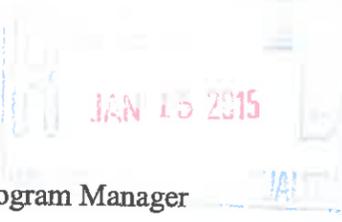


Fee
640-00190
025-00089



January 15, 2015



Ms. Bev McKeone
Supervisor NSR Program Manager
WVDEP
601 57 th Street, SE
Charleston, West Virginia 25304

RE: Boxley Aggregates of West Virginia, LLC, Lewisburg plant, permit application.

Dear Ms. McKeone:

I have enclosed the original and (2) copies of an air permit application for a stand alone aggregate washing plant to be based at Boxley's Lewisburg facility. I have also enclosed is a check for \$ 1,500.00 to cover the application and NSPS fees. This screening plant is being rented for (6) months primarily to enable Boxley to supply aggregates to the Bluestone dam project locate in Hinton, WV. I have prepared the permit application as if the plant will be on-site for (1) year in case the job runs longer.

A legal ad will soon be placed and the Affidavit of Publication will be forwarded as soon as it is received. I would appreciate if this application could be processed as soon as possible to allow the plant to be in operation by April 1, 2015. Please call me at (540) 777-7624 if you have any questions or require additional information.

Sincerely,

Timothy D. Mauzy, PE
Engineer

TABLE OF CONTENTS

Registration Application	SECTION 1
Process Description	SECTION 2
Drawings	SECTION 3
Figure 1 Business Registration Certificate.	
Figure 2 Process Flow Diagram.	
Figure 3 Plot Plan.	
Figure 4 Area Map.	
Figure 5+ Plant Literature.	
Affected Source Sheets	SECTION 4
Baghouse Air Pollution Control Device Sheets	SECTION 5
Description of Fugitive Emissions	SECTION 6
Emission Calculations	SECTION 7
Legal Advertisement	SECTION 8

SECTION 1
REGISTRATION APPLICATION



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

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

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

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

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

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

SECTION I. GENERAL INFORMATION

1. NAME OF APPLICANT (AS REGISTERED WITH THE WV SECRETARY OF STATE'S OFFICE): Boxley Aggregates of West Virginia, LLC	2. FEDERAL EMPLOYER ID NO. (FEIN): 01-0640503
3. APPLICANT'S MAILING ADDRESS: P.O. Box 13527 Roanoke, VA 24035	
4. IF APPLICANT IS A SUBSIDIARY CORPORATION, PLEASE PROVIDE THE NAME OF PARENT CORPORATION: N/A	
5. WV BUSINESS REGISTRATION. IS THE APPLICANT A RESIDENT OF THE STATE OF WEST VIRGINIA? <input type="checkbox"/> YES <input checked="" type="checkbox"/> NO IF YES, PROVIDE A COPY OF THE CERTIFICATE OF INCORPORATION / ORGANIZATION / LIMITED PARTNERSHIP (ONE PAGE) INCLUDING ANY NAME CHANGE AMENDMENTS OR OTHER BUSINESS CERTIFICATE AS ATTACHMENT A. IF NO, PROVIDE A COPY OF THE CERTIFICATE OF AUTHORITY / AUTHORITY OF L.L.C. / REGISTRATION (ONE PAGE) INCLUDING ANY NAME CHANGE AMENDMENTS OR OTHER BUSINESS CERTIFICATE AS ATTACHMENT A.	

SECTION II. FACILITY INFORMATION

7. TYPE OF PLANT OR FACILITY (STATIONARY SOURCE) TO BE CONSTRUCTED, MODIFIED, RELOCATED OR ADMINISTRATIVELY UPDATED (E.G., COAL PREPARATION PLANT, PRIMARY CRUSHER, ETC.): Portable Stone washing Plant	8. STANDARD INDUSTRIAL CLASSIFICATION (SIC) CODE FOR THE FACILITY: 1422
--	--

9A. DAQ PLANT I.D. NO. (FOR AN EXISTING FACILITY): Home Base for portable Plant <u>0 2 5 - 0 0 0 0 9</u>	10A. LIST ALL CURRENT 45CSR13 AND 45CSR30 (TITLE V) PERMIT NUMBERS ASSOCIATED WITH THIS PROCESS (FOR EXISTING FACILITY ONLY): G40-C019C
--	--

PRIMARY OPERATING SITE INFORMATION

11A. NAME OF PRIMARY OPERATING SITE: Lewisburg Plant	12A. MAILING ADDRESS OF PRIMARY OPERATING SITE: HC 40, Box 49 Lewisburg, WV 24901	
13A. DOES THE APPLICANT OWN, LEASE, HAVE AN OPTION TO BUY, OR OTHERWISE HAVE CONTROL OF THE PROPOSED SITE? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO ⇨ IF YES, PLEASE EXPLAIN: <u>Boxley Aggregates of West Virginia, LLC owns a portion of the site and maintains a lease on the remainder.</u> ⇨ 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. <u>On route 60, 3/3 miles north of Interstate 64, Exit 161</u> INCLUDE A MAP AS ATTACHMENT F.		
15A. NEAREST CITY OR TOWN: Lewisburg	16A. COUNTY: Greenbrier	
17A. UTM NORTHING (KM): 4192.3	18A. UTM EASTING (KM): 538.9	19A. UTM ZONE: 17

1ST ALTERNATE OPERATING SITE INFORMATION (G20-B, G40-C, G50-C only)

11B. NAME OF PRIMARY OPERATING SITE: 	12B. MAILING ADDRESS OF PRIMARY OPERATING SITE:
--	---

13B. DOES THE APPLICANT OWN, LEASE, HAVE AN OPTION TO BUY, OR OTHERWISE HAVE CONTROL OF THE PROPOSED SITE?
 YES NO
 ⇨ IF YES, PLEASE EXPLAIN: _____

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

14B. ⇨ FOR MODIFICATIONS or ADMINISTRATIVE UPDATES, AT AN EXISTING FACILITY, PLEASE PROVIDE DIRECTIONS TO THE PRESENT LOCATION OF THE FACILITY FROM THE NEAREST STATE ROAD;
 ⇨ FOR CONSTRUCTION OR RELOCATION PERMITS, PLEASE PROVIDE DIRECTIONS TO THE PROPOSED NEW SITE LOCATION FROM THE NEAREST STATE ROAD.

 INCLUDE A MAP AS ATTACHMENT F.

15B. NEAREST CITY OR TOWN:	16B. COUNTY:	
17B. UTM NORTHING (KM):	18B. UTM EASTING (KM):	19B. UTM ZONE:

2ND ALTERNATE OPERATING SITE INFORMATION (G20-B, G40-C, G50-C only)

11C. NAME OF PRIMARY OPERATING SITE:	12C. MAILING ADDRESS OF PRIMARY OPERATING SITE:
_____	_____

13C. DOES THE APPLICANT OWN, LEASE, HAVE AN OPTION TO BUY, OR OTHERWISE HAVE CONTROL OF THE PROPOSED SITE?
 YES NO
 ⇨ IF YES, PLEASE EXPLAIN: _____

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

14C. ⇨ FOR MODIFICATIONS or ADMINISTRATIVE UPDATES, AT AN EXISTING FACILITY, PLEASE PROVIDE DIRECTIONS TO THE PRESENT LOCATION OF THE FACILITY FROM THE NEAREST STATE ROAD;
 ⇨ FOR CONSTRUCTION OR RELOCATION PERMITS, PLEASE PROVIDE DIRECTIONS TO THE PROPOSED NEW SITE LOCATION FROM THE NEAREST STATE ROAD.

 INCLUDE A MAP AS ATTACHMENT F.

15C. NEAREST CITY OR TOWN:	16C. COUNTY:
----------------------------	--------------

17C. UTM NORTHING (KM):	18C. UTM EASTING (KM):	19C. UTM ZONE:
20. PROVIDE THE DATE OF ANTICIPATED INSTALLATION OR CHANGE: <u>04 / 01 / 15</u>		21. DATE OF ANTICIPATED START-UP IF REGISTRATION IS GRANTED: <u>04 / 01 / 15</u>
⇒ IF THIS IS AN AFTER-THE-FACT PERMIT APPLICATION, PROVIDE THE DATE UPON WHICH THE PROPOSED CHANGE DID HAPPEN: <u> </u> / <u> </u> / <u> </u>		
22. PROVIDE MAXIMUM PROJECTED OPERATING SCHEDULE OF ACTIVITY/ ACTIVITIES OUTLINED IN THIS APPLICATION: HOURS PER DAY <u>24</u> DAYS PER WEEK <u>7</u> WEEKS PER YEAR <u>52</u> PERCENTAGE OF OPERATION <u>100</u>		

SECTION III. ATTACHMENTS AND SUPPORTING DOCUMENTS

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

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

PLEASE MAIL AN ORIGINAL AND TWO COPIES OF THE COMPLETE GENERAL PERMIT REGISTRATION APPLICATION WITH THE SIGNATURE(S) TO THE DAQ PERMITTING SECTION AT THE ADDRESS SHOWN ON THE FRONT PAGE. PLEASE DO NOT FAX PERMIT APPLICATIONS. FOR QUESTIONS REGARDING APPLICATIONS OR WEST VIRGINIA AIR POLLUTION RULES AND REGULATIONS PLEASE CALL (304) 926-0475.

SECTION IV. CERTIFICATION OF INFORMATION

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

FOR A CORPORATION (domestic or foreign)

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

FOR A PARTNERSHIP

I certify that I am a General Partner

FOR A LIMITED LIABILITY COMPANY

I certify that I am a General Partner or General Manager

FOR AN ASSOCIATION

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

FOR A JOINT VENTURE

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

FOR A SOLE PROPRIETORSHIP

I certify that I am the Owner and Proprietor

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

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

Signature Abney S. Boxley, III Responsible Official Date 1-13-15
(please use blue ink)

Name & Title Abney S. Boxley, III - President
(please print or type)

Signature N/A Authorized Representative (if applicable) Date
(please use blue ink)

Applicant's Name N/A

Phone & Fax N/A Phone Fax

Email _____

SECTION 2
PROCESS DESCRIPTION

PROCESS DESCRIPTION

Boxley is supplying stone to the Bluestone dam project in Hinton WV. In order to supply all that is needed, we will need to rent a small portable wash plant for approximately (6) months.

