global environmental solutions

Jarrells Branch Coal Handling Facility

Plant ID No. 005-00078

Wharton, West Virginia

General Permit Class I Administrative Update Application

SLR Ref: 116.01024.00010

February 2015

February 12, 2015

Mr. William Durham
Division Director – Air Quality
WV Department Environmental Protection
601 57th Street
Charleston, West Virginia 25304

Re: General Permit Application
Jarrells Branch Coal Handling Facility, Wharton, West Virginia

Dear Mr. Durham:

SLR International Corporation has prepared the attached General Permit Application on behalf of Rivers Edge Mining LLC for Jarrells Branch Coal Handling Facility located in Wharton, West Virginia (Plant ID No. 005-00078).

Project Description

Rivers Edge Mining LLC is applying for a Class I Administrative Update of General Permit G10-B057. This Class I Administrative Update is being prepared and submitted to remove a stockpile, mine, conveyor belt and associated transfer points. A name change from Rivers Edge Mining, Inc. to Rivers Edge Mining LLC is also being requested in this application.

Emissions

All regulated potential emissions produced from the equipment at the coal handling facility are listed in the following table.

Point Source	
Pollutant	**Proposed emission Limits (TPY)**
PM	10.55
PM_{10}	4.99

Fugitive	
Pollutant	**Proposed emission Limits (TPY)**
PM	185.29
PM_{10}	54.81

If any additional information is needed, please contact me by at (681) 205-8949 or by e-mail at lsmith@slrconsulting.com.

Sincerely,
SLR International Corporation

Lori Smith
Senior Engineer

Nathaniel Lanham
West Virginia Operations Manager

LS/NL:kkw

Attachment: General Permit Class I Administrative Application

cc: Mr. Mark Akers, Patriot Coal Corporation

General Permit Class I Administrative Update Application

Jarrells Branch Coal Handling Facility, Plant ID No. 005-00078
Wharton, West Virginia

Prepared for:

Rivers Edge Mining LLC
P.O. Box 1001
Scott Depot, West Virginia 25560

This document has been prepared by SLR International Corporation. The material and data in this permit application were prepared under the supervision and direction of the undersigned.

Lori Smith
Senior Engineer

Nathaniel Lanham
WV Operations Manager

06/18/2014

TABLE OF CONTENTS

Note:

Attachment C is not included since this application does not affect previously permitted fugitive sources.
Attachment H is not included since there are no baghouse air pollution control devices at this facility.
Attachment J is not included since this is a Class I Administrative Update.
Attachment L is not included since this is a Class I Administrative Update.

APPLICATION FOR PERMIT

General Permit Class I Administrative Update Application

Jarrells Branch Coal Handling Facility, Plant ID No. 005-00078
Wharton, West Virginia

Rivers Edge Mining LLC
P.O. Box 1001
Scott Depot, West Virginia

February 2015

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 X CLASS I ADMINISTRATIVE UPDATE
☐ CLASS II ADMINISTRATIVE UPDATE

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

X **G10-D –** Coal Preparation and Handling
☐ **G20-B –** Hot Mix Asphalt
☐ **G30-D –** Natural Gas Compressor Stations
☐ **G33-A –** Spark Ignition Internal Combustion Engines
☐ **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
☐ **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):
RIVERS EDGE MINING LLC

2. Federal Employer ID No. **(FEIN):**
43-1898371

3. Applicant's mailing address:
PO BOX 1001
SCOTT DEPOT WV 25560

4. Applicant's physical address:
STATE ROUTE 85
WHARTON WV 25208

5. If applicant is a subsidiary corporation, please provide the name of parent corporation: PATRIOT COAL CORPORATION

6. **WV BUSINESS REGISTRATION.** Is the applicant a resident of the State of West Virginia? X **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 Registration Certificate as **Attachment A**.
- 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 HANDLING FACILITY

8a. Standard Industrial Classification (SIC) code:
1221

AND

8b. North American Industry System (NAICS) code:
212111 & 212112

9. DAQ Plant ID No. (for existing facilities only):
005 – 00078

10. List all current 45CSR13 and other General Permit numbers associated with this process (for existing facilities only):
G10-B057

A: PRIMARY OPERATING SITE INFORMATION

11A. Facility name of primary operating site:	12A. Address of primary operating site:
JARRELLS BRANCH COAL HANDLING FACILITY	Mailing: PO BOX 29 WHARTON WV 25208 Physical:SR-85 WHARTON WV 25208

13A. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? X **YES** ☐ **NO**

– IF **YES**, please explain: THE APPLICANT LEASES THE PROPERTY.

– 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. Include a **MAP** as **Attachment F**.

LOCATED OFF STATE ROUTE 85 ON JARRELLS BRANCH ROAD NEAR WHARTON.

15A. Nearest city or town:	16A. County:	17A. UTM Coordinates:
WHARTON	BOONE	Northing (KM): 4,196.9 Easting (KM): 440.7 Zone: 17

18A. Briefly describe the proposed new operation or change (s) to the facility:	19A. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits):
See **Attachment B**	Latitude: 37.91806 Longitude: 81.67667

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

11B. Name of 1st alternate operating site:	12B. Address of 1st alternate operating site:
	Mailing: Physical:

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 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 2nd alternate operating site: _____ _____	12C. Address of 2nd alternate operating site: Mailing:_____ Physical:_____ _____

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 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: _____/_____/_____ X If this is an **After-The-Fact** permit application, provide the date upon which the proposed change did happen: : 1978	21. Date of anticipated Start-up if registration is granted: AFTER-THE-FACT

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 -- Days per week -- Weeks per year -- Percentage of operation 100

The maximum projected **Operating Schedule** of activitiy/activities outlined in this application is 6100 hours/year.

