MODIFICATION TO GENERAL PERMIT REGISTRATION G40-C013C BECKLEY PLANT

Prepared for:

Appalachian Aggregates, LLC
21071 Midland Trail
Lewisburg, West Virginia 24901

Prepared by:

Potesta & Associates, Inc.
7012 MacCorkle Avenue, S.E.
Charleston, West Virginia 25304
Phone: (304) 342-1400 Fax: (304) 343-9031
Email: potesta@potesta.com

Project No. 0101-16-0353

December 2016

POTESTA

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SECTION I

APPLICATION FOR GENERAL PERMIT REGISTRATION

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:

☐ **G10-D** – Coal Preparation and Handling	■ **G40-C** – Nonmetallic Minerals Processing
☐ **G20-B** – Hot Mix Asphalt	☐ **G50-B** – Concrete Batch
☐ **G30-D** – Natural Gas Compressor Stations	☐ **G60-C** - Class II Emergency Generator
☐ **G33-A** – Spark Ignition Internal Combustion Engines	☐ **G65-C** – Class I Emergency Generator
☐ **G35-A** – Natural Gas Compressor Stations (Flare/Glycol Dehydration Unit)	☐ **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): Appalachian Aggregates, LLC

2. Federal Employer ID No. **(FEIN):** 01-0640503

3. Applicant's mailing address:
21071 Midland Trail
Lewisburg, West Virginia 24901

4. Applicant's physical address:
1700 N. Sandbranch Rd.
Mt. Hope, West Virginia 25880

5. If applicant is a subsidiary corporation, please provide the name of parent corporation: Oldcastle Materials, Inc.

6. **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 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.):
Non-metallic mineral processing plant

8a. Standard Industrial Classification AND 8b. North American Industry

Classification (SIC) code: 1422 System (NAICS) code: 212312

9. DAQ Plant ID No. (for existing facilities only):
081-00023

10. List all current 45CSR13 and other General Permit numbers associated with this process (for existing facilities only):
G40-C013C

A: PRIMARY OPERATING SITE INFORMATION

11A. Facility name of primary operating site:	12A. Address of primary operating site:
Beckley Plant	Mailing: See Box 3 Physical See Box 4

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: Applicant owns site.

➪ 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**.

From I-64E/I-77S, take Exit 54 and go left toward Pax. Turn right onto Paint Creek Rd. Stay on Paint Creek Rd. until it becomes Sweeneysburg Road. Continue on Sweeneysburg Road until the intersection with N. Sandbranch Rd. Turn left onto N. Sandbranch Rd. and the facility will be on the left in approximately 1.1 miles.

15A. Nearest city or town:	16A. County:	17A. UTM Coordinates:
Mount Hope	Raleigh	Northing (KM): 4,190.154 Easting (KM): 478.014 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):
Addition of one (1) triple deck screen, one (1) high frequency screen, six (6) conveyor belts, and three (3) stockpiles.	Latitude: 37.858582 Longitude: -81.249938

B: 1ST ALTERNATE OPERATING SITE INFORMATION (only available for G20, G40, & G50 General Permits) NOT APPLICABLE

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): **NOT APPLICABLE**

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: 01 / 11 / 2017 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: 01 / 11 / 2017

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.

- ■ 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: EQUIPMENT DATA SHEETS AND REGISTRATION SECTION APPLICABILITY FORM
- ☐ ATTACHMENT H: AIR POLLUTION CONTROL DEVICE SHEETS
- ■ ATTACHMENT I: EMISSIONS CALCULATIONS
- ■ ATTACHMENT J: CLASS I LEGAL ADVERTISEMENT
- ■ 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

☐ 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) _____

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 _____ 12/08/2016
(please use blue ink) Responsible Official Date

Name & Title John Wilkinson – Vice President
(please print or type)

Signature Not Applicable
(please use blue ink) Authorized Representative (if applicable) Date

Applicant's Name Appalachian Aggregates, LLC

Phone & Fax 276-782-8126 Use Email
Phone Fax

Email jwilkinson@appalachianmaterials.com

County/City of Washington
Commonwealth/State of Virginia
The foregoing instrument was acknowledged
before me this 8 day of December 2016
by John Wilkinson
(name of person seeking acknowledgement)
Stuart J. Rohr
Notary Public
My Commission Expires: November 30, 2020

STUART J. ROHR NOTARY PUBLIC MY COMMISSION NUMBER 7524540 COMMONWEALTH OF VIRGINIA

Date of Last Application Revision 10/18/2013

ATTACHMENT A

BUSINESS CERTIFICATE

WEST VIRGINIA
STATE TAX DEPARTMENT

BUSINESS REGISTRATION CERTIFICATE

ISSUED TO:
APPALACHIAN AGGREGATES, LLC
DBA APPALACHIAN AGGREGATES
2950 CHARLES AVE
DUNBAR, WV 25064-2103

BUSINESS REGISTRATION ACCOUNT NUMBER: **2322-1066**

This certificate is issued on: **01/19/2016**

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 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.

atL005 v.4
L1962543936

ATTACHMENT B

PROCESS DESCRIPTION

ATTACHMENT B

PROCESS DESCRIPTION

Introduction to Project

Appalachian Aggregates, LLC is applying for a revised registration under General Permit G40-C to include the addition of a triple deck screen (MP-VS3), a high frequency screen (MP-VS4), and six (6) belt conveyors (MP-BC14, MP-BC15, MP-BC16, MP-BC17, MP-BC18, MP-BC19). The maximum feed rate for triple deck screen MP-VS3 will be 250 tons per hour (TPH) and 600,000 tons per year (TPY) and the maximum feed rate for high frequency screen MP-VS4 will be 150 TPH and 876,000 TPY. Throughput rates on numerous conveyor belts were increased to match the rates in the Affected Source Sheets. The hourly throughput on cone crusher MP-CC1 was increased from 225 TPH to 300 TPH and cone crusher MP-CC2 was increased from 275 TPH to 300 TPH. In Attachment G, the new equipment is shown in blue text.

Background

On December 31, 2015, Boxley Aggregates of West Virginia, LLC (Boxley) sold the Beckley facility to Oldcastle Materials, Inc. and, effective January 8, 2016, the company name was changed to Appalachian Aggregates, LLC. The West Virginia Department of Environmental Protection, Division of Air Quality (DAQ) approved the transfer of permit G40-C013C to Appalachian Aggregates, LLC in a letter dated May 2, 2016. The current, existing permit registration is G40-C013C issued on May 21, 2014.

Facility and Process Description

The Main Plant is comprised of primary crushing and screening operations for sized aggregate production. Final sized products are stockpiled and loaded to truck via endloaders. The Wash Plant consists of screening operations with material stockpiled to await shipment off-site. For the potential to emit, the hourly emissions estimate is based on the entire facility concurrently operating. Operating rates are listed in the affected source sheets for the processing and conveying equipment.

Main Plant

Stone is hauled from the pit to the jaw hopper and grizzly feeder (MP-Hl) through TP-1. MP-H1 transfers the larger stone to jaw crusher (MP-JC1) through TP-2. The smaller stone falls through the grizzly bars (MP-VGF1) and is transferred to belt MP-BC1A through TP-4. Falling scrap is collected on belt conveyor MP-BC1B. The stone is transferred to MP-BC1 from MP-JC1, MP-BC1A and MP-BC1B through transfer points TP-3, TP-5 and TP-7, respectively. MP-BC1 transfers the material into a surge pile (OS-A) through transfer TP-8. From OS-A, the material is transferred through two underground feeders that transfer the