This application is being submitted to permit a stand alone portable stone washing plant with a home base at Boxley's Lewisburg facility. Although the plant will only be rented for (6) months, the permit application is based on the portable plant operating for (1) year. This will allow additional operation after the (6) month timeline if the job requires.

Portable Plant

A front end loader will transfer raw material into the feed hopper (PP-FH1) through TP-1/UL-WS. The belt feeder (PP-BF1) transfers the feed to (PP-BC1) through TP-2/TC-WS2. (PP-BC1) conveys the material through transfer point TP-3/TC-WS3 onto a triple deck screen (PP-VS1). The oversized material on the first deck of the vibrating screen (PP-VS1) is moved through TP-4/TC-WET to belt conveyor (PP-BC2). The material conveyed on belt (PP-BC2) is transferred through TP-5/TC-WET to stockpile PP-OS-A/HR-WS1. The material on the second deck of vibrating screen (PP-VS1) is moved through TP-6/TC-WET to belt conveyor (PP-BC3). The material conveyed on belt (PP-BC3) is transferred through TP-7/TC-WET to stockpile PP-OS-B/HR-WS1. The material on the third deck of vibrating screen (PP-VS1) is moved through TP-8/TC-WET to belt conveyor (PP-BC4). The material conveyed on belt (PP-BC4) is transferred through TP-9/TC-WET to stockpile PP-OS-C/HR-WS1. The material that passes through the third deck of vibrating screen (PP-VS1) is moved through TP-10/TC-WET to belt conveyor (PP-BC5). The material conveyed on belt (PP-BC5) is transferred through TP-11/TC-WET to either stockpile PP-OS-D/HR-WS1 or the quarry pit. The front end loader will move and loadout stockpile material as needed to trucks or existing stockpiles. Once material is introduced to PP-VS1, the material is saturated through sizing and stockpiling.

SECTION 3
DRAWINGS

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

ISSUED TO:
**BOXLEY AGGREGATES OF WEST VIRGINIA L L C
PO BOX 49 RT 60
ALTA, WV 24916-0049**

BUSINESS REGISTRATION ACCOUNT NUMBER: 1005-6689

This certificate is issued on: **06/29/2011**

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

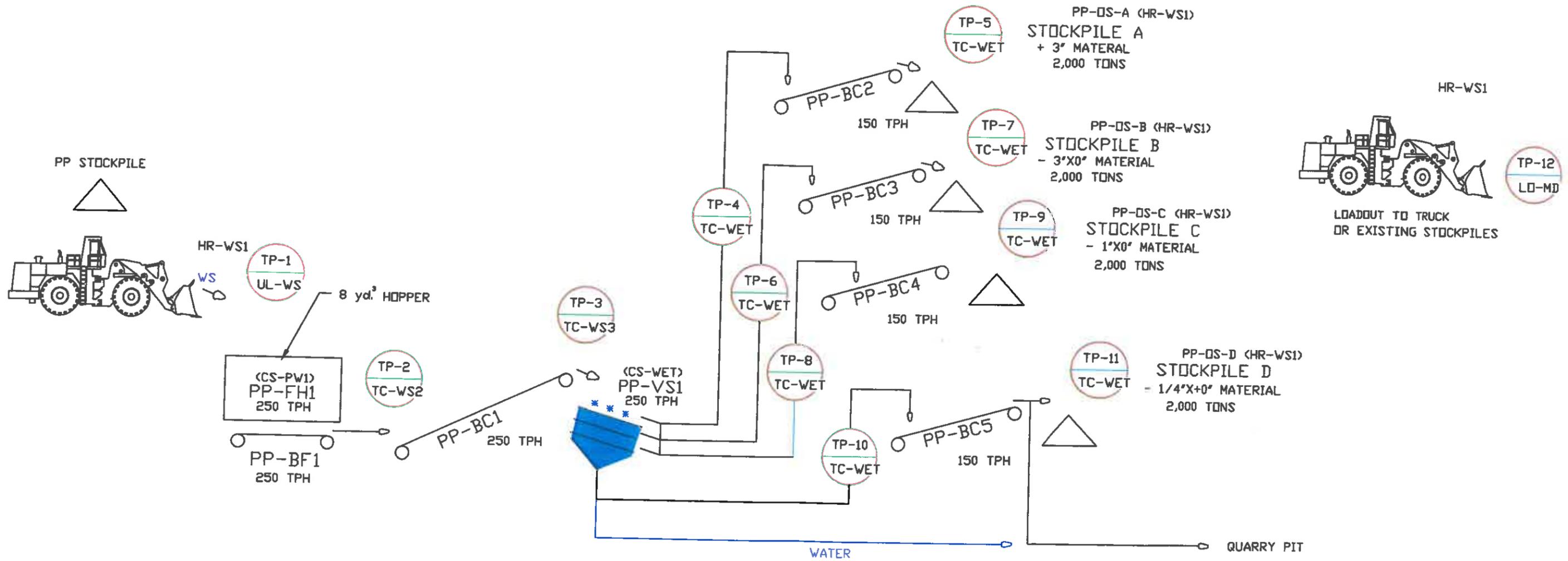
*The person or organization identified on this certificate is registered
to conduct business in the State of West Virginia at the location above.*

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.

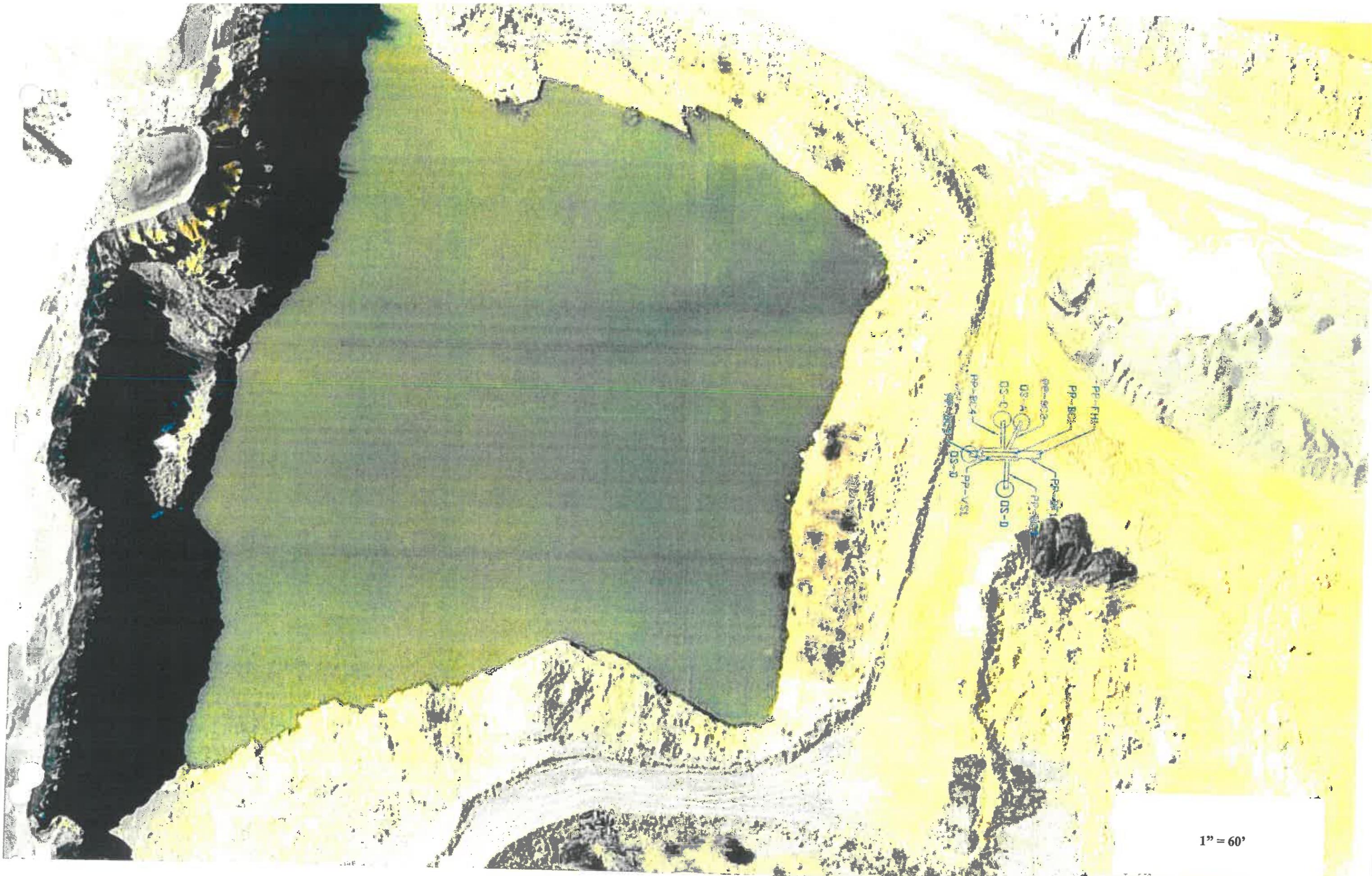
**TRAVELING/STREET VENDORS: Must carry a copy of this certificate in every vehicle operated by them.
CONTRACTORS, DRILLING OPERATORS, TIMBER/LOGGING OPERATIONS: Must have a copy of
this certificate displayed at every job site within West Virginia.**