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.

- X ATTACHMENT A : CURRENT BUSINESS CERTIFICATE
- X ATTACHMENT B: PROCESS DESCRIPTION
- ☐ ATTACHMENT C: DESCRIPTION OF FUGITIVE EMISSIONS
- X ATTACHMENT D: PROCESS FLOW DIAGRAM
- X ATTACHMENT E: PLOT PLAN
- X ATTACHMENT F: AREA MAP
- X ATTACHMENT G: EQUIPMENT DATA SHEETS AND REGISTRATION SECTION APPLICABILITY FORM
- ☐ ATTACHMENT H: AIR POLLUTION CONTROL DEVICE SHEETS
- X ATTACHMENT I: EMISSIONS CALCULATIONS
- ☐ ATTACHMENT J: CLASS I LEGAL ADVERTISEMENT
- X ATTACHMENT K: ELECTRONIC SUBMITTAL
- ☐ ATTACHMENT L: GENERAL PERMIT REGISTRATION APPLICATION FEE
- ☐ ATTACHMENT M: SITING CRITERIA WAIVER
- ☐ ATTACHMENT N: MATERIAL SAFETY DATA SHEETS (MSDS)
- ☐ ATTACHMENT O: EMISSIONS SUMMARY SHEETS
- ☐ OTHER SUPPORTING DOCUMENTATION NOT DESCRIBED ABOVE (Equipment Drawings, Aggregation Discussion, etc.)

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.

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

X 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

☒ *I hereby certify that* (please print or type) Gregory A. Ross

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,

X *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 Greg A. Ross 2/3/15
(please use blue ink) Responsible Official Date

Name & Title GREGORY A. ROSS, ATTORNEY-IN-FACT
(please print or type)

Signature _____
(please use blue ink) Authorized Representative (if applicable) Date

Applicant's Name RIVERS EDGE MINING LLC

Phone & Fax 304-369-8349 304-720-8212
Phone Fax

Email gross@patriotcoal.com

ATTACHMENT A

BUSINESS CERTIFICATE

General Permit Class I Administrative Update Application

Jarrells Branch Coal Handling Facility, Plant ID No. 005-00078
Wharton, West Virginia

Rivers Edge Mining LLC
P.O. Box 1001
Scott Depot, West Virginia

February 2015

WEST VIRGINIA
STATE TAX DEPARTMENT
BUSINESS REGISTRATION CERTIFICATE

ISSUED TO:
RIVERS EDGE MINING LLC
RT 85 20 MILES SOUTH MADISON
WHARTON, WV 25208-0003

BUSINESS REGISTRATION ACCOUNT NUMBER: **1029-9556**

This certificate is issued on: **01/8/2015**

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.

atL006 v.4
L1379233344

STATE OF WEST VIRGINIA
State Tax Department, Revenue Division
P. O. Box 2666
Charleston, WV 25330-2666

Earl Ray Tomblin, Governor

Mark W. Matkovich, Tax Commissioner

00006502010000

RIVERS EDGE MINING LLC
12312 OLIVE BLVD
SAINT LOUIS MO 63141-6443

Letter Id: L1379233344
Issued: 01/08/2015
Account #: 1029-9556

RE: Business Registration Certificate

The West Virginia State Tax Department would like to thank you for registering your business. Enclosed is your Business Registration Certificate. This certificate shall be permanent until cessation of business or until suspended, revoked or cancelled. Changes in name, ownership or location are considered a cessation of business; a new Business Registration Certificate and applicable fees are required. Please review the certificate for accuracy.

This certificate must be prominently displayed at the location for which issued. Engaging in business without conspicuously posting a West Virginia Business Registration Certificate in the place of business is a crime and may subject you to fines per W.Va. Code § 11-9.

When contacting the State Tax Department, refer to the appropriate account number listed on the back of this page. The taxes listed may not be all the taxes for which you are responsible. Account numbers for taxes are printed on the tax returns mailed by the State Tax Department. Failure to timely file tax returns may result in penalties for late filing.

Should the nature of your business activity or business ownership change, your liability for these and other taxes will change accordingly.

To learn more about these taxes and the services offered by the West Virginia State Tax Department, visit our web site at www.wvtax.gov.

Enclosure

atL006 v.4

ATTACHMENT B

PROCESS DESCRIPTION

General Permit Class I Administrative Update Application

Jarrells Branch Coal Handling Facility, Plant ID No. 005-00078
Wharton, West Virginia

Rivers Edge Mining LLC
P.O. Box 1001
Scott Depot, West Virginia

February 2015

Jarrells Branch Coal Handling Facility

Introduction

This update involves the removal of stockpile (OS1) and the CC11 Underground Mine Belt. Further, the Rivers Edge Mine is no longer operating, therefore it has been eliminated from the process as well as associated transfer points T5 and T6.

Since the Rivers Edge Mine is no longer operating, conveyor belt, BC3, and transfer point, T3, have been relocated.

Transfer point T4 only feeds the Black Stallion Overland Belt which is covered under another permit.

Further, it is requested to change the company name from Rivers Edge Mining, Inc. to Rivers Edge Mining LLC. Rivers Edge Mining, Inc. was converted to Rivers Edge Mining LLC as part of Patriot Coal Corporation's restructuring plan upon emergence from bankruptcy on December 18, 2013.