material through TP-9 and TP-10 onto conveyor belt MP-BC2. MP-BC2 conveys the material to transfer point TP-11 where the material is transferred into a triple deck screen (MP-VS1). The oversize rip rap material is transferred through TP-12 to belt conveyor MP-BC13. MP-BC13 conveys the rip rap material to stockpile OS-J through TP-13. The mid-size material is transferred through TP-14 to conveyor belt MP-BC3B or transferred through TP-16 to cone crusher MP-CC1 for additional sizing. The material conveyed on belt MP-BC3B is transferred through TP-15 to stockpile OS-1. The smaller material from MP-VS1 is transferred through TP-18 onto conveyor belt MP-BC3 or onto conveyor belt MP-BC3A. MP-BC3 conveys the material to stockpile OS-B through TP-19. MP-BC3A conveys the material to stockpile OS-B1 through TP-19A. Mid-sized stone that passes through MP-CC1 is transferred to the second triple deck screen MP-VS2 through the following series: TP-17, MP-BC4, TP-20, MP-BC4A, and TP-21. The oversize material received by MP-VS2 is transferred to bin MP-BIN1 through the sequence TP-22, MP-BC5, TP-23. From MP-BIN1, the oversized stone can follow two different circuits. Material can be transferred to MP-BC12 through TP-24. MP-BC12 conveys material to stockpile OS-K through TP-25. The second circuit directs material for resizing through MP-CC2 to arrive back to MP-VS2. This second circuit follows the sequence from MP-BIN1: TP-26, MP-CC2, TP-27, MP-BC4, TP-20, MP-BC4A, TP-21, and MP-VS2. Alternatively, MP-BC4A can send material to MP-VS3 through TP-21A. Oversize from MP-VS3 is sent to conveyor belt MP-BC14 through TP-21B. MP-BC14 feeds back to conveyor belt MP-BC5 through TP-21C. MP-VS3 sends material to OS-E by transferring to conveyor belt MP-BC15 (TP-21D) and then to the stockpile (TP-21E). Smaller material from MP-VS3 can be sent to belt conveyor MP-BC16 via transfer point TP-21F and then to stockpile OS-D (TP-21G). MP-VS3 pass-through material is sent to conveyor belt MP-BC6 (TP-21H), then to MP-BC7 (TP-36). Material can then be sent to either stockpile OS-C (TP-37) or to screen MP-VS4 (TP-37A). The smaller material from MP-VS2 is conveyed by belts to three different stockpiles for storage until load out or back to belt MP-BC1. Conveyor MP-BC9 receives material through TP-28 from the screen and transfers the material either to belt MP-BC9A through TP-29 or to belt MP-BC9B through TP-31. Belt MP-BC9A conveys material through TP-30 to stockpile OS-E. Belt MP-BC9B conveys material back to MP-BC1 through transfer TP-32. Conveyor MP-BC8 receives material through TP-33 from the screen and transfers the material to stockpile OS-D through TP-34. Conveyor MP-BC6 receives material through TP-35 from the screen and transfers the material to stockpile OS-C through the sequence TP-36, MP-BC7, TP-37 to OS-C. MP-BC7 can alternatively sent material to high frequency screen MP-VS4 via transfer point TP-37A. Oversize material from MP-VS4 transfers to conveyor belt MP-BC17 (TP-37B) then to stockpile OS-Q (TP-37C). Medium size material from MP-VS4 transfers to conveyor belt MP-BC18 (TP-37D) then to stockpile OS-R (TP-37E). Pass-through material from MP-VS4 transfers to belt conveyor MP-BC19 (TP-37F) then to stockpile OS-S (TP-37G). Stockpiles OS-C, OS-D, and OS-E are loaded to endloaders via TP-48. Stockpiles OS-I, OS-J and OS-K are loaded to truck by endloaders via TP-47. Stockpile OS-B is loaded to truck by endloaders via TP-49. Stockpiles OS-Q, OS-R, and OS-S are loaded to truck by endloaders via TP-52.

There are seven remote stockpiles (OS-F, OS-G, OS-L through OS-P) controlled by the water truck HR-WS1. These stockpiles receive material from trucks via TP-51. The material is stored until it is loaded into trucks and shipped offsite via TP-46.

Wash Plant

Material enters the wash plant by truck dump WP-H2 through TP-38. An under bin reclaim belt conveyor WP-BC10 receives the material through TP-39. WP-BC10 transfers the material to double deck screen WP-VS1 through TP-40. The larger material out of the screen is transferred to the load out bin WP-BIN1 through TP-41. This material is loaded to trucks through TP-42. The fines (sand) are transferred to stockpile OS-H via the following sequence: TP-43, screw conveyor WP-SCONV1, TP-44, WP-BC11, and TP-45 to OS-H. The sand is loaded to truck via endloader through TP50.

ATTACHMENT C

DESCRIPTION OF FUGITIVE EMISSIONS

ATTACHMENT C

DESCRIPTION OF FUGITIVE EMISSIONS

Fugitive emissions from the facility include particulate emissions from haulroads, stockpiles, and work areas. The haulroad surfaces are coarse gravel and are used by trucks, endloaders, and company personnel. Water is applied to the haulroads as needed via a water truck. Water is also applied to the work areas around the stockpiles and plant by the water truck to control particulate emissions. The stockpiles will be controlled by the water truck as needed. Usually, the stockpiles contain a sufficient amount of moisture from upstream water sprays to minimize particulate emissions. The water sprays and water supply lines will be protected from freezing (winterized) by the use of thermal protection: insulation and/or heat taping of exposed areas as needed. In the event that the thermal protection or other methods of winterizing do not prevent freezing, additives may be mixed into the water for freeze proofing.

ATTACHMENT D

PROCESS FLOW DIAGRAM

BELTS

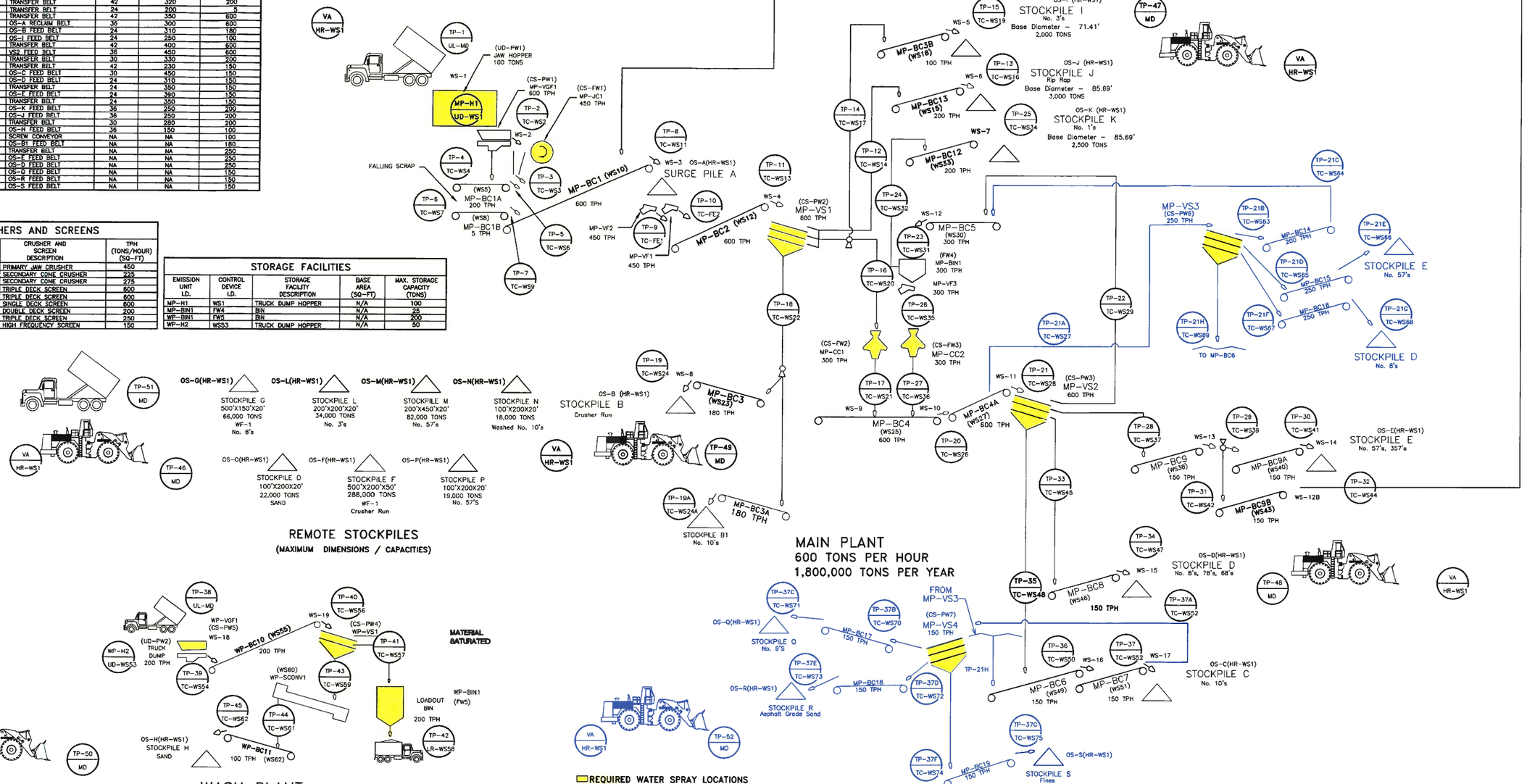
EMISSION UNIT I.D.	CONTROL DEVICE I.D.	BELT CONVEYOR DESCRIPTION	BELT WIDTH (INCHES)	BELT SPEED (FPM)	TPH (TONS/HOUR)
MP-BC1A	WS9	TRANSFER BELT	42	320	200
MP-BC1B	WS8	TRANSFER BELT	24	200	5
MP-BC1	WS10	TRANSFER BELT	42	350	600
MP-BC2	WS12	OS-A RECLAIM BELT	36	300	600
MP-BC3	WS23	OS-B FEED BELT	24	310	180
MP-BC3B	WS18	OS-I FEED BELT	24	250	100
MP-BC4	WS25	TRANSFER BELT	42	400	600
MP-BC4A	WS27	VS2 FEED BELT	36	450	600
MP-BC5	WS30	TRANSFER BELT	30	330	200
MP-BC6	WS49	TRANSFER BELT	42	230	150
MP-BC7	WS51	OS-C FEED BELT	30	450	150
MP-BC8	WS46	OS-D FEED BELT	24	310	150
MP-BC9	WS38	TRANSFER BELT	24	350	150
MP-BC9A	WS40	OS-E FEED BELT	24	390	150
MP-BC9B	WS43	TRANSFER BELT	24	350	150
MP-BC12	WS34	OS-K FEED BELT	36	250	200
MP-BC13	WS15	OS-J FEED BELT	36	250	200
MP-BC10	WS55	TRANSFER BELT	30	280	200
MP-BC11	WS62	OS-H FEED BELT	36	150	100
MP-SCONV1	WS60	SCREW CONVEYOR	NA	NA	100
MP-BC3A	TC-WS244	OS-B1 FEED BELT	NA	NA	180
MP-BC14	TC-WS63	TRANSFER BELT	NA	NA	250
MP-BC15	TC-WS65	OS-E FEED BELT	NA	NA	250
MP-BC16	TC-WS67	OS-D FEED BELT	NA	NA	250
MP-BC17	TC-WS70	OS-Q FEED BELT	NA	NA	150
MP-BC18	TC-WS72	OS-R FEED BELT	NA	NA	150
MP-BC19	TC-WS74	OS-S FEED BELT	NA	NA	150