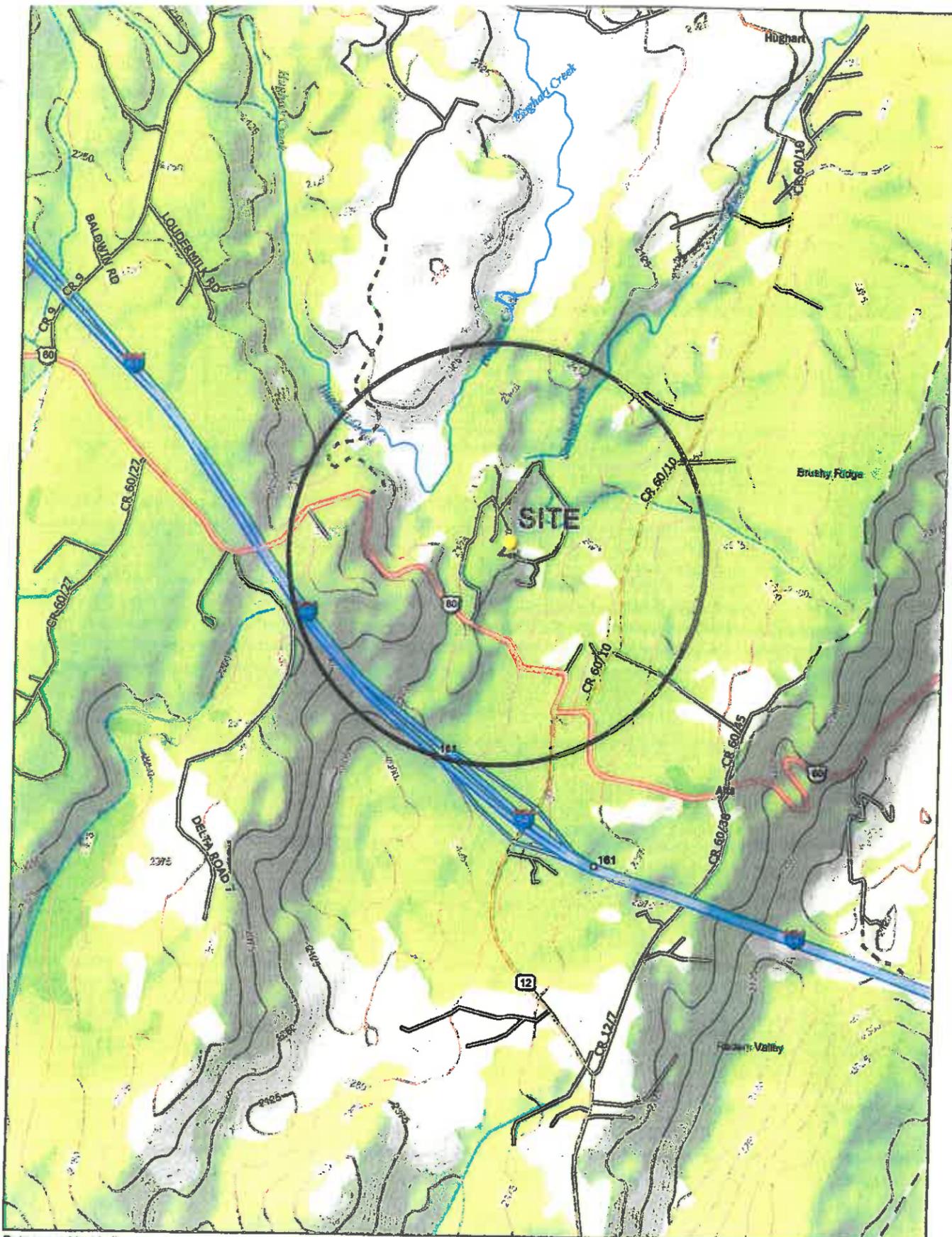
BOXLEY	
BOXLEY AGGREGATES OF WEST VIRGINIA, LLC ROANOKE, VIRGINIA	
DESIGN TDM	PLANT LEWISBURG PLANT GREENBRIER COUNTY, WV
DATE 01/09/13	JOB DESCRIPTION PORTABLE PLANT BASED AT LEWISBURG PROCESS FLOW DIAGRAM
SCALE NTS C.L.	
PLANT ID: # 026-00001	SHEET 1 OF 1



1" = 200'



1" = 60'



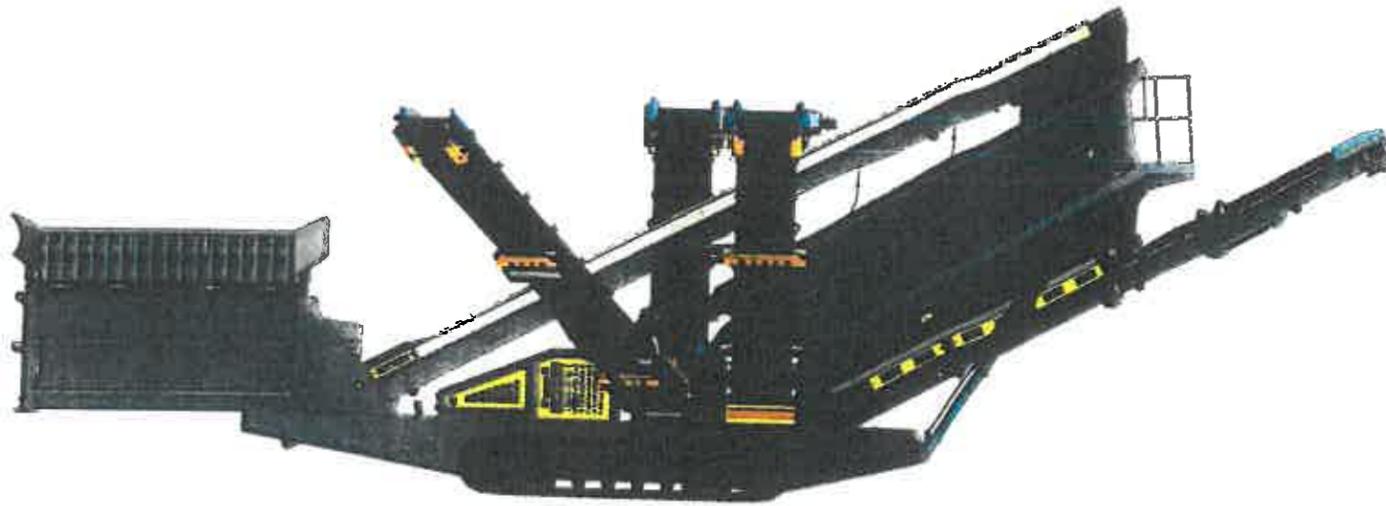
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www.delorme.com



SCREEN PLANT

Exceptional Portability | Simplified Operation | Superior Compatibility

TRACK MOUNTED SCREEN PLANT



ASTEC
INDUSTRIES, INC.

AGGREGATE AND
MINING GROUP

The GT205S is a mobile track screening plant that features a double-or-triple deck screen for processing sand and gravel, topsoil, slag, crushed stone, and recycled materials. The GT205S screening plant provides easy-to-reach engine controls and grease points for routine service, simple-to-use hydraulic leveling gears, hydraulic plant controls and screen angle adjustment. Tethered track remote control is standard with an optional wireless remote track control available.

8 cu. yds
feed hopper capacity

5' x 20' / 5' x 18'
5' x 20' top and middle decks and
5' x 18' bottom deck

129 HP
CAT power unit

Up to 600 TPH
Plant capacity, depending on material
and conditions

PERFORMANCE

- P1 **Low Profile**
Designed to simply drive off transport trailer and begin screening.
- P2 **Compact Design**
Global Track Series machines are slimmer and lighter, making them easy to transport.

EASY-TO-USE

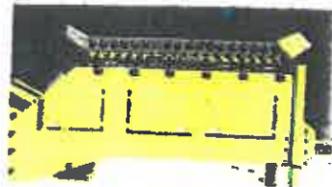
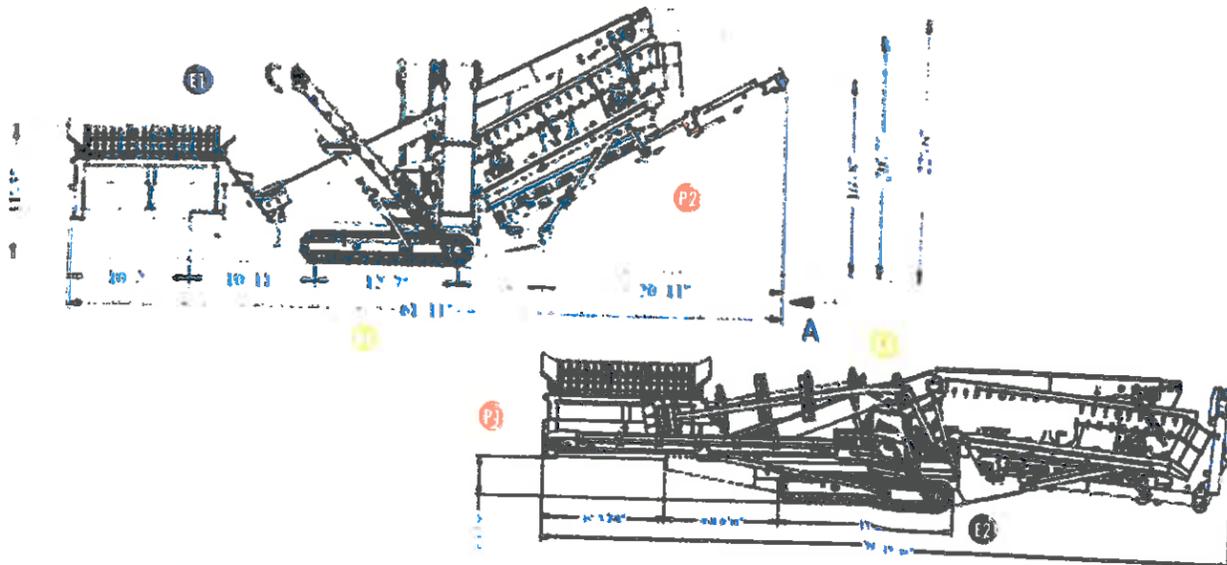
- E1 **Minimal Site Prep**
Spend time in production, instead of site preparation.
- E2 **On-Site Portable**
On-site mobility allows you to quickly relocate as production requires.

DURABILITY

- D1 **Heavy Duty Tracks**
Extreme durability and mobility.

SAFETY

- S1 **Control Panels**
Easy access to all controls for set-up and operation and emergency shut-offs.