Revised Process Description

The raw coal from the CC10 underground mine is transferred to conveyor belt, BC1, via transfer point, T1. Conveyor belt, BC1, transfers the coal to conveyor belt, BC3, via transfer point, T2. Conveyor belt, BC3, transfers the raw coal to stockpile, OS2, via transfer point, T3. Stockpile, OS2, may be reclaimed by an underground feeder, which transfers material to conveyor belt, BC4, via transfer point, T7. Conveyor, BC4, transfers raw coal directly to conveyor belt, BC2, via transfer point T8. Stockpile, OS2, may be reclaimed by endloader to truck via transfer point, T9. Trucks transport raw coal off site on unpaved haulroad, UPR-R1. Conveyor, BC2, transfers raw coal to the Black Stallion Overland Belt via transfer point, T4. The Black Stallion Overland Belt is covered under another permit.

ATTACHMENT D

PROCESS FLOW DIAGRAM

General Permit Class I Administrative Update Application

Jarrells Branch Coal Handling Facility, Plant ID No. 005-00078
Wharton, West Virginia

Rivers Edge Mining LLC
P.O. Box 1001
Scott Depot, West Virginia

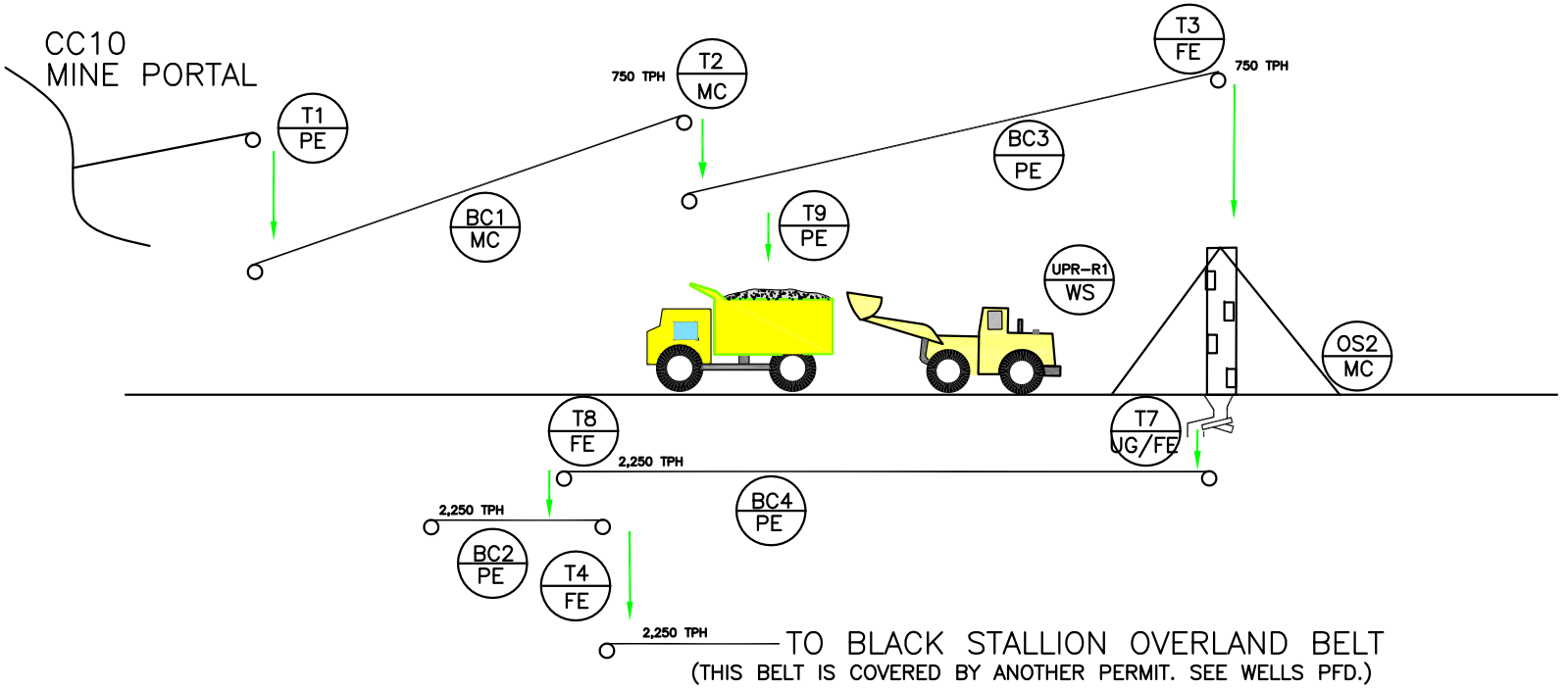
February 2015

HAULROAD SUMMARY		
SOURCE I.D.	DESCRIPTION	LENGTH
UPR-R1*	UNPAVED HAULROAD	0.52 MILES PER TRIP

*IT IS ASSUMED ENDLOADERS TRAVEL 1 MILE FOR EVERY HOUR THE FACILITY OPERATES.