CRUSHERS AND SCREENS

EMISSION UNIT I.D.	CONTROL DEVICE I.D.	CRUSHER AND SCREEN DESCRIPTION	TPH (TONS/HOUR) (SQ-FT)
MP-JC1	CS-FW1	PRIMARY JAW CRUSHER	450
MP-CC1	CS-FW2	SECONDARY CONE CRUSHER	225
MP-CC2	CS-FW3	SECONDARY CONE CRUSHER	275
MP-VS1	CS-PW2	TRIPLE DECK SCREEN	600
MP-VS2	CS-PW3	TRIPLE DECK SCREEN	600
MP-VGF1	CS-PW1	SINGLE DECK SCREEN	600
WP-VS1	CS-PW4	DOUBLE DECK SCREEN	200
WP-VS3	CS-PW6	TRIPLE DECK SCREEN	250
WP-VS4	CS-PW7	HIGH FREQUENCY SCREEN	150

STORAGE FACILITIES

EMISSION UNIT I.D.	CONTROL DEVICE I.D.	STORAGE FACILITY DESCRIPTION	BASE AREA (SQ-FT)	MAX. STORAGE CAPACITY (TONS)
MP-H1	WS1	TRUCK DUMP HOPPER	N/A	100
MP-BIN1	FW4	BIN	N/A	25
WP-BIN1	FW5	BIN	N/A	200
WP-H2	WS53	TRUCK DUMP HOPPER	N/A	50



OWNER:
BOXLEY AGGREGATES OF WEST VIRGINIA, LLC
PO BOX 13527, ROANOKE, VIRGINIA 24035

PROJECT #: 16-0353 FILENAME: 16-0353-01

POTESTA

POTESTA & ASSOCIATES, INC.
ENGINEERS AND ENVIRONMENTAL CONSULTANTS
7012 MacCorkle Ave. SE, Charleston, WV 25304
TEL: (304) 342-1400 FAX: (304) 343-9031
E-Mail Address: potesta@potesta.com

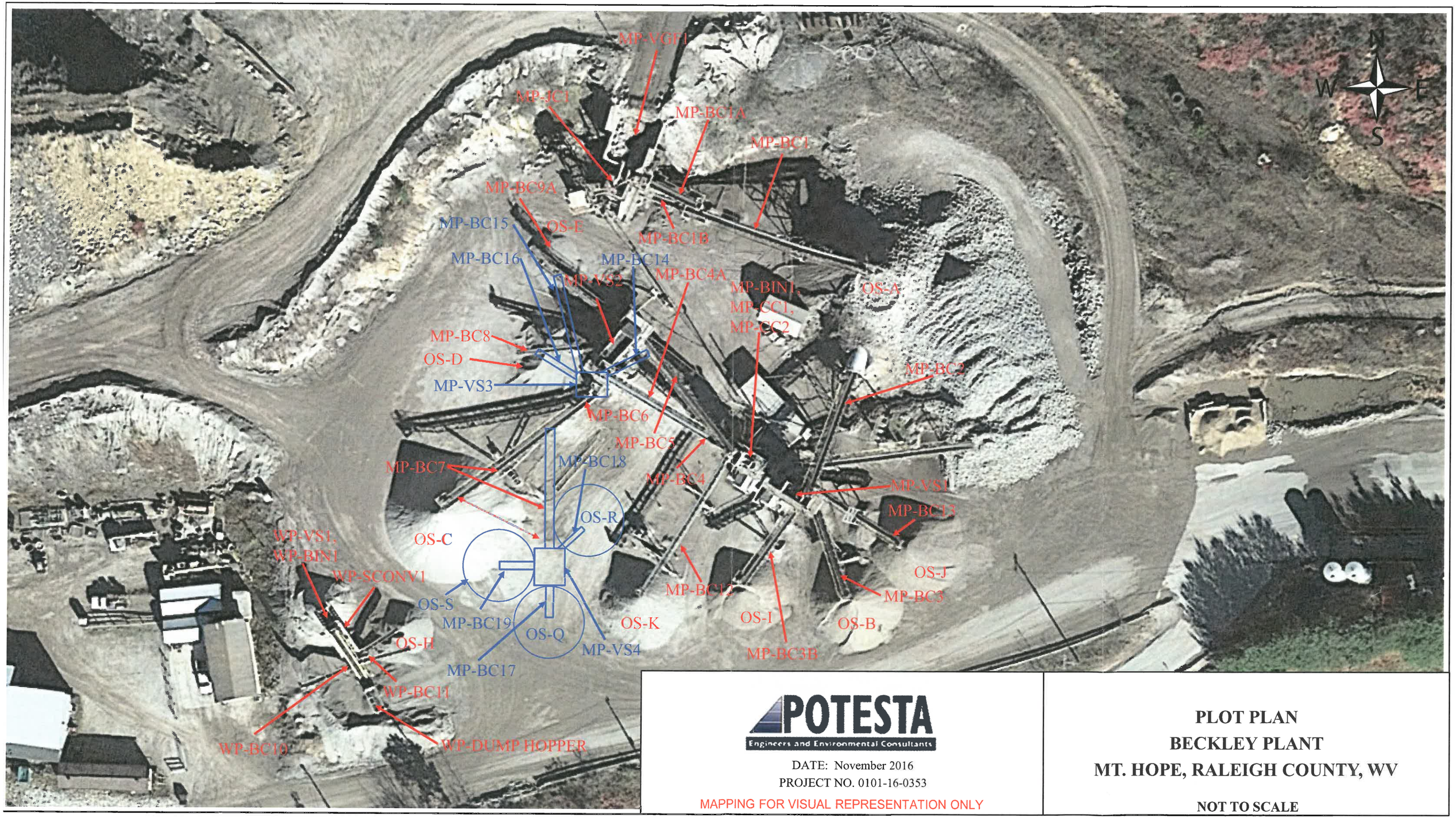
Project
APPALACHIAN AGGREGATES, LLC
BECKLEY PLANT
1700 NORTH SANDBRANCH ROAD
MT. HOPE, WEST VIRGINIA

Scale NO SCALE
Date NOV. 2016
Dwg. No. FIGURE 1

File: S:\C3D-Proj-YR\2016\16-0353-BOXLEY-BECKLEY\16-0353-01.dwg
Plot Date/Time: Nov 23, 2016 - 3:16pm
Plotted By: cmwillis