HOPPER
8 cubic yard capacity
Low Feed Height 11'3" (3430mm)



TOP DECK CROSS CONVEYOR
30' / 650mm
Feeds Overs Conveyor



SCREEN
5' / 1524mm x 20' / 6100mm Upper Deck(s)
5' / 1524mm x 18' / 5500mm Bottom Deck
1000 RPM Maximum - Optional Ball Deck Available

SERVICE MADE EASY

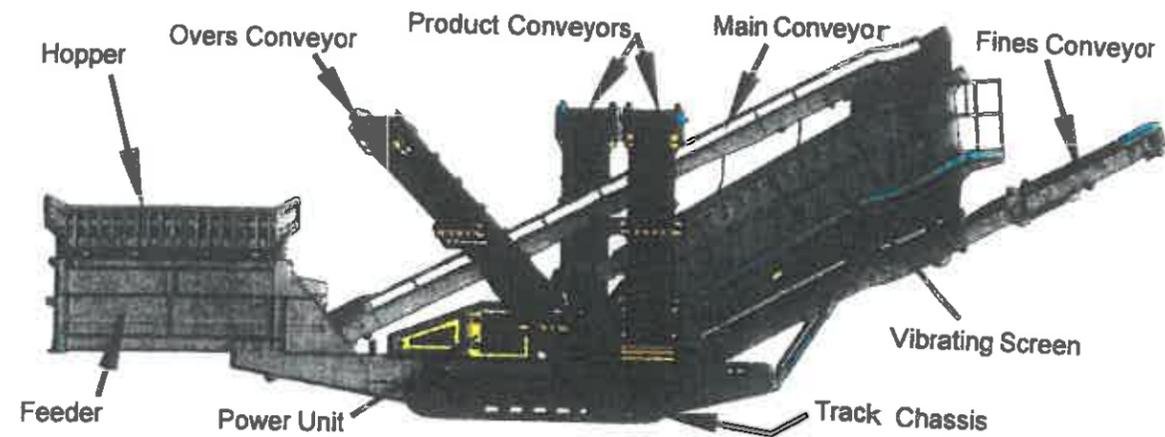
Because we're dedicated to keeping you up and running, we've provided two resources for quality O.E.M. parts and 24/7 service. KPI-JCI and Astec Mobile Screens parts and service are available from your local dealer and/or representative.

Find the dealer or representative nearest you at www.kpijci.com.

PART OF THE GLOBAL TRACK SYSTEM

Combine with the G1200 Cone Crusher and the GT125 Jaw Crusher for a portable crushing and screening system.

Because KPI-JCI & Astec Mobile Screens may use in their catalog & literature, old photographs of its products which may have been modified by the owners, products furnished by KPI-JCI & Astec Mobile Screens may not necessarily be as illustrated herein. Also continuous design progress makes it necessary that specifications be subject to change without notice. All sales of the products of KPI-JCI & Astec Mobile Screens are subject to the provisions of its standard warranty. KPI-JCI & Astec Mobile Screens do not warrant or represent that their products meet any federal, state, or local statutes, codes, ordinances, rules, standards or other regulations, including OSHA and MSHA, covering safety pollution, electrical, wiring, etc. Compliance with these statutes and regulations is the responsibility of the user and will be dependent upon the area and the use to which the product is put by the user. In some photographs, guards may have been removed for illustrative purposes only. This equipment should not be operated without all guards attached in their normal position. Placement of guards and other safety equipment is often dependent upon the area and the use to which the product is put. A safety study should be made by the user of the application, and, if required, additional guards, warning signs and other safety devices should be installed by the user, wherever appropriate before operating the products.

**VIBRATING SCREEN**

- o 5' x 20' top/center deck, 18' bottom deck
- o 1000 RPM adjustable amplitude
- o Hydraulic angle adjustment
- o Access ladder with wrap around walkway

CHASSIS

- o 18" channel frame
- o Tracks
- o Pendant remote control (wireless optional)

HOPPER

- o 8 cubic yard capacity
- o Heavy duty sloped grizzly with 6" openings
- o Hydraulic remote tipping grid and wings
- o Hydraulic support legs

FEEDER

- o 13'-0" x 1200mm belt feeder
- o Hydraulic variable speed drive

MAIN CONVEYOR

- o 36'-0" x 1050mm hydraulic drive
- o Full-length skirt boards
- o Chevron Belt, Vulcanized

OVERS CONVEYOR

- o 30'-0" x 650mm swing out design
- o Hydraulic variable speed drive
- o Chevron Belts, Vulcanized

PRODUCT CONVEYORS

- o Two (2) 28'-0" x 800mm swing out design
- o Hydraulic variable speed drive
- o Chevron Belts, Vulcanized

FINES CONVEYOR

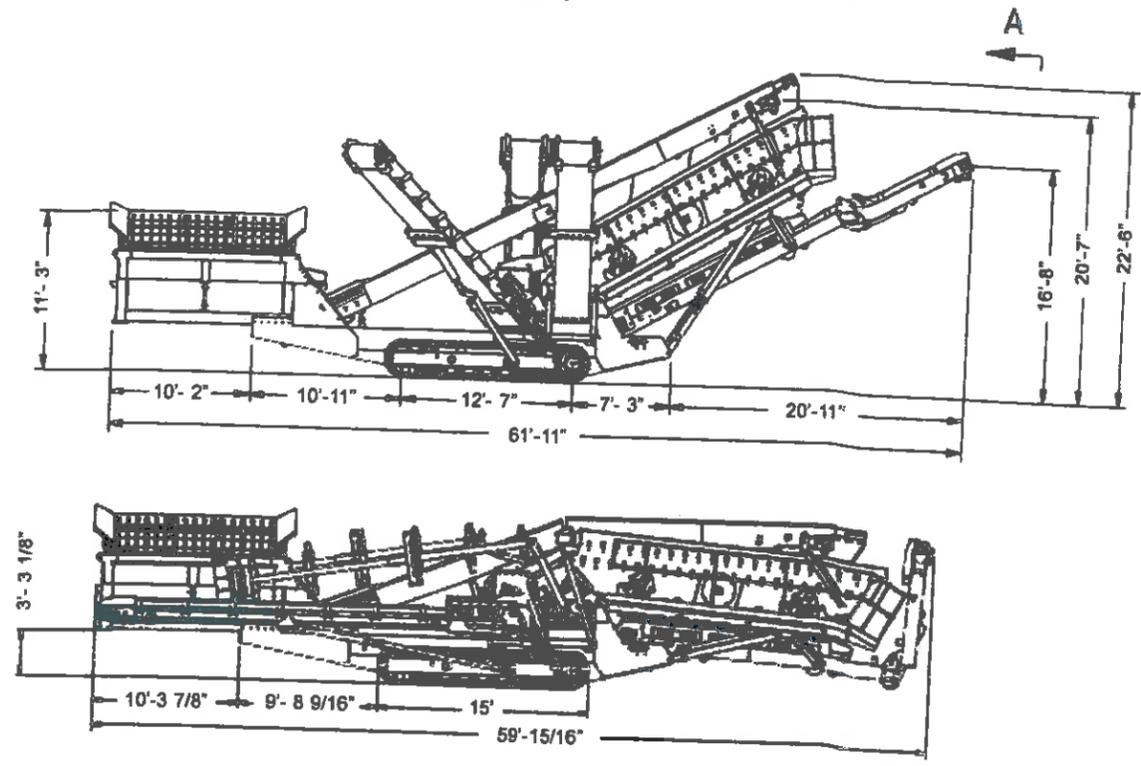
- o 24'-0" x 1200mm hydraulic drive
- o Vulcanized

POWER & HYDRAULICS

- o Cat 129 HP Tier III diesel engine
- o 120 gallon fuel tank
- o Oil Cooler
- o Hydraulic pumps operate all plant functions
- o 130 gallon hydraulic reservoir
- o NEMA-4 rated instrument panel
- o Emergency stop

- o 2-deck Vibrating Screen Configuration
- o Wireless Track Remote
- o Ball Tray for Bottom Deck Module

- o Hammermill Shredder
- o Tier IV Engine



APPLICATION PARAMETERS

Maximum Feed to Grizzly.....24"/730mm
 Grizzly Spacing.....6"/152mm

PHYSICAL OPERATING CHARACTERISTICS

Overall Length.....61'11"/18.872m
 Operating Height.....22'6"/6.86m
 Operating Width.....59'8"/18.19m
 Feed Height.....11'3"/3.43m

OPERATING SLOPE

Side to Side.....1% grade

Maximum Top Deck Screen Opening.....4"/1220mm
 Maximum Total Products.....(3) sized, 1 oversize

Travel Length.....60'/18.29m
 Travel Height.....11'10"/3.61m
 Travel Width.....11'4"/3.38m
 Unit Weight.....82,800 lbs/37,558 kg

Front to Back.....3% grade

NOTE: Specifications are subject to change without notice.

Because AMS may use in its catalog & literature full photographs of its products which may have been modified by the owners, products furnished by AMS may not necessarily be as illustrated therein. Its continuous design program makes it necessary that specifications be subject to change without notice. All uses of the products of AMS are subject to the provisions of its standard warranty. AMS does not warrant or represent that its products meet any federal, or other regulations, including OSHA and MSHA, state, or local statutes, codes, ordinances, rules, standards covering safety, pollution, electrical wiring, etc. Compliance with these statutes and regulations is the responsibility of the user and will be dependent upon the area and the use to which the product is put by the user. In some photographs, guards may have been removed for illustrative purposes only. This equipment should not be operated without all guards attached in their normal position. Placement of guards and other safety equipment is often dependent upon the area and how the product is used. A safety study should be made by the user of the application, and, if required additional guards, warning signs and other safety devices should be installed by the user, wherever appropriate before operating the product.