STORAGE SUMMARY		
SOURCE I.D.	DESCRIPTION	CAPACITY
OS2	CC10 STOCKPILE	49,598 FT2 /40,000 TONS

EQUIPMENT SUMMARY				
SOURCE I.D.	DESCRIPTION	MAX. CAPACITY TPH	MAX. CAPACITY TPY	CONTROL
BC1	CC10 BELT CONVEYOR	750	4,575,000	MC
BC2	CC10 BELT CONVEYOR	2,250	10,050,000	PE
BC3	CC10 BELT CONVEYOR	750	4,575,000	PE
BC4	CC10 BELT CONVEYOR	2,250	10,050,000	PE



ATTACHMENT D

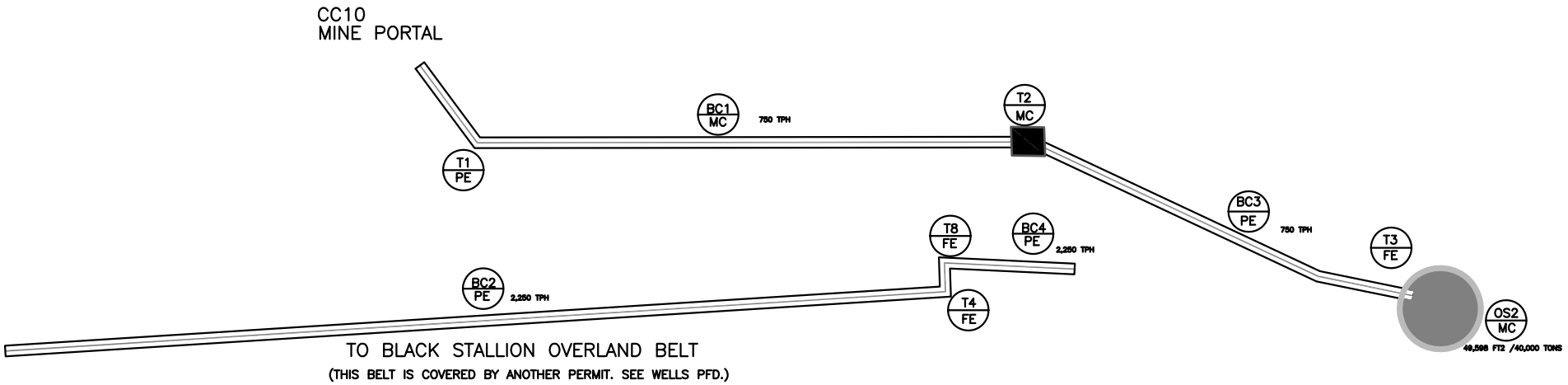
SLR International Corporation
8 Capitol Street, Suite 300
Charleston, WV 25301
Phone: (681) 205-8949
Fax: (681) 205-8969

JARRELL BRANCH COAL HANDLING FACILITY
PROCESS FLOW DIAGRAM – PROFILE

RIVERS EDGE MINING LLC
SCOTT DEPOT, WEST VIRGINIA

REVISIONS	
NO.	DESCRIPTION

DWN. EAS CHKD. NLL
APPD. NLL DATE 02/03/14
SCALE: NA
DRAWING NUMBER
116.01024.00010 REV
SHT. NO. 1 OF 1



ATTACHMENT D

SLR International Corporation
8 Capitol Street, Suite 300
Charleston, WV 25301
Phone: (681) 205-8949
Fax: (681) 205-8969