ATTACHMENT E

PLOT PLAN



POTESTA
Engineers and Environmental Consultants

DATE: November 2016
PROJECT NO. 0101-16-0353

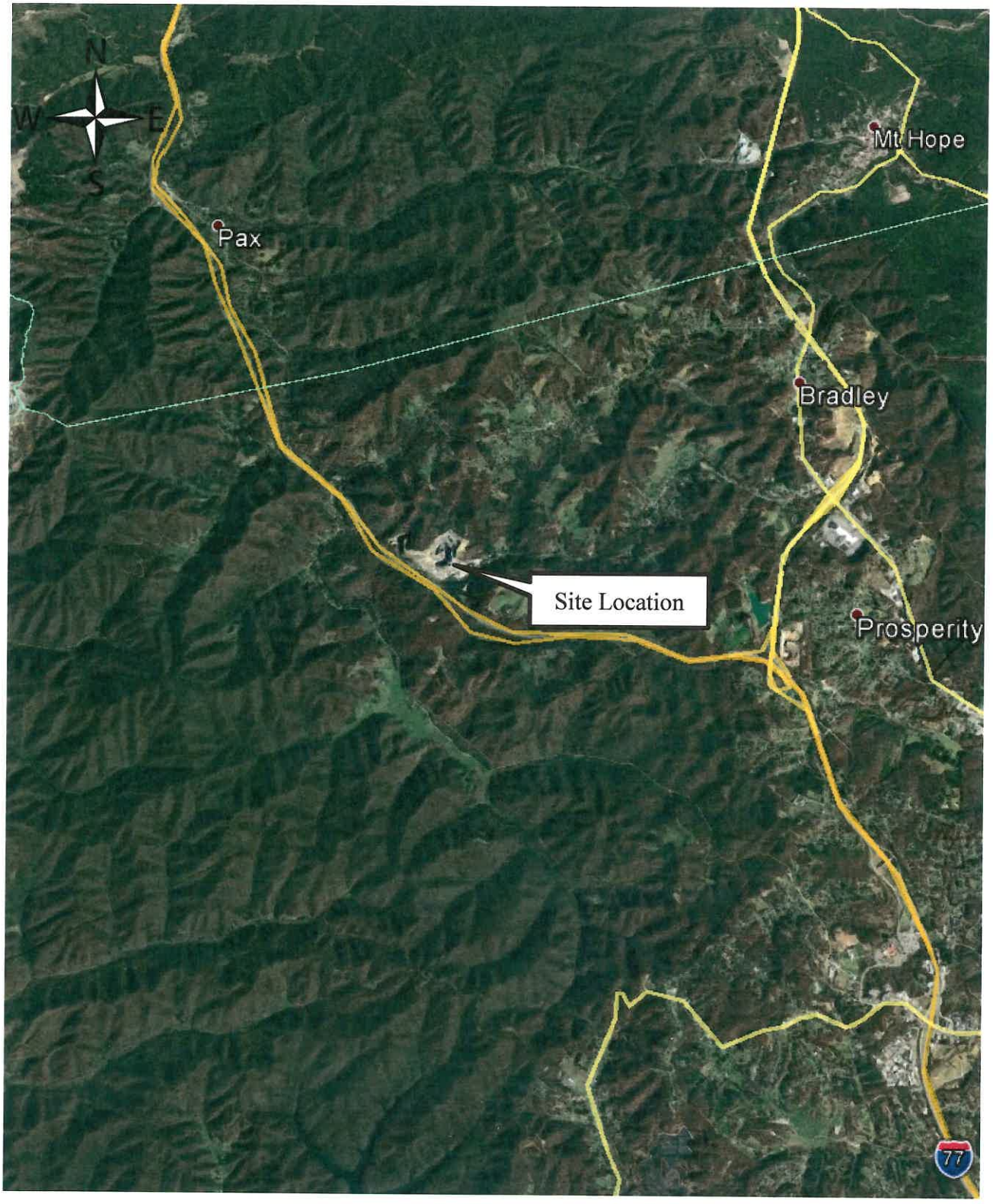
MAPPING FOR VISUAL REPRESENTATION ONLY

PLOT PLAN
BECKLEY PLANT
MT. HOPE, RALEIGH COUNTY, WV

NOT TO SCALE

ATTACHMENT F

AREA MAP



POTESTA
Engineers and Environmental Consultants

DATE: November 2016

PROJECT NO. 0101-16-0353

MAPPING FOR VISUAL REPRESENTATION ONLY

AREA MAP
BECKLEY PLANT
MOUNT HOPE, RALEIGH COUNTY, WV

NOT TO SCALE

ATTACHMENT G

EQUIPMENT DATA SHEETS AND REGISTRATION SECTION APPLICABILITY FORM

General Permit G40-C Registration
Section Applicability Form

General Permit G40-C allows qualified registrants to seek registration for a variety of sources. These sources include nonmetallic mineral processing plants which include crushers, screens, transfer points (loading, unloading, etc.), open stockpiles, bins, haulroads, reciprocating internal combustion engine driven compressors, emergency standby generators, and tanks. All registered facilities will be subject to Sections 1.0, 1.1, 2.0, 3.0 and 4.0.

General Permit G40-C allows the registrant to choose which sections of the permit that they wish to seek registration under. Therefore, please mark which sections that you are applying for registration under. Please keep in mind, that if this registration is approved, the issued registration will state which sections will apply to your affected facility.

Section 5[1]	Nonmetallic Mineral Processing Operations	☒
Section 6	Standards of Performance for Nonmetallic Mineral Processing Plants that Commenced Construction, Reconstruction or Modification after August 31, 1983 but before April 22, 2008 (40CFR60 Subpart OOO)	☒
Section 7	Standards of Performance for Nonmetallic Mineral Processing Plants that Commenced Construction, Reconstruction or Modification on or after April 22, 2008. (40CFR60 Subpart OOO)	☒
Section 8[2]	Reciprocating Internal Combustion Engines (R.I.C.E.)	☐
Section 9	Tanks	☐
Section 10	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40CFR60 Subpart IIII)	☐
Section 11	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40CFR60 Subpart JJJJ)	☐

1 Affected facilities that are subject to Section 5 may also be subject to Sections 6 and 7. Therefore, if the applicant is seeking registration under multiple sections, they will need to select all applicable sections.

2 Affected facilities that are subject to Section 8 may also be subject to Sections 10 or 11. Therefore, if the applicant is seeking registration under multiple sections, they will need to select all applicable sections.

CRUSHING AND SCREENING AFFECTED SOURCE SHEET

Source Identification Number[1]		MP-JC1	MP-CC1	MP-CC2	MP-VS1	MP-VS2	MP-VS3
Type of Crusher or Screen[2]		JC	CC	CC	TD	TD	TD
Make, Model No., Serial No.[3]		NA	NA	NA	NA	NA	NA
Date of Construction, Reconstruction, or Modification (Month/Year)[4]		2014	2003	2003	2001	2001	2016
Maximum Throughput[5]	tons/hour	450	300	300	600	600	250
	tons/year	1,800,000	1,800,000	1,800,000	1,800,000	3,552,000	
Material sized from/to:[6]		ROM	-9" to 0"	-4" to ¾"	NAP	NAP	NAP
Average Moisture Content (%)[7]		1.5	1.5	1.5	1.5	1.5	1.5
Control Device ID Number[8]		CS-FW1	CS-FW2	CS-FW3	CS-PW2	CS-PW3	CS-PW6
Baghouse Stack Parameters[9]	height (ft)						
	diameter (ft)						
	volume (ACFM)						
	exit temp (F)						
	UTM Coordinates						
Maximum Operating Schedule[10]	hours/day	24	24	24	24	24	24
	days/year	365	365	365	365	365	365
	hours/year	8,760	8,760	8,760	8,760	8,760	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	CC	Cone Crusher

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"/ -⅜").
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.

CRUSHING AND SCREENING AFFECTED SOURCE SHEET CON'T

Source Identification Number[1]		WP-VS1	MP-VS4	MP-VGF1			
Type of Crusher or Screen[2]		DD	DD	SD			
Make, Model No., Serial No.[3]		NA	TCI	NA			
Date of Construction, Reconstruction, or Modification (Month/Year)[4]		2001	2016	2001			
Maximum Throughput[5]	tons/hour	200	150	600			
	tons/year	600,000	876,000	1,800,000			
Material sized from/to:[6]		NAP	NAP	NAP			
Average Moisture Content (%)[7]		1.5	1.5	1.5			
Control Device ID Number[8]		CS-PW4	CS-PW7	CS-PW5			
Baghouse Stack Parameters[9]	height (ft)						
	diameter (ft)						
	volume (ACFM)						
	exit temp (°F)						
	UTM Coordinates						
Maximum Operating Schedule[10]	hours/day	24	24	24			
	days/year	365	365	365			
	hours/year	8,760	8,760	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"/ -⅜").
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[1]	Date of Construction, Reconstruction, or Modification (Month/Year)[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		
MP-BC1A	2001	R/SA	9" X 0	200	1,752,000	1.5	WS
MP-BC1B	2003	R/SA	9" X 0	5	15,000	1.5	WS
MP-BC1	2001	R/SA	9" X 0	600	1,800,000	1.5	WS
MP-BC2	2001	R/SA	1 ½" X 0	600	1,800,000	1.5	WS
MP-BC3	2001	FA	1 ½" X 0	180	1,576,800	1.5	WS
MP-BC3A	2001	FA	1 ½" X 0	180	1,576,800	1.5	WS
MP-BC3B	2001	SA	4" X 1"	100	876,000	1.5	WS
MP-BC4	2001	SA	2 ½" X 0	600	3,552,000	1.5	WS
MP-BC4A	2001	SA	2 ½" X 0	600	3,552,000	1.5	WS
MP-BC5	2001	SA	2 ½" X ¾"	300	1,752,000	1.5	WS
MP-BC6	2001	S	¼" X 0	150	1,314,000	1.5	WS
MP-BC7	2001	S	¼" X 0	150	1,314,000	1.5	WS
MP-BC8	2001	SA	½" X $^3/_{32}$"	150	1,314,000	1.5	WS
MP-BC9	2001	SA	1" X ½"	150	1,314,000	1.5	WS
MP-BC9A	2003	SA	1" X ½"	150	1,314,000	1.5	WS
MP-BC9B	2003	SA	1" X ½"	150	1,314,000	1.5	WS
MP-BC12	2003	SA	1" X ½"	200	1,314,000	1.5	WS

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 Material (RM) Sized Material (SM) Refuse (R) Other (O)
4. Enter the nominal size of the material being conveyed (e.g. sized material- 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