2704 W. LeFevre Rd., Sterling, IL 61081
 1-800-545-2125 Fax: 815-626-6430

Email: sales@astecmobilescreens.com
www.astecmobilescreens.com

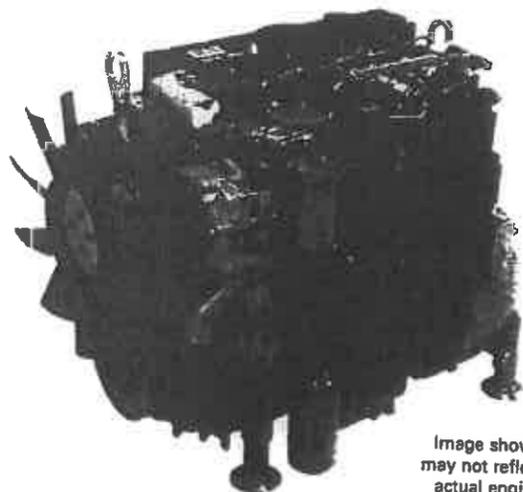


Image shown may not reflect actual engine

CATERPILLAR® ENGINE SPECIFICATIONS

I-4, 4-Stroke-Cycle Diesel

Bore.....	105 mm (4.1 in.)
Stroke.....	127 mm (5.0 in.)
Displacement.....	4.4 L (269 in ³)
Aspiration.....	Turbocharged Aftercooled
Compression Ratio.....	16.2:1
Combustion System.....	Direct Injection
Rotation (from flywheel end) ...	Counterclockwise
Capacity for Liquids	
Cooling System (engine only) ..	7 L (7.4 U.S. qts.)
Lube Oil System	
(refill) typical	up to 11 L (11.6 U.S. qts.)

dependent on sump option and gradeability requirements

Engine Weight, Net Dry (approximate) with standard equipment.... 360 kg (793.7 lbs.)

FEATURES

Emissions

Meets Tier 3, Stage IIIA emissions requirements. Tier 3 refers to EPA (U.S.) standards. Stage IIIA refers to European standards.

Reliable and Durable Power

Diesel tough components and conservative speed for smooth operation and long engine life. Factory-designed systems built at Caterpillar ISO 9001:2000 certified facilities.

High Performance

With maximum torque levels maintained, the C4.4 ACERT™ engine provides class-leading power take-off capability.

Clean and Quiet Power

Cleaner, meeting EPA Tier 3 and Stage IIIA European Union emissions standards.

Easy Low-Cost Maintenance

Convenient positioning of service points for easy accessibility. Service intervals set at 500 hours as standard.

Web Site

For additional information on all your power requirements, visit www.cat-industrial.com.

STANDARD ENGINE EQUIPMENT

Air Inlet

Inlet manifold with choice of inlets

Control System

Alternators
Starter motors
Glow plugs for cold start aids

Cooling System

Fan drives and locations

Flywheels and Flywheel Housing

SAE No. 3 flywheel housing
Flywheel and starter rings

Fuel System

Fuel filter positions

Lube System

Lubricating oil filters and breathers
Oil filter positions
Lubricating oil sumps

Power Take Off

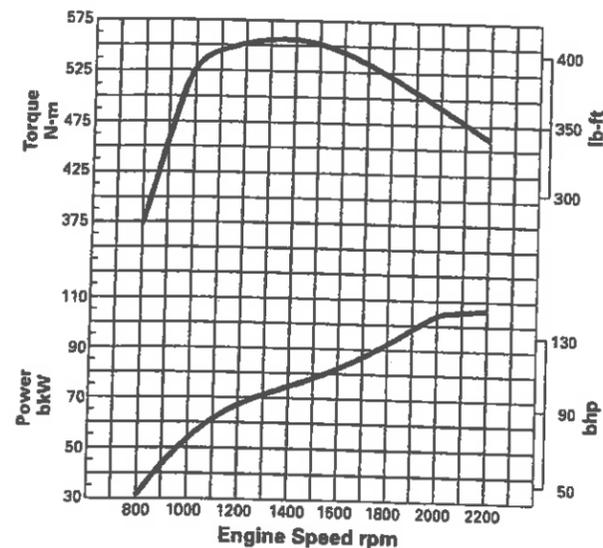
SAE B PTO

General

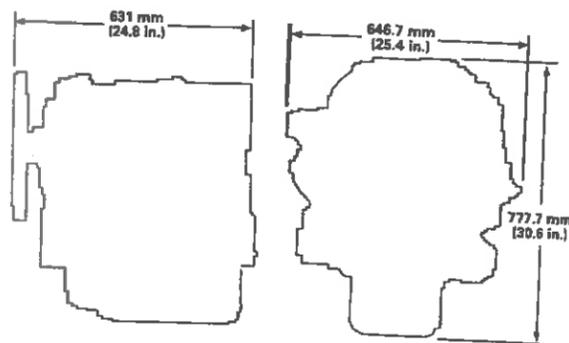
Timing case and gear-driven auxiliaries
Belt-driven auxiliaries
Engine mountings
Gauges
Displays
Power and torque curve tailoring

PERFORMANCE DATA

Turbocharged Aftercooled — 2200 rpm



DIMENSIONS



Length	631 mm (24.8 in.)
Width	626.0 mm (24.65 in.)
Height	958.0 mm (37.72 in.)

Note: Dimensions depend on final specifications.

Unbalanced

	Speed rpm	Power bkW	Torque N-m	Power bhp	Torque lb-ft
Highest Rating	2200	106.2	461	142.4	340.0
Peak Torque	1400	81.5	556	109.3	410.1

Gross Intermittent Power = SAE J1995
Other ratings are available.
Lower power ratings should not be read from these curves.

RATING DEFINITIONS AND CONDITIONS

IND-C (Intermittent) is the horsepower and speed capability of the engine where maximum power and/or speed are cyclic (time at full load not to exceed 50%).

Additional ratings are available for specific customer requirements. Consult your Caterpillar dealer.

Rating Conditions for Diesel Engines — up to 6.6 liter are based on ISO/TR14396, inlet air standard conditions with a total barometric pressure of 100 kPa (29.5 in. Hg), with a vapor pressure of 1 kPa (.295 in. Hg), and 25°C (77°F). Performance is measured using fuel to specification EPA 2D 89.330-96 with a density of 0.845-0.850 kg/L @ 15°C (59°F) and fuel inlet temperature 40°C (104°F).

Materials and specifications are subject to change without notice. The International System of Units (SI) is used in this publication. CAT, CATERPILLAR, their respective logos, ACERT, "Caterpillar Yellow" and the POWER EDGE trade dress as well as corporate and product identity used herein, are trademarks of Caterpillar and may not be used without permission.

Pursuant to the authority vested in the Air Resources Board by Sections 43013, 43018, 43101, 43102, 43104 and 43105 of the Health and Safety Code; and

Pursuant to the authority vested in the undersigned by Sections 39515 and 39516 of the Health and Safety Code and Executive Order G-02-003;

IT IS ORDERED AND RESOLVED: That the following compression-ignition engines and emission control systems produced by the manufacturer are certified as described below for use in off-road equipment. Production engines shall be in all material respects the same as those for which certification is granted.

MODEL YEAR	ENGINE FAMILY	DISPLACEMENT (liters)	FUEL TYPE	USEFUL LIFE (hours)
2011	BPKXL04.4NJ1	4.4	Diesel	8000
SPECIAL FEATURES & EMISSION CONTROL SYSTEMS			TYPICAL EQUIPMENT APPLICATION	
Electronic Direct Injection, Electronic Control Module, Turbocharger, Charge Air Cooler			Cranes, Loaders, Tractor, Dozer, Pump, Compressor, Generator Set, Other Industrial Equipment	

The engine models and codes are attached.

The following are the exhaust certification standards (STD) and certification levels (CERT) for hydrocarbon (HC), oxides of nitrogen (NOx), or non-methane hydrocarbon plus oxides of nitrogen (NMHC+NOx), carbon monoxide (CO), and particulate matter (PM) in grams per kilowatt-hour (g/kw-hr), and the opacity-of-smoke certification standards and certification levels in percent (%) during acceleration (Accel), lugging (Lug), and the peak value from either mode (Peak) for this engine family (Title 13, California Code of Regulations, (13 CCR) Section 2423):

RATED POWER CLASS	EMISSION STANDARD CATEGORY		EXHAUST (g/kw-hr)					OPACITY (%)		
			HC	NOx	NMHC+NOx	CO	PM	ACCEL	LUG	PEAK
56 ≤ kW < 75	Tier 3	STD	N/A	N/A	4.7	5.0	0.40	20	15	50
75 ≤ kW < 130	Tier 3	STD	N/A	N/A	4.0	5.0	0.30	20	15	50
		CERT	--	--	3.7	1.8	0.21	7	2	11

BE IT FURTHER RESOLVED: That for the listed engine models, the manufacturer has submitted the information and materials to demonstrate certification compliance with 13 CCR Section 2424 (emission control labels), and 13 CCR Sections 2425 and 2426 (emission control system warranty).

Engines certified under this Executive Order must conform to all applicable California emission regulations.

This Executive Order is only granted to the engine family and model-year listed above. Engines in this family that are produced for any other model-year are not covered by this Executive Order.

Executed at El Monte, California on this 13 day of December 2010.



Annette Hebert, Chief
Mobile Source Operations Division



WASHINGTON, DC 20460



CERTIFICATE OF CONFORMITY
2011 MODEL YEAR

Manufacturer: **PERKINS ENGINES CO. LTD.**
Engine Family: **BPKXL04.4NJ1**
Certificate Number: **PKX-NRCI-11-07**
Intended Service Class: **NR 5 (75-130)**
Fuel Type: **DIESEL**
FELs: **NMHC + NOx: N/A NOx: N/A PM: N/A**
Effective Date: **9/17/2010**
Date Issued: **9/17/2010**

Karl J. Simon, Director
Compliance and Innovative Strategies Division
Office of Transportation and Air Quality

Pursuant to Section 111 and Section 213 of the Clean Air Act (42 U.S.C. sections 7411 and 7547) and 40 CFR Part 60 and Part 89, and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following stationary and nonroad engines, by engine family, more fully described in the documentation required by 40 CFR Part 60 and 89, and produced in the stated model year.

This certificate of conformity covers only those new stationary and nonroad compression-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 60 and 89 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 60 and 89.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 89.129-96 and 89.506-96 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to a revocation or suspension of this certificate for reasons specified in 40 CFR Part 89. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void ab initio for other reasons specified in 40 CFR Part 89.

