
BC6	2013	R	>8"x0	300	1,411,200	18	N
BC7	2013	R	>8"x0	300	1,411,200	18	N
BC8	2013	R	>8"x0	350	1,646,400	19	N
BC9	2013	R	<0.5"	50	235,200	22	N
BC10	2006	CC	2"x0	350	1,646,400	8	N
BC11	2013	CC	2"x0	350	1,481,760	8	N
BC12	2013	CC	2"x0	350	1,481,760	8	N
BC13	2013	CC	2"x0	350	164,640	8	N
BC14	Not Constructed	RC	>8"x0	800	764,400	8	N
BC15	Not Constructed	RC	>8"x0	800	764,400	8	N
BC16	Not Constructed	RC	>8"x0	800	764,400	8	N
BC17	Not Constructed	RC	>8"x0	800	764,400	8	N

1. Enter the appropriate Source Identification Number for each conveyor using the following codes. For example, multiple belt conveyors should be designated BC-1, BC-2, BC-3 etc. Transfer points are considered emission points, not sources, and should not be included in the *Conveying Affected Source Sheet*. Transfer Point Identification Numbers shall be assigned in the *Emission Calculation Sheet*.

BC Belt Conveyor	BE Bucket Elevator	DL Drag-link Conveyor
PS Pneumatic System	SC Screw Conveyor	VC Vibrating Conveyor
OT Other		

2. Enter the date that each crusher and screen was constructed, reconstructed, or modified.
3. Enter the type of material being handled - Raw Coal (RC) Sized Coal (SC) Clean Coal (CC) Refuse (R) Other (O)
4. Enter the nominal size of the material being conveyed (e.g. clean coal - ¾" x 0). If more than one material is handled by the listed conveyor, list each material and enter the appropriate data for each material.
5. Enter the maximum material transfer rate for each conveyor in tons per hour and tons per year.
6. Enter the average percent moisture content of the conveyed material.
7. Enter the control device for the conveyor. PE - Partial Enclosure (example ¾ hoop), FE - Full Enclosure, N - None

## STORAGE ACTIVITY AFFECTED SOURCE SHEET

Source Identification Number <sup>1</sup>	OS-1	OS-2	OS-3	OS-4	OS-5	OS-6	OS-7
Type of Material Stored <sup>2</sup>	RC	RC	RC	R	CC	CC	RC
Average Moisture Content (%) <sup>3</sup>	5	8	8	19	8	8	8
Maximum Yearly Storage Throughput (tons) <sup>4</sup>	764,400	764,400	764,400	1,411,200	1,481,760	164,640	764,400
Maximum Storage Capacity (tons) <sup>5</sup>	15,000	15,000	15,000	15,000	25,000	15,000	15,000
Maximum Base Area (ft <sup>2</sup> ) <sup>6</sup>	22,238	22,238	22,238	22,238	29,693	22,238	22,238
Maximum Pile Height (ft) <sup>7</sup>	55	55	55	55	63	55	55
Method of Material Load-in <sup>8</sup>	TD	TD	TD	SS	SS	OT	SS
Load-in Control Device Identification Number <sup>9</sup>	N	N	N	N	N	N	N
Storage Control Device Identification Number <sup>9</sup>	WS	WS	WS	WS	WS	WS	WS
Method of Material Load-out <sup>8</sup>	FE	FE	FE	FE	FE	FE	FE
Load-out Control Device Identification Number <sup>9</sup>	N	N	N	N	N	N	N

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.

## STORAGE ACTIVITY AFFECTED SOURCE SHEET

Source Identification Number <sup>1</sup>	OT-1	OT-2	BS-1	BS-2	BS-3	BS-4	
Type of Material Stored <sup>2</sup>	RC	R	O	O	O	O	
Average Moisture Content (%) <sup>3</sup>	6	18	20	20	3	3	
Maximum Yearly Storage Throughput (tons) <sup>4</sup>	3,057,600	1,411,200	5,000	5,000	5,000	5,000	
Maximum Storage Capacity (tons) <sup>5</sup>	100	200	50	50	60	60	
Maximum Base Area (ft <sup>2</sup> ) <sup>6</sup>	400	225	100	100	100	100	
Maximum Pile Height (ft) <sup>7</sup>	N/A	30	20	20	20	20	
Method of Material Load-in <sup>8</sup>	FE	SS	PC	PC	PC	PC	
Load-in Control Device Identification Number <sup>9</sup>	N	PE	FE	FE	FE	FE	
Storage Control Device Identification Number <sup>9</sup>	N	FE	FE	FE	FE	FE	
Method of Material Load-out <sup>8</sup>	FC	FC	UC	UC	UC	UC	
Load-out Control Device Identification Number <sup>9</sup>	PE	N	FE	FE	FE	FE	