JARRELL BRANCH COAL HANDLING FACILITY
PROCESS FLOW DIAGRAM – AERIAL

RIVERS EDGE MINING LLC
SCOTT DEPOT, WEST VIRGINIA

REVISIONS		
NO.	DESCRIPTION	

DWN. EAS CHKD. NLL
APPD. NLL DATE 02/03/14
SCALE: NA
DRAWING NUMBER
116.01024.00010 REV
SHT. NO. 1 OF 1

ATTACHMENT E

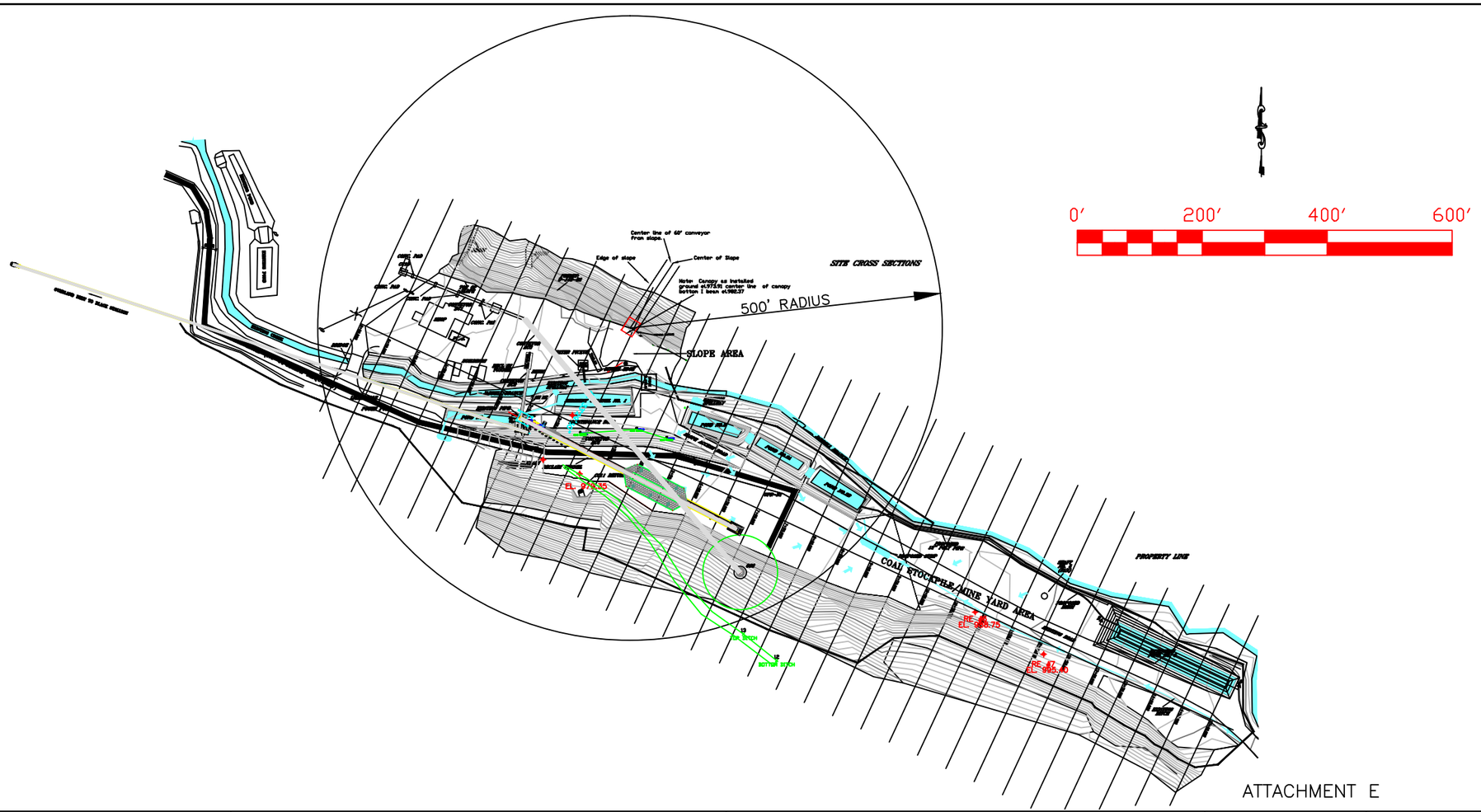
PLOT PLAN

General Permit Class I Administrative Update Application

Jarrells Branch Coal Handling Facility, Plant ID No. 005-00078
Wharton, West Virginia

Rivers Edge Mining LLC
P.O. Box 1001
Scott Depot, West Virginia

February 2015



ATTACHMENT E

SLR	JARRELL BRANCH COAL HANDLING FACILITY PLOT PLAN	REVISIONS	DWN. LPS	CHKD. NLL
SLR International Corporation 8 Capitol Street, Suite 300 Charleston, WV 25301 Phone: (681) 205-8949 Fax: (681) 205-8969	RIVERS EDGE MINING LLC SCOTT DEPOT, WEST VIRGINIA	NO. DESCRIPTION	APPD. NLL	DATE 02/06/14
			SCALE: NA	
			DRAWING NUMBER 116.01024.00006.0010	REV
			SHT. NO. 1 OF 1	