CONVEYING AFFECTED SOURCE SHEET CON'T

Source Identification Number[1]	Date of Construction, Reconstruction, or Modification (Month/Year)[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		
MP-BC13	2001	R	9" X 4"	200	1,752,000	1.5	WS
MP-BC14	2016	SA	2 ½" X ¾"	250	600,000	1.5	WS
MP-BC15	2016	SA	1" X ½"	250	600,000	1.5	WS
MP-BC16	2016	SA	½" X 3/32"	250	600,000	1.5	WS
MP-BC17	2016	SA	3/8 X ½"	150	876,000	1.5	WS
MP-BC18	2016	S	¼" X 0	150	876,000	1.5	WS
MP-BC19	2016	S	¼" X 0	150	876,000	1.5	WS
WP-BC10	2001	SA	1 ½" X 0	200	600,000	1.5	WS
WP-BC11	2001	S	¼" X 0	100	30,000	1.5	WS
WP-SCONV1	2001	S	¼" X 0	100	30,000	1.5	WS

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 Material (RM) Sized Material (SM) Refuse (R) Other (O)
4. Enter the nominal size of the material being conveyed (e.g. sized material- 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]	MP-H1	MP-BIN1	WP-H1	WP-BIN1	OS-A	OS-B
Type of Material Stored[2]	R	SA	SA/S	SA	R/SA	SA
Average Moisture Content (%)[3]	1.5	1.5	1.5	1.5	10	10
Maximum Yearly Storage Throughput (tons)[4]	1,800,000	1,752,000	600,000	600,000	1,800,000	1,576,800
Maximum Storage Capacity (tons)[5]	100	25	50	200	5,000	2,000
Maximum Base Area (ft^2)[6]	NA	NA	NA	NA	7,850	1,250
Maximum Pile Height (ft)[7]	NA	NA	NA	NA	25	20
Method of Material Load-in[8]	TD	SS	TD	SS	SS	SS
Load-in Control Device Identification Number[9]	UL-MD	TC-WS31	UL-MD	TC-WS57	TC-WS11	TC-WS24
Storage Control Device Identification Number[9]	UD-PW1	FW4	CS-PW5	FW5	HR-WS1	HR-WS1
Method of Material Load-out[8]	UC	OT	UC	FC	UC	FE
Load-out Control Device Identification Number[9]	TC-WS2	TC-WS35, TC-WS32	TC-WS54	LR-WS58	TC-FE1, TC-FE2	TP-49MD

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. sized material, raw material, 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 RS Radial Stacker
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 CON'T

Source Identification Number[1]	OS-C	OS-D	OS-E	OS-F	OS-G	OS-H
Type of Material Stored[2]	SA	SA	SA	SA	SA	SA
Average Moisture Content (%)[3]	10	10	10	10	10	10
Maximum Yearly Storage Throughput (tons)[4]	876,000	1,314,000	1,314,000	251,000	251,000	30,000
Maximum Storage Capacity (tons)[5]	20,000	2,000	2,000	288,000	66,000	1,000
Maximum Base Area (ft^2)[6]	16,000	1,250	1,250	100,000	75,000	750
Maximum Pile Height (ft)[7]	15	15	15	50	20	10
Method of Material Load-in[8]	SS	SS	SS	TD	TD	SS
Load-in Control Device Identification Number[9]	TC-WS52	TC-WS47	TC-WS41	TP-51MD	TP-51MD	TC-WS62
Storage Control Device Identification Number[9]	HR-WS1	HR-WS1	HR-WS1	HR-WS1	HR-WS1	HR-WS1
Method of Material Load-out[8]	FE	FE	FE	FE	FE	FE
Load-out Control Device Identification Number[9]	TP-48MD	TP-48MD	TP-48MD	TP-46MD	TP-46MD	TP-50MD

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)
   - OS Open Stockpile
   - SF Stockpiles with wind fences
   - E3 Enclosure (three sided enclosure)
   - SB Storage Building (full enclosure)
   - OT Other RS Radial Stacker
2. Describe the type of material stored or stockpiled. (e.g. sized material, raw material, 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
   - FC Fixed Height Chute from Bins
   - FE Front Endloader
   - MC Mobile Conveyor/Stacker
   - UC Under-pile or Under-Bin Reclaim Conveyor
   - RC Rake or Bucket Reclaim Conveyor
   - SS Stationary Conveyor/Stacker
   - ST Stacking Tube
   - TC Telescoping Chute from Bins
   - TD Truck Dump
   - PC Pneumatic Conveyor/Stacker
   - 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 CON'T

Source Identification Number[1]	OS-I	OS-J	OS-K	OS-L	OS-M	OS-N
Type of Material Stored[2]	SA	R	SA	SA	SA	SA
Average Moisture Content (%)[3]	5	5	10	5	10	10
Maximum Yearly Storage Throughput (tons)[4]	876,000	1,752,000	75,000	125,000	275,000	70,000
Maximum Storage Capacity (tons)[5]	2,000	3,000	2,500	34,000	82,000	18,000
Maximum Base Area (ft^2)[6]	4,500	6,000	6,000	40,000	90,000	20,000
Maximum Pile Height (ft)[7]	20	20	20	20	20	20
Method of Material Load-in[8]	SS	SS	SS	TD	TD	TD
Load-in Control Device Identification Number[9]	TC-WS19	TC-WS16	TC-WS34	TP-51MD	TP51-MD	TP51-MD
Storage Control Device Identification Number[9]	HR-WS1	HR-WS1	HR-WS1	HR-WS1	HR-WS1	HR-WS1
Method of Material Load-out[8]	FE	FE	FE	FE	FE	FE
Load-out Control Device Identification Number[9]	TP-47MD	TP47-MD	TP-47MD	TP46-MD	TP46-MD	TP46-MD

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. sized material, raw material, 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.

STORAGE ACTIVITY AFFECTED SOURCE SHEET CON'T

Source Identification Number[1]	OS-O	OS-P	OS-Q	OS-R	OS-S	
Type of Material Stored[2]	SA	SA	SA	S	S	
Average Moisture Content (%)[3]	10	10	10	10	10	
Maximum Yearly Storage Throughput (tons)[4]	85,000	75,000	462,000	462,000	462,000	
Maximum Storage Capacity (tons)[5]	22,000	19,000	NEEDED	NEEDED	NEEDED	
Maximum Base Area (ft^2)[6]	20,000	20,000	20,000	20,000	20,000	
Maximum Pile Height (ft)[7]	20	20	20	20	20	
Method of Material Load-in[8]	TD	TD	SS	SS	SS	
Load-in Control Device Identification Number[9]	TP-51MD	TP-51MD	TC-WS71	TC-WS73	TC-WS75	
Storage Control Device Identification Number[9]	HR-WS1	HR-WS1	HR-WS1	HR-WS1	HR-WS1	
Method of Material Load-out[8]	FE	FE	FE	FE	FE	
Load-out Control Device Identification Number[9]	TP-46MD	TP46-MD	TP52-MD	TP-52MD	TP52-MD	

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. sized material, raw material, 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.

HAULROAD EMISSIONS

Include G40-C Emission Calculation Spreadsheet indicating haulroad emissions, or submit calculations indicating assumptions made to substantiate emission values.

Emission Source	Uncontrolled Emissions (PM/PM10/PM2.5)*		Controlled Emissions (PM/PM10/PM2.5)*	
	Hourly (lb/hr)	Annual (tpy)	Hourly (lb/hr)	Annual (tpy)
Stone to OS's	92.95/27.44	139.43/41.15	23.24/6.86	34.86/10.29
Stone In	109.48/32.31	164.22/48.47	27.37/8.08	41.05/12.12
Stone Out	151.17/44.62	226.76/66.93	37.79/11.16	56.69/16.73
Endloader	21.81/6.44	95.54/28.20	5.45/1.61	23.88/7.05
*The G40B emission calculation spreadsheet provided by the DAQ does not calculate PM2.5.				

ENGINE DATA SHEET NOT APPLICABLE

Source Identification Number[1]							
Engine Manufacturer and Model							
Manufacturer's Rated bhp/rpm							
Source Status[2]							
Date Installed/Modified/Removed (Month/Year)[3]							
Engine Manufactured/Reconstruction Date[4]							
Is this a Certified Stationary Compression Ignition Engine according to 40CFR60 Subpart IIII? (Yes or No)[5]							
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart JJJJ? (Yes or No)[6]							
Engine, Fuel and Combustion Data	Engine Type[7]						
	APCD Type[8]						
	Fuel Type[9]						
	H_2S (gr/100 scf)						
	Operating bhp/rpm						
	BSFC (Btu/bhp-hr)						
	Fuel throughput (ft^3/hr)						
	Fuel throughput ($MMft^3$/yr)						
	Operation (hrs/yr)						
Reference[10]	Potential Emissions[11]	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
	NO_X						
	CO						
	VOC						
	SO_2						
	PM_{10}						
	Formaldehyde						

1. Enter the appropriate Source Identification Number for each reciprocating internal combustion compressor/generator engine located at the facility. Multiple compressor engines should be designated CE-1, CE-2, CE-3 etc. Emergency Generator engines should be designated EG-1, EG-2, EG-3 etc. If more than three (3) engines exist, please use additional sheets.