- 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
- Describe the type of material stored or stockpiled. (e.g. clean coal (CC), raw coal (RC), refuse (R), sized coal (SC), other (O))
- Enter the average percent moisture content of the stored material.
- Enter the maximum yearly storage throughput for each storage activity.
- Enter the maximum storage capacity for each storage activity in tons (e.g. silo capacity, maximum stockpile size, etc.)
- For stockpiles, enter the maximum stockpile base area.
- For stockpiles, enter the maximum stockpile height.
- 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
- 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.

# **Attachment I**

## **Emissions Calculations**





**3. WIND EROSION OF STOCKPILES (Including all stockpiles of raw coal, clean coal, coal refuse, etc.)**

p =	number of days per year with precipitation >0.01 inch	157
f =	percentage of time that the unobstructed wind speed exceeds 12 mph at the mean pile height	20

Source ID No.	Stockpile Description	Silt Content of Material %	Stockpile base area Max. sqft	Control Device ID Number	Control Efficiency %
OS-1	Raw Coal	5	22,238	N	0
OS-2	Raw Coal	8	22,238	N	0
OS-3	Raw Coal	8	22,238	N	0
OS-4	Refuse	18	22,238	N	0
OS-5	Clean Coal	8	29,693	N	0
OS-6	Clean Coal	8	29,693	N	0
OS-7	Raw Coal	8	29,693	N	0

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

s =	silt content of road surface material (%)	10
p =	number of days per year with precipitation >0.01 inch	157
M <sub>dry</sub> =	surface material moisture content (%) - dry conditions	0.2

Item Number	Description	Number of wheels	Mean Vehicle Weight(tons)	Mean Vehicle Speed (mph)	Miles per Trip	Maximum Trips Per Hour	Maximum Trips Per Year	Control Device ID Number	Control Efficiency %
1	Front End Loaders Raw Coal	4	120	6	0.05	30	#####	WS	70
2	Raw Coal Trucks	18	282	6	0.6	10	57,330	WS	70
3	Front End Loaders Refuse	4	120	19	0.05	20	82,320	WS	70
4	Refuse Truck	4	120	19	0.5	8	32,928	WS	70
5	Front End Loaders Clean Coal	4	120	8	0.05	30	#####	WS	70
6	Clean Coal Trucks	18	45	8	0.8	12	37,044	WS	70
7									
8									

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

sL =	road surface silt loading, (g/ft^2)	70
P =	number of days per year with precipitation >0.01 inch	157

Item Number	Description	Mean Vehicle Weight (tons)	Miles per Trip	Maximum Trips Per Hour	Maximum Trips Per Year	Control Device ID Number	Control Efficiency %
1							
2							
3							
4							
5							
6							
7							
8							

# EMISSIONS SUMMARY

Name of applicant: Mid-Vol Coal Sales, Inc.  
 Name of plant: Eckman Preparation Plant

## 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>	2.02	8.85	2.02	8.85
<i>Unpaved Haulroad Emissions</i>	521.42	1,280.02	156.43	384.01
<i>Paved Haulroad Emissions</i>	0.00	0.00	0.00	0.00
<b>Fugitive Emissions Total</b>	<b>523.44</b>	<b>1,288.87</b>	<b>158.45</b>	<b>392.86</b>

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	78.00	183.46	15.60	36.69
<i>Transfer Point Emissions</i>	14.40	8.96	11.68	6.83
<b>Point Source Emissions Total*</b>	<b>92.40</b>	<b>192.42</b>	<b>27.28</b>	<b>43.52</b>

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

<b>Facility Emissions Total</b>	<b>615.84</b>	<b>1,481.29</b>	<b>185.73</b>	<b>436.38</b>
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**\*Facility Potential to Emit (PTE) (Baseline Emissions) = 43.52**  
 (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>	0.95	4.16	0.95	4.16
<i>Unpaved Haulroad Emissions</i>	153.90	377.81	46.17	113.34
<i>Paved Haulroad Emissions</i>	0.00	0.00	0.00	0.00
<b>Fugitive Emissions Total</b>	<b>154.85</b>	<b>381.97</b>	<b>47.12</b>	<b>117.50</b>