ATTACHMENT F

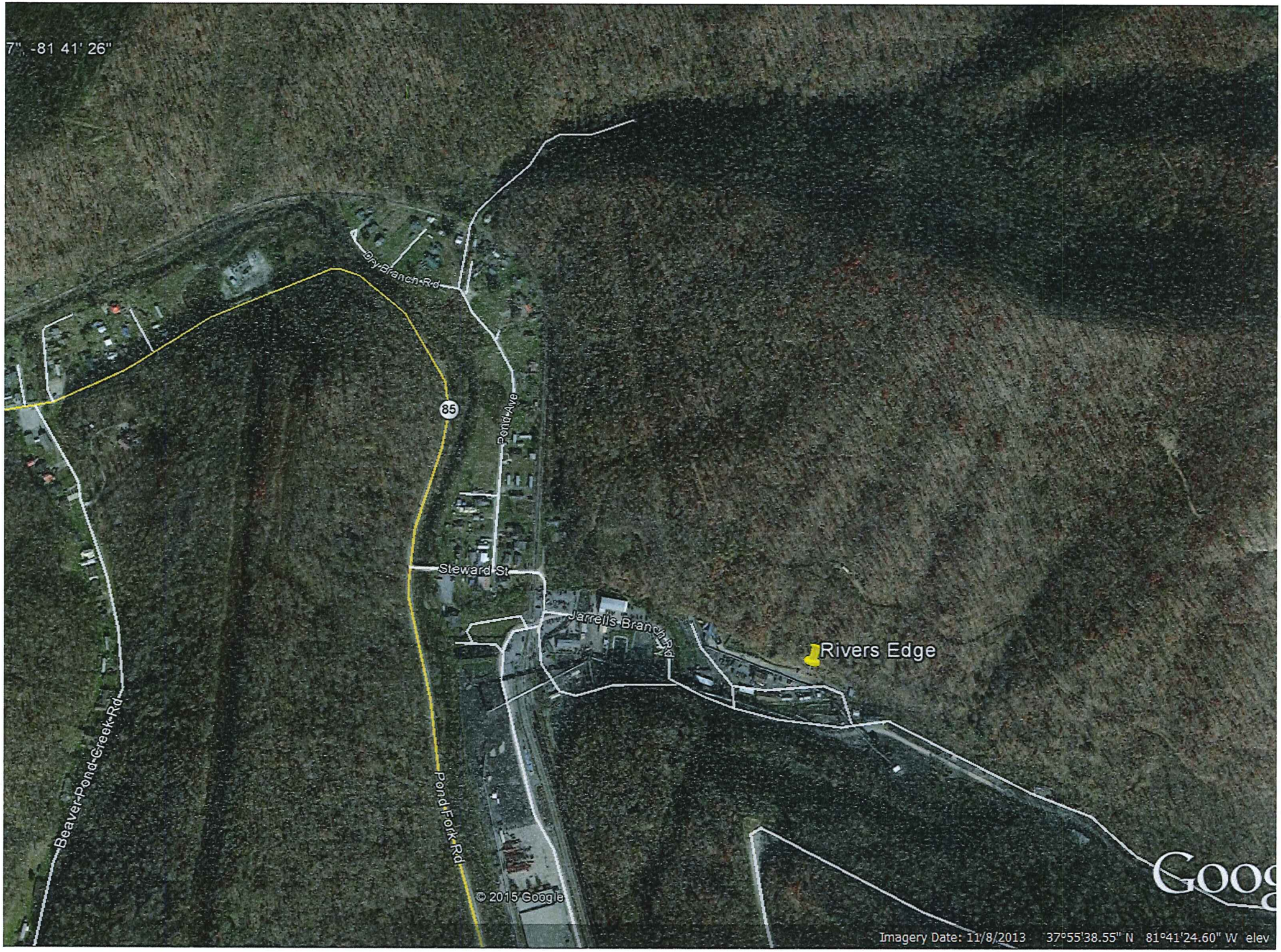
AREA MAP

General Permit Class I Administrative Update Application

Jarrells Branch Coal Handling Facility, Plant ID No. 005-00078
Wharton, West Virginia

Rivers Edge Mining LLC
P.O. Box 1001
Scott Depot, West Virginia

February 2015


7", -81 41' 26"
Dry Branch Rd
85
Pond Ave
Steward St
Jarrells Branch Rd
Rivers Edge
Beaver Pond Creek Rd
Pond Fork Rd
© 2015 Google
Imagery Date: 11/8/2013 37°55'38.55" N 81°41'24.60" W elev

ATTACHMENT G

AFFECTED SOURCE SHEETS

General Permit Class I Administrative Update Application

Jarrells Branch Coal Handling Facility, Plant ID No. 005-00078
Wharton, West Virginia

Rivers Edge Mining LLC
P.O. Box 1001
Scott Depot, West Virginia

February 2015

CONVEYING AFFECTED SOURCE SHEET

Source Identification Number[1]	Date of Manufacture[2]	Type of Material Handled[3]	Size of Material Handled[4]	Maximum Material Transfer Rate[5]		Average Moisture Content (%)[6]	Control Device[7]
				tons/hour	tons/year		
BC1	1978	RC	12” X 0”	750	4,575,000	5	MC
BC2	1978	RC	12” X 0”	2,250	10,050,000	5	PE
BC3	1978	RC	12” X 0”	750	4,575,000	5	PE
BC4	1978	RC	12” X 0”	2,250	10,050,000	5	PE
Note: This application increases the maximum throughput of BC1 and relocates BC3. The other conveyors are listed for informational purposes.							

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 conveying device was manufactured.
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 3/4 hoop) FE - Full Enclosure N - None

STORAGE ACTIVITY AFFECTED SOURCE SHEET

Source Identification Number[1]	OS2	Note: Stockpile, OS1, has been removed from the process.			
Type of Material Stored[2]	RC				
Average Moisture Content (%)[3]	5				
Maximum Yearly Storage Throughput (tons)[4]	4,575,000				
Maximum Storage Capacity (tons)[5]	40,000				
Maximum Base Area (ft^2)[6]	49,598				
Maximum Pile Height (ft)[7]	88				
Method of Material Load-in[8]	ST				
Load-in Control Device Identification Number[9]	FE				
Storage Control Device Identification Number[9]	MC				
Method of Material Load-out[8]	FE UC				
Load-out Control Device Identification Number[9]	PE FE				

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, raw coal, refuse, etc).
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.

ATTACHMENT I

EMISSIONS CALCULATIONS

General Permit Class I Administrative Update Application

Jarrells Branch Coal Handling Facility, Plant ID No. 005-00078
Wharton, West Virginia

Rivers Edge Mining LLC
P.O. Box 1001
Scott Depot, West Virginia

February 2015

CHANGE IN EMISSIONS

Name of applicant: Rivers Edge Mining LLC
Name of plant: Jarrell Branch Coal Handling Facility

Particulate Matter or PM (for 45CSR13 Permit Determination)

	Uncontrolled PM		Controlled PM	
	lb/hr	TPY	lb/hr	TPY
FUGITIVE EMISSIONS CHANGE				
Stockpile Emissions	(0.04)	(0.17)	(0.04)	(0.17)
Unpaved Haulroad Emissions	(81.52)	(355.53)	(24.46)	(106.66)
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Change	**(81.56)**	**(355.70)**	**(24.49)**	**(106.83)**
POINT SOURCE EMISSIONS CHANGE				
Equipment Emissions	N/A	N/A	N/A	N/A
Transfer Point Emissions	(3.56)	(5.49)	(1.14)	(0.50)
Point Source Emissions Change	**(3.56)**	**(5.49)**	**(1.14)**	**(0.50)**
Facility Emissions Change	**(85.12)**	**(361.19)**	**(25.63)**	**(107.33)**

Particulate Matter under 10 microns, or PM-10 (for 45CSR13 Permit Determination)

	Uncontrolled PM-10		Controlled PM-10	
	lb/hr	TPY	lb/hr	TPY
FUGITIVE EMISSIONS CHANGE				
Stockpile Emissions	(0.02)	(0.08)	(0.02)	(0.08)
Unpaved Haulroad Emissions	(24.06)	(104.94)	(7.22)	(31.48)
Paved Haulroad Emissions	N/A	N/A	N/A	N/A
Fugitive Emissions Change	**(24.08)**	**(105.02)**	**(7.24)**	**(31.56)**
POINT SOURCE EMISSIONS CHANGE				
Equipment Emissions	N/A	N/A	N/A	N/A
Transfer Point Emissions	(1.68)	(2.60)	(0.54)	(0.24)
Point Source Emissions Change	**(1.68)**	**(2.60)**	**(0.54)**	**(0.24)**
Facility Emissions Change	**(25.76)**	**(107.62)**	**(7.78)**	**(31.80)**