2. Enter the Source Status using the following codes:

   NS Construction of New Source (installation) ES Existing Source

MS Modification of Existing Source RS Removal of Source

3. Enter the date (or anticipated date) of the engine's installation (construction of source), modification or removal.

4. Enter the date that the engine was manufactured, modified or reconstructed.

5. Is the engine a certified stationary compression ignition internal combustion engine according to 40CFR60 Subpart IIII. If so, the engine and control device must be operated and maintained in accordance with the manufacturer's emission-related written instructions. You must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. If the certified engine is not operated and maintained in accordance with the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and you must demonstrate compliance according to 40CFR§60.4210 as appropriate.

   Provide a manufacturer's data sheet for all engines being registered.

6. Is the engine a certified stationary spark ignition internal combustion engine according to 40CFR60 Subpart JJJJ. If so, the engine and control device must be operated and maintained in accordance with the manufacturer's emission-related written instructions. You must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. If the certified engine is not operated and maintained in accordance with the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and you must demonstrate compliance according to 40CFR§60.4243a(2)(i) through (iii), as appropriate.

   Provide a manufacturer's data sheet for all engines being registered.

7. Enter the Engine Type designation(s) using the following codes:

LB2S	Lean Burn Two Stroke	RB4S	Rich Burn Four Stroke
LB4S	Lean Burn Four Stroke		

8. Enter the Air Pollution Control Device (APCD) type designation(s) using the following codes:

A/F	Air/Fuel Ratio	IR	Ignition Retard
HEIS	High Energy Ignition System	SIPC	Screw-in Precombustion Chambers
PSC	Prestratified Charge	LEC	Low Emission Combustion
NSCR	Rich Burn & Non-Selective Catalytic Reduction	SCR	Lean Burn & Selective Catalytic Reduction

9. Enter the Fuel Type using the following codes:

PQ	Pipeline Quality Natural Gas	RG	Raw Natural Gas
2FO	#2 Fuel Oil	LPG	Liquid Propane Gas

10. Enter the Potential Emissions Data Reference designation using the following codes. Attach all referenced data to this *Compressor/Generator Data Sheet(s)*.

MD	Manufacturer's Data	AP	AP-42	
GR	GRI-HAPCalc™	OT	Other _____	(please list)

11. Enter each engine's Potential to Emit (PTE) for the listed regulated pollutants in pounds per hour and tons per year. PTE shall be calculated at manufacturer's rated brake horsepower and may reflect reduction efficiencies of listed Air Pollution Control Devices. Emergency generator engines may use 500 hours of operation when calculating PTE. PTE data from this data sheet shall be incorporated in the *Emissions Summary Sheet*.

STORAGE TANK DATA SHEET NOT APPLICABLE

Source ID #[1]	Status[2]	Content[3]	Volume[4]	Dia[5]	Throughput[6]	Orientation[7]	Liquid Height[8]

1. Enter the appropriate Source Identification Numbers (Source ID #) for each storage tank located at the facility. Tanks should be designated T01, T02, T03, etc.
2. Enter storage tank Status using the following:

   EXIST Existing Equipment NEW Installation of New Equipment
   REM Equipment Removed
3. Enter storage tank content such as condensate, pipeline liquids, glycol (DEG or TEG), lube oil, etc.
4. Enter storage tank volume in gallons.
5. Enter storage tank diameter in feet.
6. Enter storage tank throughput in gallons per year.
7. Enter storage tank orientation using the following:

   VERT Vertical Tank HORZ Horizontal Tank
8. Enter storage tank average liquid height in feet.

ATTACHMENT I

EMISSIONS CALCULATIONS

INPUTS

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

Name of applicant: ppalachian Aggregates, LL
Name of plant: Beckley Plant

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

1a. PRIMARY CRUSHING

Primary Crusher ID Number	Description	Maximum Material Processing Capacity		Control Device ID Number	Control Efficiency %
		TPH	TPY		
MP-JC1	Primary Jaw Crusher	450	1,800,000	CS-FW1	70

1b. SECONDARY AND TERTIARY CRUSHING

Secondary & Tertiary Crusher ID	Description	Maximum Material Processing Capacity		Control Device ID Number	Control Efficiency %
		TPH	TPY		
MP-CC1	Secondary / Tertiary Cone Crusher	300	1,800,000	CS-FW2	90
MP-CC2	Secondary / Tertiary Cone Crusher	300	1,800,000	CS-FW3	90

1c. SCREENING

Secondary & Tertiary Crusher ID	Description	Maximum Material Processing Capacity		Control Device ID Number	Control Efficiency %
		TPH	TPY		
MP-VGF1	Primary Grizzly	600	1,800,000	CS-PW1	80
MP-VS1	Primary Screen	600	1,800,000	CS-PW2	80
MP-VS2	Secondary / Tertiary Screen	600	3,552,000	CS-PW3	80
WP-VS1	Secondary / Tertiary Screen	200	600,000	CS-PW4	80
MP-VS3	Secondary / Tertiary Triple Deck Screen	250	600,000	CS-PW5	80
MP-VS4	Secondary / Tertiary High Frequency Screen	150	876,000	CS-PW6	80

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 Transfer Rate TPH	Maximum Transfer Rate TPY	Control Device ID Number	Control Efficiency %
TP1	Truck Dump into MP-H1/MP-VGF1	1.5	600	1,800,000	UL-MD	0
TP2, 4	MP-VGF1 to MP-JC1/MP-BC1A	1.5	650	1,800,000	WS2, 4	70
TP3, 5, 7	MP-JC1/BC1A/BC1B to MP-BC1	1.5	655	1,800,000	WS3, 6, 9	70
TP6	Falling Scrap to MP-BC1B	1.5	5	15,000	WS7	70
TP8	MP-BC1 to OS-A	1.5	600	1,800,000	WS11	70
TP9, 10	MP-VF1/MP-VF2 to MP-BC2	1.5	900	1,800,000	FE1, 2	80
TP11	MP-BC2 to MP-VS1	1.5	600	1,800,000	WS13	70
TP12	MP-VS1 to MP-BC13	1.5	200	1,752,000	WS14	70
TP13	MP-BC13 to OS-J	1.5	200	1,752,000	WS16	70
TP14	MP-VS1 to MP-BC3B	1.5	100	876,000	WS17	70
TP15	MP-BC3B to OS-I	1.5	100	876,000	WS19	70
TP16	MP-VS1 to MP-CC1	1.5	300	1,800,000	WS20	70
TP17	MP-CC1 to MP-BC4	1.5	300	1,800,000	WS21	70
TP18, 18A	MP-VS1 to MP-BC3/MP-BC3A	1.5	360	1,576,800	WS22, 22	70
TP19	MP-BC3 to OS-B	1.5	180	1,576,800	WS24	70
TP19A	MP-BC3A to OS-B1	1.5	180	0	WS24A	70
TP20	MP-BC4 to MP-BC4A	1.5	600	3,552,000	WS26	70
TP21	MP-BC4A to MP-VS2	1.5	600	3,552,000	WS28	70
TP21A	MP-BC4A to MP-VS3	1.5	250	600,000	WS27	70
TP21B, C	MP-VS3 to MP-BC14 to MP-BC5	1.5	0	0	WS63, 64	70
TP21D, E	MP-VS3 to MP-BC15 to OS-E	1.5	250	600,000	WS65, 66	70
TP21F, G	MP-VS3 to MP-BC16 to OS-D	1.5	0	0	WS67, 68	70
TP21H	MP-VS3 to MP-BC6	1.5	0	0	WS69	70
TP22	MP-VS2 to MP-BC5	1.5	300	1,752,000	WS29	70
TP23	MP-BC5 to MP-BIN1	1.5	300	1,752,000	WS31	70
TP24, 26	MP-BIN1 to MP-BC12/MP-CC2	1.5	500	3,066,000	WS32, 35	70
TP25	MP-BC12 to OS-K	1.5	200	600,000	WS34	70
TP27	MP-CC2 to MP-BC4	1.5	275	1,800,000	WS36	70
TP28	MP-VS2 to MP-BC9	1.5	150	1,314,000	WS37	70
TP29, 31	MP-BC9 to MP-BC9A/MP-BC9B	1.5	300	1,314,000	WS39, 42	70
TP30	MP-BC9A to OS-E	1.5	150	1,314,000	WS41	70
TP32	MP-BC9B to MP-BC1	1.5	150	0	WS44	70
TP33	MP-VS2 to MP-BC8	1.5	150	1,314,000	WS45	70
TP34	MP-BC8 to OS-D	1.5	150	462,000	WS47	70
TP35	MP-VS2 to MP-BC6	1.5	150	876,000	WS48	70
TP36	MP-BC6 to MP-BC7	1.5	150	876,000	WS50	70
TP37, 37A	MP-BC7 to OS-C or MP-VS4	1.5	150	876,000	WS52	70
TP37B, C	MP-VS4 to MP-BC17 to OS-Q	1.5	0	0	WS70, 71	70
TP37D	MP-VS4 to MP-BC18	1.5	150	876,000	WS72	70
TP37E	MP-BC18 to OS-R	1.5	150	876,000	WS73	70
TP37F	MP-VS4 to MP-BC19	1.5	0	0	WS74	70
TP37G	MP-BC19 to OS-S	1.5	0	0	WS75	70
TP38	Truck Dump to WP-H1	1.5	200	600,000	UL-MD	0
TP39	WP-H1 to WP-BC10	1.5	200	600,000	WS54	70
TP40	WP-BC10 to WP-VS1	1.5	200	600,000	WS56	70
TP41, 42	WP-VS1 to WP-BIN1 to truck loadout	1.5	200	570,000	WS57, 58	100
TP43	WP-VS1 to WP-SCONV1	1.5	100	30,000	WS59	100
TP44	WP-SCONV1 to WP-BC11	1.5	100	30,000	WS61	100
TP45	WP-BC11 to OS-H	1.5	100	30,000	WS62	100
TP46	Remote OS's to truck by loader	1.5	600	1,800,000	MD	0
TP47	OS-I, OS-J, OS-K to truck by loader	1.5	600	0	MD	0
TP48	OS-C, OS-D, OS-E to truck by loader	1.5	600	0	MD	0
TP49	OS-B to truck by loader	1.5	600	0	MD	0
TP50	OS-H to truck by loader	1.5	600	30,000	MD	100
TP51	Truck to Remote OS's	1.5	600	1,800,000	MD	0
TP52	OS-Q, OS-R, OS-S to truck by loader	1.5	0	0	MD	0