This certificate does not cover stationary and nonroad engines sold, offered for sale, or introduced, or delivered for introduction, into commerce in the U.S. prior to the effective date of the certificate.

Models NJ

Engine type: C4.4 DITAAC

Cylinder arrangement	Vertical in-line
Cycle	4 stroke
Induction system	Turbocharged air/air after cooling
Combustion system	Direct injection
Bore	105,0 mm (4.13 in)
Stroke	127,0 mm (5.00 in)
Compression ratio	16.2 : 1
Cubic capacity	4,4 litres (269 in ³)
Firing order	1, 3, 4, 2
Rotation	Clockwise, viewed from front
Basic thread form	Metric
Cooling system	Liquid

Note: shown on general arrangement drawings (1)

Length (2) (4)	631,0 mm (24.82 in)
Width (4)	626,0 mm (24.65 in)
Height (4)	958,0 mm (37.72 in)

Engine weights - non-stressed

Bare engine (dry) (3)	360 kg
Bare engine (wet) (3)	TBA

Engine weights - stressed

Bare engine (dry) (3)	395 kg
Bare engine (wet) (3)	TBA

Note: All values are with standard engine parts fitted, unless otherwise stated.

(1). Final weight and dimensions will depend on complete specification.
(2). Dimension from rear face of cylinder block to fan drive pulley face.
(3). Excludes flywheel housing, flywheel, and electrics.
(4). Based on top turbocharger arrangement GAA0397

508-5585

C4.4 DITAAC - T2900, with balancer

C4.4, Electronic FIE

CATERPILLAR

Engine Model:
C4.4

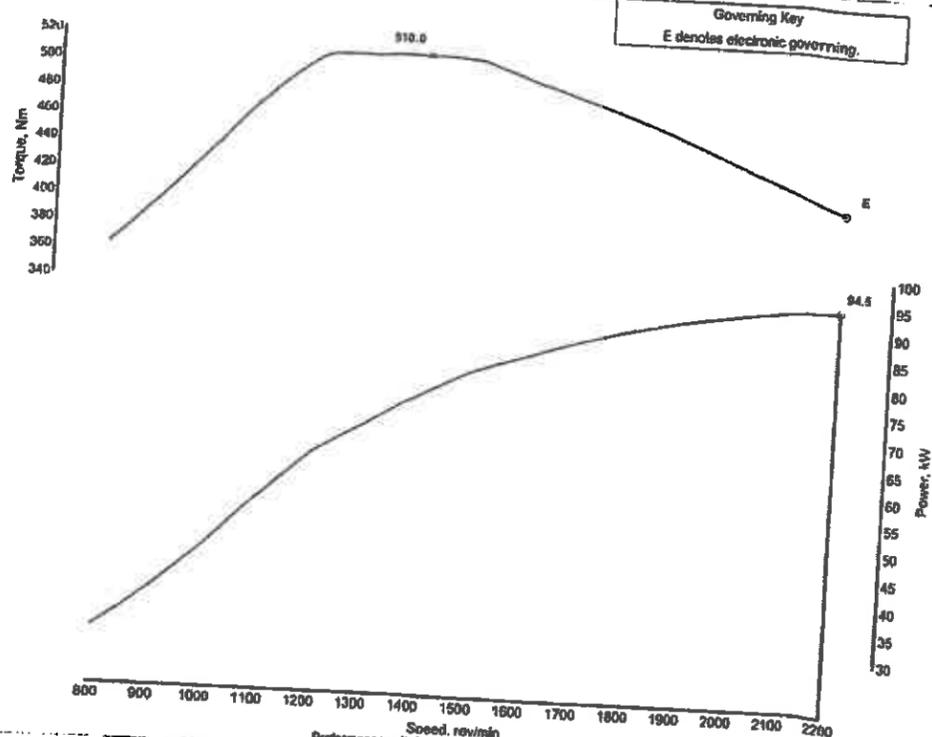
Caterpillar Inc.
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proprietary information of
Caterpillar Inc.

Curve: **T 2900** Sheet 1
Issue: **1** Date: **8-Apr-2005**

**Development Target -
May be Subject to Change**

Rating Standards: **ISO 14386: 2002**
Production Tolerance On Power Output: **+3%, -3%**
Total Barometric Pressure (kPa): **100**
Vapour Pressure (kPa): **1**
Air Inlet Temperature (°C): **25**

Fuel Types:	Europe Off Highway	USA FED Off Highway
Fuel Specification:	CEC RF-06-99	EPA 2D 89.330 1999
Density (kg/l @ 15°C):	0.833 - 0.837	0.845 - 0.85
Viscosity (mm ² s @ 40°C):	2.5 - 3.5	2.0 - 3.2
Sulphur Content (% mass):	0.03 max	0.03 - 0.4
Cetane No:	52 - 54	40 - 48



Notes:
1. For duty cycle refer to the C power rating definition in the Caterpillar Industrial Engine Ratings Guide (LECH3874).

Exhaust Quality Standard
Smoke: 77/537/EEC - Includes FAS.
Certification Refs (Rated Speeds)

Emissions:
US EPA 40 CFR Part 89 Tier 3.
EU NRMM 97/68/EC Stage 3A.
Power Standard
Certification Refs (Rated Speeds)

Auxiliaries fitted to engine:
Balancer - fitted.

Approved by:
J.C. Paine
(Product Manager)
Date: 8-Apr-2005

Accepted by:
C. Hemm
(PE Manager)
Date: 8-Apr-2005

Issued by:
D.J. Campbell
(Legislation Manager)

Rating Curves Data Sheet

Curve T 2900 Sheet 2

Note 1: Unless otherwise specified, all stated data is for maximum rated speed and 100% load.

General Data
 Engine Model: C4.4
 Number Of Cylinders: 4
 Bore (mm): 105.0
 Stroke (mm): 127.0
 Configuration: Vertical In Line
 Displacement (litres): 4.4
 Aspiration: Turbocharged
 Compression Ratio: 16.2 : 1
 Combustion Bowl:

Cooling System
 Heat Rejected @ Rated Speed (kW):
 Heat Rejected @ Peak Torque (kW):
 Coolant Flow (litres/min):
 Thermostat - Start To Open (°C):
 Thermostat - Fully Open (°C):
 Recommended Cap Pressure (kPa):
 Max Top Tank Pressure (kPa):

Fuel System
 Fuel Pump Model: CAT FUEL SYSTEMS HEUI SF
 Injection Timing (BTDC) - Static: T.D.C. No 1
 - Dynamic (needle lift pick-up):
 LIR Pump Pressure (Out) (kPa):
 Fuel Pump Pressure (In) (kPa):
 Fuel Filter Max Particle Size (micron): 2
 Fuel Return System Type: Return to Tank

Air System
 Engine Air Flow (kg/min):
 Induction Manifold Pressure (kPa):
Charge Air Cooler System
 Charge Air Cooling System: Air-to-Air
 Max Total Pressure Drop Inc Pipes (kPa): 10.0
 Charge Air Cooler Heat Rejection (kW):
 Manifold Charge Air Temperature (°C): 55.0

Lubrication System
 Lubricating Oil Specification: See Engine Specification Manual

Turbocharger
 Turbocharger Type: Borg Warner B1 with wastegate
 Maximum Altitude (m): 3000

Exhaust System
 Exhaust Flow (kg/min):
 Exhaust Temperature (°C):

Performance Data
 Friction Power @ Rated Speed (kW):
 Friction Power @ Peak Torque (kW):
 Torque @ 900 rev/min (Nm): 384

Cold Start Capability
 Unaided Start Limit (°C): -10
 Aided Start Limit (°C): -40
 Start Aid (Optional): Glowplugs fitted as standard
 Minimum Cranking Speed (rev/min) - unaided: Not applicable
 - aided:

For further performance data see table below.

Performance Data			Rating Standard: ISO 14396:2002			Further Notes:
Speed (rev/min)	Torque (Nm)	Power (kW)	Max Exhaust Back Pressure (kPa)	Max Inlet Restriction (kPa)	Governing Categories (key on alt 1)	
2200	410	94.5	15.0	5.0	E	
2100	425	93.5				
2000	440	92.2				
1800	470	88.6				
1600	495	82.9				
1500	508	79.8				
1400	510	74.8				
1300	508	69.2				
1200	507	63.7				
1000	440	46.1				
800	384	30.5				

Curve Issue No:
 Curve Issue Date:

Internal References
 1 DCP Number(s):
 8-Apr-2005

TAN Number:
 FIE EDR Number

Att. n 1062

Engine Model Summary Template

U-R-022 15.1
12-3-2010

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: (lb/hr) @ peak HP (for diesels only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lb/hr)@peak torque Per SAE J1930	9.Emission Control
PKXL04.4NJ1	1	3339/2200	144@2200	114.5	55.2	413@1400	131.7	40.4	DDI TAA ECM TC, C
PKXL04.4NJ1	2	2936/2000	145@2000	120.0	52.6	405@1400	124.3	38.8	DDI TAA ECM
PKXL04.4NJ1	3	2932/2000	118@2000	100.5	44.1	391@1400	121.3	37.2	DDI TAA ECM
PKXL04.4NJ1	4	2840/2000	136.8@2000	114.8	50.3	406@1400	124.4	38.2	DDI TAA ECM
PKXL04.4NJ1	5	2934/2000	107.3@2000	91.0	40.0	354@1400	112.4	34.5	DDI TAA ECM
PKXL04.4NJ1	6	3028/2200	142.4@2200	112.0	54.0	410@1400	126.8	38.9	DDI TAA ECM
PKXL04.4NJ1	7	2894/2200	139.6@2200	112.0	54.0	406@1400	126.8	38.9	DDI TAA ECM
PKXL04.4NJ1	8	3032/2200	136.8@2200	107.3	51.7	395@1400	121.4	37.3	DDI TAA ECM
PKXL04.4NJ1	9	2908/2200	134@2200	107.3	51.7	391@1400	121.4	37.3	DDI TAA ECM
PKXL04.4NJ1	10	3026/2200	129.4@2200	102.4	49.4	381@1400	117.4	36.0	DDI TAA ECM
PKXL04.4NJ1	11	2900/2200	127@2200	102.4	49.4	376@1400	117.4	36.0	DDI TAA ECM
PKXL04.4NJ1	12	3020/2200	125@2200	100.2	48.3	366@1400	114.7	35.2	DDI TAA ECM
PKXL04.4NJ1	13	2898/2200	122@2200	100.2	48.3	361@1400	114.7	35.2	DDI TAA ECM
PKXL04.4NJ1	14	3198/2200	122@2200	98.8	47.6	381@1400	113.4	34.8	DDI TAA ECM
PKXL04.4NJ1	15	3197/2200	120@2200	98.8	47.6	358@1400	113.4	34.8	DDI TAA ECM
PKXL04.4NJ1	16	3018/2200	117@2200	96.0	46.3	381@1400	118.4	36.3	DDI TAA ECM
PKXL04.4NJ1	17	2939/2200	114@2200	96.0	46.3	376@1400	118.4	36.3	DDI TAA ECM
PKXL04.4NJ1	18	3012/2200	110@2200	91.1	43.9	358@1400	112.5	34.5	DDI TAA ECM
PKXL04.4NJ1	19	2906/2200	107@2200	91.1	43.9	354@1400	112.5	34.5	DDI TAA ECM
PKXL04.4NJ1	20	3272/2400	125.9@2400	95.9	50.5	364@1400	114.1	36.0	DDI TAA ECM
PKXL04.4NJ1	21	3273/2400	123@2400	95.9	50.5	361@1400	114.1	36.0	DDI TAA ECM
PKXL04.4NJ1	22	3274/2400	141@2400	104.1	54.8	384@1400	121.9	38.5	DDI TAA ECM
PKXL04.4NJ1	23	3275/2400	138.8@2200	104.1	54.8	391@1400	121.9	38.5	DDI TAA ECM
PKXL04.4NJ1	24	3362/1800	156.8@1800	138.5	54.6	457@1800	138.5	54.6	DDI TAA ECM
PKXL04.4NJ1	25	3364/1500	131@1500	138	45.4	457@1500	138	45.4	DDI TAA ECM
PKXL04.4NJ1	26	3366/1800	130@1800	120	47.4	379@1800	120	47.4	DDI TAA ECM
PKXL04.4NJ1	27	3368/1500	108@1500	112	36.8	379@1500	112	36.8	DDI TAA ECM

16. rev 10/2

Engine Model Summary Template

U-2-1-15
12-3-2010

Engine Family	1.Engine Code	2.Engine Model	3.BHP@RPM (SAE Gross)	4.Fuel Rate: mm/stroke @ peak HP (for diesel only)	5.Fuel Rate: lbs/hr @ peak HP (for diesel only)	6.Torque @ RPM (SEA Gross)	7.Fuel Rate: mm/stroke@peak torque	8.Fuel Rate: (lbes/hr)@peak torque Devices Per SAE J1830	9.Emission Control
PKXL04.4NJ1	28	3260/2200	102.5@2200	84.3	40.7	348@1400	109.0	33.5	ECM DDI TAA TC
PKXL04.4NJ1	29	3261/2200	100@2200	84.3	40.7	345/1400	109.0	33.5	ECM DDI TAA
PKXL04.4NJ1	30	3262/2200	117.3@2200	94.0	45.3	394/1400	121.7	37.3	ECM DDI TAA
PKXL04.4NJ1	31	3263/2200	114.9@2200	94.0	45.3	391/1400	121.7	37.3	ECM DDI TAA
PKXL04.4NJ1	32	3264/2200	126.9@2200	99.8	48.1	409@1400	124.6	38.2	ECM DDI TAA
PKXL04.4NJ1	33	3265/2200	124.4@2200	99.8	48.1	406@1400	124.6	38.2	ECM DDI TAA
PKXL04.4NJ1	34	3425/2220	123.1@2220	97.8	47.6	361@1400	112.0	34.4	ECM DDI TAA
PKXL04.4NJ1	35	3426/2500	124.7@2500	92.0	50.4	362@1500	107.9	35.5	ECM DDI TAA
PKXL04.4NJ1	36	3472/2400	126@2400	95.9	50.5	364@1400	114.1	36.0	DDI TAA ECM
PKXL04.4NJ1	37	3474/2400	141.3@2400	104.1	54.8	361@1400	121.9	38.5	DDI TAA ECM
PKXL04.4NJ1	38	3494/2200	122@2200	98.8	47.6	358@1400	113.4	34.8	DDI TAA ECM



MODEL	769C		771C Quarry Truck		773B		775B Quarry Truck	
Flywheel Power	336 kW	450 hp	336 kW	450 hp	485 kW	650 hp	485 kW	650 hp
Gross Power	353 kW	474 hp	353 kW	474 hp	509 kW	682 hp	509 kW	682 hp
Operating Weight (Empty)*	31 178 kg	68,750 lb	33 814 kg	74,560 lb	39 396 kg	86,869 lb	42 324 kg	93,325 lb
Max. Gross Weight	67 586 kg	149,000 lb	73 970 kg	163,100 lb	92 534 kg	204,000 lb	101 700 kg	224,300 lb
Top Speed (Loaded)	75 km/h	47 mph	40 km/h	25 mph	62 km/h	38 mph	45 km/h	28 mph
Distribution: Empty:								
Front	50%		46%		47%		44%	
Rear	50%		54%		53%		56%	
Distribution: Loaded:								
Front	33%		33%		33%		33%	
Rear	67%		67%		67%		67%	
Max. Capacity, Tons**	36.3 t	40 T	40 t	44 T	52.6 t	58 T	60 t	65 T
Cubic Yards —								
Struck (SAE)	17.5 m³	22.9 yd³	17.9 m³	23.4 yd³	26.0 m³	34.0 yd³	28.5 m³	37.2 yd³
Heaped (2:1) (SAE)	23.6 m³	30.9 yd³	25.3 m³	33.8 yd³	34.1 m³	44.6 yd³	39.3 m³	51.4 yd³
Engine Model	3408		3408		3412		3412	
No. Cylinders	8		8		12		12	
Bore	137 mm	5.4"	137 mm	5.4"	137 mm	5.4"	137 mm	5.4"
Stroke	152 mm	6.0"	152 mm	6.0"	152 mm	6.0"	152 mm	6.0"
Displacement	18 L	1099 in³	18 L	1099 in³	27 L	1649 in³	27 L	1649 in³
Standard Tires, Front & Dual Rear	18.00R33 (E-4)		18.00R33 (E-4)		24.00R35 (E-4)		24.00R35 (E-4)	
Ground Pressure: Empty								
Front	840 kPa	122 psi	841 kPa	122 psi	579 kPa	84 psi	586 kPa	85 psi
Rear	854 kPa	124 psi	992 kPa	144 psi	661 kPa	96 psi	744 kPa	108 psi
Ground Pressure: Loaded								
Front	1212 kPa	176 psi	1323 kPa	192 psi	951 kPa	138 psi	1054 kPa	153 psi
Rear	2453 kPa	356 psi	2687 kPa	390 psi	1929 kPa	280 psi	2136 kPa	310 psi
Vehicular Clearance Turning Circle	18.5 m	60'8"	18.5 m	60'8"	23.5 m	77'0"	23.5 m	77'0"
Fuel Tank Refill Capacity	530 L	140 U.S. gal	530 L	140 U.S. gal	700 L	185 U.S. gal	700 L	185 U.S. gal
GENERAL DIMENSIONS (Empty):								
Height to Canopy Rock Guard Rail	4.03 m	13'2.5"	4.03 m	13'2.5"	4.40 m	14'5.3"	4.40 m	14'5.3"
Wheel Base	3.71 m	12'2"	3.71 m	12'2"	4.19 m	13'9"	4.19 m	13'9"
Overall Length<1	8.19 m	26'10"	8.38 m	27'6"	9.27 m	30'5"	9.47 m	31'1"
Loading Height (Empty)	3.22 m	10'7.4"	3.22 m	10'7.4"	3.78 m	12'5"	3.71 m	12'2"
Height at Full Dump	7.70 m	25'3"	7.70 m	25'3"	8.74 m	28'8"	8.74 m	28'8"
Body Length	5.31 m	17'5"	5.51 m	18'1"	6.43 m	21'1"	6.71 m	22'
Width	4.514 m	14'10"	4.91 m	16'2"	4.70 m	15'5"	4.91 m	16'2"
Width (Shipping)***	3.64 m	11'11"	4.24 m	13'11"	3.79 m	12'5"	4.24 m	13'11"
Front Tire Tread	3.10 m	10'2"	3.10 m	10'2"	3.18 m	10'5"	3.18 m	10'5"

*Weights include lubricants, coolant, full fuel tank and standard body.

**Maximum rating requires selection of proper tires and is dependent on selection of optional equipment. Maximum gross weight (empty weight plus payload) should not be exceeded.

<1 Includes catwalk protrusion beyond front bumper on 769C, 771C, 773B and 775B.