EMISSIONS SUMMARY - BEFORE

Name of applicant: Rivers Edge Mining, Inc.
Name of plant: Jarrell Branch Coal Handling Facility

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

	Uncontrolled PM		Controlled PM	
	lb/hr	TPY	lb/hr	TPY
FUGITIVE EMISSIONS				
Stockpile Emissions	0.20	0.87	0.20	0.87
Unpaved Haulroad Emissions	222.52	970.84	66.76	291.25
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	**222.72**	**971.71**	**66.95**	**292.12**
POINT SOURCE EMISSIONS				
Equipment Emissions	0.00	0.00	0.00	0.00
Transfer Point Emissions	13.88	30.12	5.41	11.05
Point Source Emissions Total*	**13.88**	**30.12**	**5.41**	**11.05**
Facility Emissions Total	**236.60**	**1,001.83**	**72.37**	**303.17**

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

***Facility Potential to Emit (PTE) (Baseline Emissions) = 11.05**

(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				
Stockpile Emissions	0.09	0.41	0.09	0.41
Unpaved Haulroad Emissions	65.68	286.55	19.70	85.97
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	**65.77**	**286.96**	**19.80**	**86.37**
POINT SOURCE EMISSIONS				
Equipment Emissions	0.00	0.00	0.00	0.00
Transfer Point Emissions	6.56	14.25	2.56	5.23
Point Source Emissions Total*	**6.56**	**14.25**	**2.56**	**5.23**
Facility Emissions Total	**72.34**	**301.21**	**22.36**	**91.60**

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

EMISSIONS SUMMARY - AFTER

Name of applicant: Rivers Edge Mining LLC
Name of plant: Jarrell Branch Coal Handling Facility

Particulate Matter or PM (for Permit Determination)

	Uncontrolled PM		Controlled PM	
	lb/hr	TPY	lb/hr	TPY
FUGITIVE EMISSIONS				
Stockpile Emissions	0.16	0.69	0.16	0.69
Unpaved Haulroad Emissions	141.00	615.32	42.30	184.60
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	**141.16**	**616.01**	**42.46**	**185.29**
POINT SOURCE EMISSIONS				
Equipment Emissions	0.00	0.00	0.00	0.00
Transfer Point Emissions	10.32	24.63	4.28	10.55
Point Source Emissions Total	**10.32**	**24.63**	**4.28**	**10.55**
Facility Emissions Total	**151.48**	**640.64**	**46.73**	**195.84**

Particulate Matter under 10 microns, or PM-10

	Uncontrolled PM-10		Controlled PM-10	
	lb/hr	TPY	lb/hr	TPY
FUGITIVE EMISSIONS				
Stockpile Emissions	0.07	0.33	0.07	0.33
Unpaved Haulroad Emissions	41.62	181.62	12.49	54.49
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	**41.69**	**181.94**	**12.56**	**54.81**
POINT SOURCE EMISSIONS				
Equipment Emissions	0.00	0.00	0.00	0.00
Transfer Point Emissions	4.88	11.65	2.02	4.99
Point Source Emissions Total	**4.88**	**11.65**	**2.02**	**4.99**
Facility Emissions Total	**46.57**	**193.59**	**14.58**	**59.80**
Facility Emissions Total	**46.57**	**193.59**	**14.58**	**59.80**

INPUTS

Include all information for each emission source and transfer point as listed in the permit application.

Name of applicant: **Rivers Edge Mining LLC**

Name of plant: **Jarrell Branch Coal Handling Facility**

1. CRUSHING AND SCREENING (including all primary and secondary crushers and screens)

1a. PRIMARY CRUSHING

Primary Crusher ID Number	Description	MAXIMUM Throughput TPH	MAXIMUM Throughput TPY	Control Device ID Number	Control Efficiency %	Permitted Maximum Throughput TPH	Permitted Maximum Throughput TPY
	NONE						

1b. SECONDARY AND TERTIARY CRUSHING

Secondary & Tertiary Crusher ID	Description	MAXIMUM Throughput TPH	MAXIMUM Throughput TPY	Control Device ID Number	Control Efficiency %	Permitted Maximum Throughput TPH	Permitted Maximum Throughput TPY
NONE							

1c. SCREENING

Primary Screen ID Number	Description	MAXIMUM Throughput TPH	MAXIMUM Throughput TPY	Control Device ID Number	Control Efficiency %	Permitted Maximum Throughput TPH	Permitted Maximum Throughput TPY
	NONE						

2. TRANSFER POINTS (including all conveyor transfer points, equipment transfer points etc.)

		PM	PM-10
k =	Particle Size Multiplier (dimensionless)	0.74	0.35
U =	Mean Wind Speed (mph)	7	

Transfer Point ID No.	Transfer Point Description Include ID Numbers of all conveyors, crushers, screens, stockpiles, etc. involved	Material Moisture Content %	MAXIMUM Throughput TPH	MAXIMUM Throughput TPY	Control Device ID Number	Control Efficiency %	Permitted Maximum Throughput TPH	Permitted Maximum Throughput TPY
T1	CC10 MINE TO BC1	5	750	4,575,000	PE	50		
T2	BC1 TO BC3	5	750	4,575,000	MC	0		
T3	BC3 TO OS2	5	750	4,575,000	FE	80		
T4	BC2 TO OVERLAND BELT	5	2,250	10,050,000	PE	50		
T7	OS2 TO BC4	5	2,250	10,050,000	PE	50		
T8	BC4 TO BC2	5	2,250	10,050,000	FE	80		
T9	LOADER TO TRUCK	5	1,147	4,575,000	FE	80		

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	10
	exceeds 12 mph at the mean pile height	

Source ID No.	Stockpile Description	Silt Content of Material %	Stockpile base area Max. sqft	Control Device ID Number	Control Efficiency %
OS2	40,000 ton raw coal stockpile	5	49,598	MC	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

Item Number	Description		Mean Vehicle Weight(tons)		Miles per Trip		MAX Trips Per Year	Control Device ID Number	Control Efficiency %
1	UPR-R1 - Endloader/Dozer Traffic*	4	150	5	1	1	8,760	WS	70
2	UPR-R1 - Truck Traffic*	18	28.5	15	0.52	36	314,063	WS	70
3									
4									
5									
6									
7									
8									

*Assumes endloaders & dozers travel a maximum of 1 mile for every hour the facility is operated.