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	36.66	86.22	7.33	17.24
<i>Transfer Point Emissions</i>	6.81	4.24	5.53	3.23
<b>Point Source Emissions Total*</b>	<b>43.47</b>	<b>90.46</b>	<b>12.86</b>	<b>20.48</b>

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

<b>Facility Emissions Total</b>	<b>198.32</b>	<b>472.44</b>	<b>59.98</b>	<b>137.98</b>
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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	14.403	8.963	11.683	6.831	6.812	4.239	5.526	3.231

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

For PM-10 =lb/ton  $E = 0.0032 \cdot k \cdot [(U/5)^{1.3}] / [(M/2)^{1.4}]$

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
OS-1	0.142	0.623	0.142	0.623	0.067	0.293	0.067	0.293
OS-2	0.228	0.997	0.228	0.997	0.107	0.469	0.107	0.469
OS-3	0.228	0.997	0.228	0.997	0.107	0.469	0.107	0.469
OS-4	0.512	2.243	0.512	2.243	0.241	1.054	0.241	1.054
OS-5	0.304	1.331	0.304	1.331	0.143	0.626	0.143	0.626
OS-6	0.304	1.331	0.304	1.331	0.143	0.626	0.143	0.626
OS-7	0.304	1.331	0.304	1.331	0.143	0.626	0.143	0.626
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	2.021	8.853	2.021	8.853	0.950	4.161	0.950	4.161

**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	34.02	173.39	10.21	52.02	10.04	51.18	3.01	15.35
2	199.91	573.03	59.97	171.91	59.00	169.14	17.70	50.74
3	22.68	46.68	6.80	14.00	6.70	13.78	2.01	4.13
4	90.73	186.72	27.22	56.02	26.78	55.11	8.03	16.53
5	34.02	84.03	10.21	25.21	10.04	24.80	3.01	7.44
6	140.05	216.17	42.01	64.85	41.34	63.80	12.40	19.14
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
<b>TOTALS</b>	<b>521.42</b>	<b>1280.02</b>	<b>156.43</b>	<b>384.01</b>	<b>153.90</b>	<b>377.81</b>	<b>46.17</b>	<b>113.34</b>

**Source:**

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

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

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

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
P =	number of days per year with precipitation >0.01 inch	157	

**Emission Factors**

For PM  $E = \left(\frac{I}{35}\right)^{0.7} \cdot \left(\frac{W}{12}\right)^{0.45} \cdot \left(\frac{H}{3}\right)^{0.45} \cdot (365 - P)$

For PM-10  $E = \left(\frac{J}{35}\right)^{0.9} \cdot \left(\frac{W}{12}\right)^{0.45} \cdot \left(\frac{H}{3}\right)^{0.45} \cdot (365 - P)$

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	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
<b>TOTALS</b>	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

**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 <sup>2</sup> )	70	
P =	number of days per year with precipitation >0.01 inch	157	
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  $E = (\$34 * ((\$35/2)^{0.65} * ((Inputs!G190)/3)^{1.5} - (\$38)) * (1 - ((Inputs!\$184$

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

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

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

**Attachment J**  
**Class I Legal Advertisement**

**Air Quality Permit Notice**  
**Notice of Application**

**As Approved Original Description:**

Notice is given that Mid-Vol Coal Sales, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air Quality for a Permit to modify a coal cleaning facility located near Eckman, in McDowell County, West Virginia.

The applicant estimates the modified potential to discharge the following Regulated Air Pollutants will be: 436.38 tons per year of particulate matter (PM) of which 392.86 tons per year are fugitive emissions and 137.98 tons per year of PM<sub>10</sub> of which 117.50 tons per year are fugitive emissions.

Startup of the operation commenced January 1, 2011. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57<sup>th</sup> Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1227, during normal business hours.

Dated this the 8<sup>th</sup> day of June, 2016.

By: Mid-Vol Coal Sales, Inc.  
Derrick Kegley  
Manager of Engineering  
640 Clover Dew Dairy Road  
Princeton, WV 24740