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-A, B, C	Surge, Crusher Run, 10's	2	25,100	HR-WS1	75
OS-D	No. 8, 68's, or 78's	2	1,250	HR-WS1	75
OS-E	No. 57's or 357's	2	1,250	HR-WS1	75
OS-F, G	Crusher Run, No. 8's	2	175,000	HR-WS1	75
OS-H	Wash Plant Sand	2	750	HR-WS1	75
OS-I, J, K	No. 3's, Rip Rap, No.1's	2	16,500	HR-WS1	75
OS-L, M	No. 3's, No. 57's	2	130,000	HR-WS1	75
OS-N	Washed No. 10's	2	20,000	HR-WS1	75
OS-O, P	Sand, No 57's	2	40,000	HR-WS1	75
OS-B1	No. 10's	2	1,250	HR-WS1	75
OS-Q, R	No. 9's, AGS	2	40,000	HR-WS1	75
OS-S	Fines	2	20,000	HR-WS1	75

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_{dry} =	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	Stone to OS's	6	65	15	0.45	12	36,000	HR-WS1	75
2	Stone In	6	65	15	0.53	12	36,000	HR-WS1	75
3	Stone Out	10	25	15	0.45	30	90,000	HR-WS1	75
4	Endloader	4	110	15	1	1	8,760	HR-WS1	75
5									
6									
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: Appalachian Aggregates, LLC
Name of plant: Beckley Plant

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

	Uncontrolled PM		Controlled PM	
	lb/hr	TPY	lb/hr	TPY
FUGITIVE EMISSIONS				
Stockpile Emissions	1.21	5.28	0.30	1.32
Unpaved Haulroad Emissions	375.42	625.94	93.85	156.49
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	**376.62**	**631.22**	**94.16**	**157.81**
POINT SOURCE EMISSIONS				
Equipment Emissions	64.14	126.87	12.59	24.58
Transfer Point Emissions	86.16	154.40	38.14	56.78
Point Source Emissions Total*	**150.30**	**281.27**	**50.73**	**81.36**
*Note: Point Source Total Controlled PM TPY emissions is used for 45CSR14 Major Source determination (see below)				
Facility Emissions Total	**526.92**	**912.49**	**144.89**	**239.17**

***Facility Potential to Emit (PTE) (Baseline Emissions) =** **81.36**

(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	0.57	2.48	0.14	0.62
Unpaved Haulroad Emissions	110.81	184.75	27.70	46.19
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	**111.38**	**187.24**	**27.84**	**46.81**
POINT SOURCE EMISSIONS				
Equipment Emissions	22.77	45.36	4.46	8.73
Transfer Point Emissions	40.75	73.03	18.04	26.85
Point Source Emissions Total*	**63.52**	**118.39**	**22.49**	**35.58**
*Note: Point Source Total Controlled PM-10 TPY emissions is used for 45CSR30 Major Source determination				
Facility Emissions Total	**174.90**	**305.62**	**50.34**	**82.39**

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
MP-JC1	0.900	1.800	0.270	0.540	0.450	0.900	0.135	0.270
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
TOTAL	0.900	1.800	0.270	0.540	0.450	0.900	0.135	0.270

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
MP-CC1	1.620	4.860	0.162	0.486	0.720	2.160	0.072	0.216
MP-CC2	1.620	4.860	0.162	0.486	0.720	2.160	0.072	0.216
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
TOTAL	3.240	9.720	0.324	0.972	1.440	4.320	0.144	0.432

1c. Screening

Screen ID Number	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
MP-VGF1	15.000	22.500	3.000	4.500	5.220	7.830	1.044	1.566
MP-VS1	15.000	22.500	3.000	4.500	5.220	7.830	1.044	1.566
MP-VS2	15.000	44.400	3.000	8.880	5.220	15.451	1.044	3.090
WP-VS1	5.000	7.500	1.000	1.500	1.740	2.610	0.348	0.522
MP-VS3	6.250	7.500	1.250	1.500	2.175	2.610	0.435	0.522
MP-VS4	3.750	10.950	0.750	2.190	1.305	3.811	0.261	0.762
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
TOTAL	60.000	115.350	12.000	23.070	20.880	40.142	4.176	8.028

Crushing and Screening	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
TOTAL	64.140	126.870	12.594	24.582	22.770	45.362	4.455	8.730

1. Emissions From CRUSHING AND SCREENING (Continued)

EMISSION FACTORS

source: AP42, Fifth Edition, Revised 08/2004
(lb/ton of material throughput)

PM	
Primary Crushing	0.002
Tertiary Crushing	0.0054
Screening	0.025

PM-10	
Primary Crushing	0.001
Tertiary Crushing	0.0024
Screening	0.0087

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
TP1	3.292	4.937	3.292	4.937	1.557	2.335	1.557	2.335
TP2, 4	3.566	4.937	1.070	1.481	1.687	2.335	0.506	0.701
TP3, 5, 7	3.593	4.937	1.078	1.481	1.700	2.335	0.510	0.701
TP6	0.027	0.041	0.008	0.012	0.013	0.019	0.004	0.006
TP8	3.292	4.937	0.987	1.481	1.557	2.335	0.467	0.701
TP9, 10	4.937	4.937	0.987	0.987	2.335	2.335	0.467	0.467
TP11	3.292	4.937	0.987	1.481	1.557	2.335	0.467	0.701
TP12	1.097	4.806	0.329	1.442	0.519	2.273	0.156	0.682
TP13	1.097	4.806	0.329	1.442	0.519	2.273	0.156	0.682
TP14	0.549	2.403	0.165	0.721	0.259	1.137	0.078	0.341
TP15	0.549	2.403	0.165	0.721	0.259	1.137	0.078	0.341
TP16	1.646	4.937	0.494	1.481	0.778	2.335	0.234	0.701
TP17	1.646	4.937	0.494	1.481	0.778	2.335	0.234	0.701
TP18, 18A	1.975	4.325	0.592	1.298	0.934	2.046	0.280	0.614
TP19	0.987	4.325	0.296	1.298	0.467	2.046	0.140	0.614
TP19A	0.987	0.000	0.296	0.000	0.467	0.000	0.140	0.000
TP20	3.292	9.743	0.987	2.923	1.557	4.608	0.467	1.382
TP21	3.292	9.743	0.987	2.923	1.557	4.608	0.467	1.382
TP21A	1.372	1.646	0.411	0.494	0.649	0.778	0.195	0.234
TP21B, C	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TP21D, E	1.372	1.646	0.411	0.494	0.649	0.778	0.195	0.234
TP21F, G	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TP21H	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TP22	1.646	4.806	0.494	1.442	0.778	2.273	0.234	0.682
TP23	1.646	4.806	0.494	1.442	0.778	2.273	0.234	0.682
TP24, 26	2.743	8.410	0.823	2.523	1.297	3.978	0.389	1.193
TP25	1.097	1.646	0.329	0.494	0.519	0.778	0.156	0.234
TP27	1.509	4.937	0.453	1.481	0.714	2.335	0.214	0.701
TP28	0.823	3.604	0.247	1.081	0.389	1.705	0.117	0.511
TP29, 31	1.646	3.604	0.494	1.081	0.778	1.705	0.234	0.511
TP30	0.823	3.604	0.247	1.081	0.389	1.705	0.117	0.511
TP32	0.823	0.000	0.247	0.000	0.389	0.000	0.117	0.000
TP33	0.823	3.604	0.247	1.081	0.389	1.705	0.117	0.511
TP34	0.823	1.267	0.247	0.380	0.389	0.599	0.117	0.180
TP35	0.823	2.403	0.247	0.721	0.389	1.137	0.117	0.341
TP36	0.823	2.403	0.247	0.721	0.389	1.137	0.117	0.341
TP37, 37A	0.823	2.403	0.247	0.721	0.389	1.137	0.117	0.341
TP37B, C	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TP37D	0.823	2.403	0.247	0.721	0.389	1.137	0.117	0.341
TP37E	0.823	2.403	0.247	0.721	0.389	1.137	0.117	0.341
TP37F	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TP37G	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TP38	1.097	1.646	1.097	1.646	0.519	0.778	0.519	0.778
TP39	1.097	1.646	0.329	0.494	0.519	0.778	0.156	0.234
TP40	1.097	1.646	0.329	0.494	0.519	0.778	0.156	0.234
TP41, 42	1.097	1.564	0.000	0.000	0.519	0.740	0.000	0.000
TP43	0.549	0.082	0.000	0.000	0.259	0.039	0.000	0.000
TP44	0.549	0.082	0.000	0.000	0.259	0.039	0.000	0.000
TP45	0.549	0.082	0.000	0.000	0.259	0.039	0.000	0.000
TP46	3.292	4.937	3.292	4.937	1.557	2.335	1.557	2.335
TP47	3.292	0.000	3.292	0.000	1.557	0.000	1.557	0.000
TP48	3.292	0.000	3.292	0.000	1.557	0.000	1.557	0.000