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

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

Item Number	Description	Mean Vehicle Weight(tons)	Miles per Trip	Trips Per Hour	ACTUAL Trips Per Year	Control Device ID Number	Control Efficiency %
1	NONE						
2							
3							
4							
5							
6							
7							
8							

1. Emissions From CRUSHING AND SCREENING

1a. Primary Crushing

Primary Crusher ID Number	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

1b. Secondary and Tertiary Crushing

Secondary & Tertiary Crusher ID	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

1c. Screening

Screen ID Number	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Crushing and Screening	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
TOTAL	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

EMISSION FACTORS

source: Air Pollution Engineering Manual and References

(lb/ton of material throughput)

PM	lb/ton
Primary Crushing	0.02
Tertiary Crushing	0.06
Non-Vibrating Screening*	0.0010
Vibrating Screening	0.10

PM-10	lb/ton
Primary Crushing	0.0094
Tertiary Crushing	0.028
Non-Vibrating Screening	0.0005
Vibrating Screening	0.047

*Per DAQ guidance, the emission factor that is applied towards non-vibrating screens is the same as the transfer point emission factor.

2. Emissions From TRANSFER POINTS

Transfer Point ID No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
T1	0.76	2.33	0.38	1.16	0.36	1.10	0.18	0.55
T2	0.76	2.33	0.76	2.33	0.36	1.10	0.36	1.10
T3	0.76	2.33	0.15	0.47	0.36	1.10	0.07	0.22
T4	2.29	5.11	1.14	2.55	1.08	2.42	0.54	1.21
T7	2.29	5.11	1.14	2.55	1.08	2.42	0.54	1.21
T8	2.29	5.11	0.46	1.02	1.08	2.42	0.22	0.48
T9	1.17	2.33	0.23	0.47	0.55	1.10	0.11	0.22
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

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	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	10.32	24.63	4.28	10.55	4.88	11.65	2.02	4.99

Source:
AP-42 Fifth Edition
13.2.4 Aggregate Handling and Storage Piles

Emissions From Batch Drop

E = k*(0.0032) * [(U/5)^1.3]/[(M/2)^1.4] = 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

For PM E(M) = 0.003667 *[1/((M/2)^1.4)] = pounds/ton

For PM-10 E(M) = 0.001735 *[1/((M/2)^1.4)] = pounds/ton

For lb/hr [lb/ton]*[ton/hr] = [lb/hr]

For Tons/year [lb/ton]*[ton/yr]*[ton/2000lb] = [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
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
OS2	0.16	0.69	0.16	0.69	0.07	0.33	0.07	0.33
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	0.16	0.69	0.16	0.69	0.07	0.33	0.07	0.33

Source:
Air Pollution Engineering Manual

Storage Pile Wind Erosion (Active Storage)

E = 1.7*[s/1.5]*[(365-p)/235]*[f/15] = (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

For PM E(s)= 0.668747 * s = lb/day/acre

For PM-10* E(s)= 0.314311 * s = lb/day/acre

For lb/hr [lb/day/acre]*[day/24hr]*[base area of pile (acres)] = lb/hr

For Ton/yr [lb/day/acre]*[365day/yr]*[Ton/2000lb]*[base area of pile (acres)] = Ton/yr

*Assumes PM-10 is 47% of the total PM.

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	14.29	62.60	4.29	18.78	4.22	18.48	1.27	5.54
2	126.71	552.72	38.01	165.82	37.40	163.14	11.22	48.94
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
TOTALS	141.00	615.32	42.30	184.60	41.62	181.62	12.49	54.49

Source:
AP-42 12/03 Edition
13.2.2 Unpaved Roads - updated 12/2003

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

E = [(k*(s/12)^a * (W/3)^b) * [(365-p)/365)] = lb / Vehicle Mile Traveled (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 with at least 0.01 inches of precipitation	157	
s =	silt content of road surface material (%)	10	*
W =	Mean vehicle weight (tons)		

*based on stone quarrying and processing plant road because no factors are listed for coal preparation plants.

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
TOTALS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source:
AP-42 12/03 Edition
13.2.1 PAVED ROADS

Emission Estimate For Paved Haulroads

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

Where:

		PM	PM-10
k =	particle size multiplier	0.082	0.016
sL =	road surface silt loading, (g/m^2)	70	*
P =	number of days per year with precipitation >0.01 inch	157	
N =	number of days in averaging period	365	
W =	average vehicle weight, (ton)		

*based on sand and gravel processing because no factors are listed for coal preparation plants.

ATTACHMENT K

ELECTRONIC SUBMITTAL DISKETTE

General Permit Class I Administrative Update Application

Jarrells Branch Coal Handling Facility, Plant ID No. 005-00078
Wharton, West Virginia

Rivers Edge Mining LLC
P.O. Box 1001
Scott Depot, West Virginia

February 2015