***Disassembled.

SECTION 4
AFFECTED SOURCE SHEETS

CRUSHING AND SCREENING AFFECTED SOURCE SHEET

Source Identification Number ¹		PP-VS1					
Type of Crusher or Screen ²		TD					
Make, Model No., Serial No. ³		Astec					
Date of Construction, Reconstruction, or Modification (Month/Year) ⁴		2012					
Maximum Throughput ⁵	tons/hour	250					
	tons/year	625,000					
Material sized from/to: ⁶		N/A					
Average Moisture Content (%) ⁷		2.3					
Control Device ID Number ⁸		CS-PW					
Baghouse Stack Parameters ⁹	height (ft)	N/A					
	diameter (ft)	N/A					
	volume (ACFM)	N/A					
	exit temp (F)	N/A					
	UTM Coordinates	N/A					
Maximum Operating Schedule ¹⁰	hours/day	24					
	days/year	365					
	hours/year	8760					

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

HM	Hammermill	SS	Stationary Screen	DR	Double Roll Crusher
SD	Single Deck Screen	BM	Ball Mill	DD	Double-Deck Screen
RB	Rotary Breaker	TD	Triple Deck Screen	JC	Jaw Crusher
GC	Gyratory Crusher	OT	Other		
3. Enter the make, model number, and serial number of the crusher/screen.
4. Enter the date that each crusher and screen was constructed, reconstructed, or modified.
5. Enter the maximum throughput for each crusher and screen in tons per hour and tons per year.
6. Describe the nominal material size reduction (e.g. +2" / -3/4").
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		
PP-BF1	2012	SM	+3 "x0 "	250	625,000	1.5	WS
PP-BC1	2012	SM	+3 "x0 "	250	625,000	1.5	WS
PP-BC2	2012	SM	+3 "x0 "	150	375,000	3.0	N
PP-BC3	2012	SM	-3 "x0 "	150	375,000	3.0	N
PP-BC4	2012	SM	-1 "x0 "	150	375,000	3.0	N
PP-BC5	2012	SM	-1/4 "x0 "	150	375,000	3.0	N
PP-FH1	2012	SM	+3 "X0 "	250	625,000	1.5	WS

- 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				
- Enter the date that each crusher and screen was constructed, reconstructed, or modified.
- Enter the type of material being handled - Raw Material (RM) Sized Material (SM) Refuse (R) Other (O)
- 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.
- Enter the maximum material transfer rate for each conveyor in tons per hour and tons per year.
- Enter the average percent moisture content of the conveyed material.
- 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	PP-OS-A	PP-OS-B	PP-OS-C	PP-OS-D		
Type of Material Stored ²	SM	SM	SM	SM		
Average Moisture Content (%) ³	3.0	3.0	3.0	5.0		
Maximum Yearly Storage Throughput (tons) ⁴	375000	370000	375000	375000		
Maximum Storage Capacity (tons) ⁵	2000	2000	2000	2000		
Maximum Base Area (ft ²) ⁶	4000	4000	4000	4000		
Maximum Pile Height (ft) ⁷	18	18	18	18		
Method of Material Load-in ⁸	SS	SS	SS	SS		
Load-in Control Device Identification Number ⁹	TC-WS5	TC-WS7	TC-WS9	TC-WS11		
Storage Control Device Identification Number ⁹	HR-WS1	HR-WS1	HR-WS1	HR-WS1		
Method of Material Load-out ⁸	FE	FE	FE	FE		
Load-out Control Device Identification Number ⁹	LO-MD	LO-MD	LO-MD	LO-MD		

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

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

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

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		Controlled Emissions	
	Hourly (lb/hr)	Annual (tpy)	Hourly (lb/hr)	Annual (tpy)
Unpaved Haulroads	81.92	102.40	20.48	25.60

ENGINE DATA SHEET

Source Identification Number ¹		PP-ENG1					
Engine Manufacturer and Model		Caterpillar C4.4 DITAAC					
Manufacturer's Rated bhp/rpm		99.5-142 /2200					
Source Status ²		NS					
Date Installed/Modified/Removed (Month/Year) ³		2012					
Engine Manufactured/Reconstruction Date ⁴		2012					
Is this a Certified Stationary Compression Ignition Engine according to 40CFR60 Subpart III? (Yes or No) ⁵		Yes					
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart JJJ? (Yes or No) ⁶		No					
Engine, Fuel and Combustion Data	Engine Type ⁷	LB4S					
	APCD Type ⁸	A/F					
	Fuel Type ⁹	2FO					
	H ₂ S (gr/100 scf)	N/A					
	Operating bhp/rpm	127@2200					
	BSFC (Btu/bhp-hr)	7,196					
	Fuel throughput (ft ³ /hr)	0.92					
	Fuel throughput (MMft ³ /yr)	N/A					
	Operation (hrs/yr)	2500					
Reference ¹⁰	Potential Emissions ¹¹	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
MD	NMHC+ NO _x	0.77	0.96				
MD	CO	1.05	1.32				
MD	VOC	0.84	1.05				
MD	SO ₂	N/A	N/A				
MD	PM PM	0.09	0.12				
	Formaldehyde	N/A	N/A				

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 |

SECTION 5

**BAGHOUSE AIR POLLUTION CONTROL DEVICE
SHEET**

There are no baghouses proposed in this application.

SECTION 6

DESCRIPTION OF FUGITIVE EMISSIONS

DESCRIPTION OF FUGITIVE EMISSIONS

Fugitive emissions from the operation of the portable wash plant include possible particulate emissions from the work area, operation and stockpiles. To control particulate emissions, the work area surfaces and stockpiles are watered as needed using a water truck. Water is also applied at the hopper, belt feeder and BC1 / VS1 transfers as needed to control particulate emissions. Once material is transferred to the washing screen it becomes saturated and remains so through stockpiling. Any water sprays and water supply lines will be protected from freezing by the use of thermal protection 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.

Emissions from the diesel engine will be controlled by maintaining recommended services at the required intervals to insure that the engine operates at peak efficiency.

SECTION 7
EMISSION CALCULATIONS

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

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

Source ID No.	Stockpile Description	Silt Content of Material %	Stockpile base area Max. sqft	Control Device ID Number	Control Efficiency %
PPOS-A		1	4,000	HR-WS1	75
PPOS-B		1	4,000	HR-WS1	75
PPOS-C		1	4,000	HR-WS1	75
PPOS-D		1	4,000	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	Feed from main plant to PP	4	80	15	0.8	4	10,000	HR-WS1	75
2									
3									
4									
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: Boxley Aggregates
 Name of plant: Lewisburg

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

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

FUGITIVE EMISSIONS				
<i>Stockpile Emissions</i>	0.02	0.09	0.01	0.02
<i>Unpaved Haulroad Emissions</i>	60.48	75.60	15.12	18.90
<i>Paved Haulroad Emissions</i>	0.00	0.00	0.00	0.00
Fugitive Emissions Total	60.50	75.69	15.12	18.92

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	6.25	7.81	0.00	0.00
<i>Transfer Point Emissions</i>	7.13	8.91	1.51	1.89
Point Source Emissions Total*	13.38	16.72	1.51	1.89

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

Facility Emissions Total	73.88	92.41	16.63	20.81
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***Facility Potential to Emit (PTE) (Baseline Emissions) = 1.89**
 (Based on Point Source Total controlled PM TPY emissions from above) ENTER ON LINE 26 OF APPLICATION

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

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

FUGITIVE EMISSIONS				
<i>Stockpile Emissions</i>	0.01	0.04	0.00	0.01
<i>Unpaved Haulroad Emissions</i>	17.85	22.31	4.46	5.58
<i>Paved Haulroad Emissions</i>	0.00	0.00	0.00	0.00
Fugitive Emissions Total	17.86	22.36	4.47	5.59

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	2.18	2.72	0.00	0.00
<i>Transfer Point Emissions</i>	3.37	4.21	0.71	0.89
Point Source Emissions Total*	5.55	6.93	0.71	0.89

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

Facility Emissions Total	23.41	29.29	5.18	6.48
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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	0.000	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	0.000							

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	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTAL	0.000							

1c. Screening

Screen ID Number	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
PP-VS1	6.250	7.813	0.000	0.000	2.175	2.719	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
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	6.250	7.813	0.000	0.000	2.175	2.719	0.000	0.000

Crushing and Screening	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
TOTAL	6.250	7.813	0.000	0.000	2.175	2.719	0.000	0.000

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 (continued)

Transfer Point ID No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTALS	7.129	8.911	1.509	1.886	3.372	4.215	0.714	0.892

Source:

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

Emissions From Batch Drop

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

Where:

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

Assumptions:

k - Particle size multiplier

For PM (< or equal to 30um) k = 0.74
 For PM-10 (< or equal to 10um) k = 0.35

Emission Factor

For PM E= $\$188 \cdot (0.0032) \cdot \left(\frac{(U/5)^{1.3}}{(M/2)^{1.4}} \right)$
 =lb/ton

For PM-10 E= $\$188 \cdot (0.0032) \cdot \left(\frac{(U/5)^{1.3}}{(M/2)^{1.4}} \right)$
 =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
PPOS-A	0.005	0.022	0.001	0.006	0.002	0.011	0.001	0.003
PPOS-B	0.005	0.022	0.001	0.006	0.002	0.011	0.001	0.003
PPOS-C	0.005	0.022	0.001	0.006	0.002	0.011	0.001	0.003
PPOS-D	0.005	0.022	0.001	0.006	0.002	0.011	0.001	0.003
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
0	0.000	0.000	0.000	0.000	0.000	0.000	0.000	0.000
TOTALS	0.020	0.090	0.005	0.022	0.010	0.042	0.002	0.011

Source:

Air Pollution Engineering Manual

Storage Pile Wind Erosion (Active Storage)

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

Where:

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

Emission Factors

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

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

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

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

4. Emissions From UNPAVED HAULROADS

Item No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1	60.48	75.60	15.12	18.90	17.85	22.31	4.46	5.58
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	60.48	75.60	15.12	18.90	17.85	22.31	4.46	5.58

Source:

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

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

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

Where:

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

Emission Factors

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

For PM-10 $E = ((\$J35) \cdot ((\text{Inputs!}\$163)/12)^{\$J36}) \cdot (((\text{Inputs!}H171)/3)^{\$J37})$

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

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

SECTION 8
LEGAL ADVERTISEMENT

AIR QUALITY PERMIT NOTICE
Notice of Application

Notice is given that Boxley Aggregates of West Virginia, LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a General Permit Registration, for a portable non metallic mineral processing wash plant located at HC40, Box 49, Lewisburg in Greenbrier County, West Virginia. The latitude and longitude coordinates are: N 37.88 ° and W 80.56 ° respectively.

The applicant estimates the potential to discharge the following Regulated Air Pollutants will be: PM, 20.81 tons per year (with haulroads included), PM₁₀, 6.48 tons per year (with haulroads included), CO, 1.32 tons per year, VOC, 1.05 tons per year.

Startup of operation is planned to begin on or about the 1 st day of April, 2015. 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 1227, during normal business hours.

Dated this the 15 th day of January, 2015.

By: Boxley Aggregates of West Virginia, LLC
Abney S. Boxley, III
President
P.O. Box 13527
Roanoke, Virginia 24035