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
TP49	3.292	0.000	3.292	0.000	1.557	0.000	1.557	0.000
TP50	3.292	0.082	0.000	0.000	1.557	0.039	0.000	0.000
TP51	3.292	4.937	3.292	4.937	1.557	2.335	1.557	2.335
TP52	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTALS	86.159	154.396	38.137	56.778	40.751	73.025	18.038	26.855

Source:
AP42, Fifth Edition, Revised 11/2006
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

Emission Factor
For PM E= $I$88*(0.0032)*((((Inputs!$I$72)/5)^1.3)/(((Inputs!G78+0.000000001)/2)^1.4))
=lb/ton

For PM-10 E= $J$88*(0.0032)*((((Inputs!$I$72)/5)^1.3)/(((Inputs!G78+0.000000001)/2)^1.4))
=lb/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
OS-A, B, C	0.064	0.281	0.016	0.070	0.030	0.132	0.008	0.033
OS-D	0.003	0.014	0.001	0.004	0.002	0.007	0.000	0.002
OS-E	0.003	0.014	0.001	0.004	0.002	0.007	0.000	0.002
OS-F, G	0.448	1.961	0.112	0.490	0.210	0.922	0.053	0.230
OS-H	0.002	0.008	0.000	0.002	0.001	0.004	0.000	0.001
OS-I, J, K	0.042	0.185	0.011	0.046	0.020	0.087	0.005	0.022
OS-L, M	0.333	1.457	0.083	0.364	0.156	0.685	0.039	0.171
OS-N	0.051	0.224	0.013	0.056	0.024	0.105	0.006	0.026
OS-O, P	0.102	0.448	0.026	0.112	0.048	0.211	0.012	0.053
OS-B1	0.003	0.014	0.001	0.004	0.002	0.007	0.000	0.002
OS-Q, R	0.102	0.448	0.026	0.112	0.048	0.211	0.012	0.053
OS-S	0.051	0.224	0.013	0.056	0.024	0.105	0.006	0.026
TOTALS	1.205	5.280	0.301	1.320	0.567	2.481	0.142	0.620

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

Emission Factors

For PM E=(1.7)*((Inputs!F147)/1.5)*((365-Inputs!I139)/235)*((Inputs!I140)/15)

For PM-10 E=0.47*(1.7)*((Inputs!F147)/1.5)*((365-Inputs!I139)/235)*((Inputs!I140)/15)

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

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	92.95	139.43	23.24	34.86	27.44	41.15	6.86	10.29
2	109.48	164.22	27.37	41.05	32.31	48.47	8.08	12.12
3	151.17	226.76	37.79	56.69	44.62	66.93	11.16	16.73
4	21.81	95.54	5.45	23.88	6.44	28.20	1.61	7.05
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	375.42	625.94	93.85	156.49	110.81	184.75	27.70	46.19

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

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

E= k*((s/12)^a)*((W/3)^b) =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= (($I$35)*(((Inputs!$I$163)/12)^($I$36))*(((Inputs!H171)/3)^$I$37))

For PM-10 E= (($J$35)*(((Inputs!$I$163)/12)^($J$36))*(((Inputs!H171)/3)^$J$37))

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)

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:
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) = 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)	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	0.00047	0.00047

Emission Factors

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

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

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)

ATTACHMENT J

CLASS I LEGAL ADVERTISEMENT

ATTACHMENT J

AIR QUALITY PERMIT NOTICE

Notice of Application

Notice is given that Appalachian Aggregates, LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality for a Modification to General Permit Registration G40-C013C for the Beckley Plant to install two (2) screens, six (6) conveyor belts, and increase throughput on numerous pieces of existing equipment. The facility is located on N. Sandbranch Road near Mount Hope in Raleigh County, West Virginia. The latitude and longitude coordinates are: 37.858582, -81.249938.

The applicant recalculated facility emissions and estimates the new potential to emit will be: PM of 239.17 tons per year (tpy) and PM10 of 82.39 tpy.

The new equipment is anticipated to be installed on the 21th day of January, 2017. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 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 (**Insert Date**) day of December, 2016.

By: Appalachian Aggregates, LLC
John Wilkinson
Vice President
21071 Midland Trail
Lewisburg, West Virginia 24901

ATTACHMENT K

ELECTRONIC SUBMITTAL

ATTACHMENT L

GENERAL PERMIT REGISTRATION APPLICATION FEE

General Permit Levels
Construction, Modification, Relocation, Administrative Update

Class II General Permits – G10-D (Coal Preparation and Handling), G20-B (Hot Mix Asphalt), G30-D (Natural Gas Compressor Stations), G35-A (Natural Gas Compressor Stations with Flares/Glycol Dehydration Units), G40-C (Nonmetallic Minerals Processing), G50-B (Concrete Batch Plant), G60-C (Emergency Generators)

Class I General Permit – G33-A (Spark Ignition Internal Combustion Engines 25 HP-500 HP), G65-C (Emergency Generators)

General Permit	Public Notice	Review Period as per 45CSR13	Application Fee	Criteria	Application Type
Class II General Permit (Construction)	30 days (applicant)	45 days	$500 + applicable NSPS fees	6 lb/hr and 10 tpy of any regulated air pollutant OR 144 lb/day of any regulated air pollutant, OR 2 lb/hr of any hazardous air pollutant OR 5 tpy of aggregated HAP OR 45CSR27 TAP (10% increase if above BAT triggers or increase to BAT triggers) or subject to applicable standard or rule, but subject to specific eligibility requirements	Registration Application
Class II General Permit (Modification)	30 days (applicant)	45 days	$500 + applicable NSPS fees	Same as Class II General Permit (Construction) but subject to specific eligibility requirements	Registration Application
Administrative Update (Class I)	None	60 days	None	Decrease in emissions or permanent removal of equipment OR more stringent requirements or change in MRR that is equivalent or superior	Registration Application or Written Request
Administrative Update (Class II)	30 days (applicant)	60 days	$300 + applicable NSPS fees	No change in emissions or an increase less than Class II Modification levels	Registration Application
Relocation	30 days (applicant)	45 days	$500 + applicable NSPS fees	No emissions increase or change in facility design or equipment	Registration Application
Class I General Permit	None	45 days	$250	Same as Class II General Permit (Construction) but subject to specific eligibility requirements	Registration Application

ATTACHMENT O

EMISSIONS SUMMARY SHEETS

EMISSION SUMMARY SHEET FOR CRITERIA POLLUTANTS

Registration Number (Agency Use) **G40-C**

	Potential Emissions (lbs/hr)					Potential Emissions (tons/yr)				
Source ID No.	**NO_X**	**CO**	**VOC**	**SO_2**	**PM_{10}**	**NO_X**	**CO**	**VOC**	**SO_2**	**PM_{10}**
Transfer Points					18.04					26.86
Crushing					0.28					0.70
Screening					4.18					8.03
Stockpiles					0.14					0.62
Haul Roads					27.70					46.19
Total					**50.34**					**82.40**

EMISSION SUMMARY SHEET FOR HAZARDOUS/TOXIC POLLUTANTS

Registration Number (Agency Use) **G40-C**

	Potential Emissions (lbs/hr)						Potential Emissions (tons/yr)					
Source ID No.	Benzene	Ethyl-benzene	Toluene	Xylenes	n-Hexane	Formalde-hyde	Benzene	Ethyl-benzene	Toluene	Xylenes	n-Hexane	Formalde-hyde