TABLE OF CONTENTS

- Letter
- Application For General Permit Registration
- ATTACHMENT A
  Current Business Certificate
- ATTACHMENT B
  Process Description
- ATTACHMENT C
  Description of Fugitive Emissions
- ATTACHMENT D
  Process Flow Diagram
- ATTACHMENT F
  Location Map
- ATTACHMENT G
  Equipment Data Sheets and Registration Section Applicability Form
- ATTACHMENT I
  Emissions Calculations
- ATTACHMENT J
  Class I Legal Advertisement
- ATTACHMENT K
  Electronic Submittal
- ATTACHMENT L
  General Permit Registration Application Fee

Pike Technical Services, Inc.
183 Tollage Creek
Pikeville, Kentucky 41501
Phone: (606) 432-0300 or Fax: (606) 433-1820

October 26, 2015

Mr. Thornton E. Martin Jr.
Permit Engineer
WV DEP
Division of Air Quality
601 57th Street
Charleston, WV 25304

Re: Bizzack Construction, LLC
Portable Screening Unit
Application for General Permit Registration
G40-C – Nonmetallic Minerals Processing

Dear Mr. Martin,

Transmitted herewith, please find attached one (1) original set and two (2) copy sets of an Application for General Permit Registration (G40-C – Nonmetallic Minerals Processing) for a Portable Screening Unit to be located in Raleigh County, West Virginia, near Helen. The screening operation will be conducted on the Coalfields Expressway, a West Virginia Department of Transportation Project. If you should have any questions concerning this report, please contact me at (606) 432-0300 ext. 303.

Sincerely,

Ishmal Ratliff
Senior Project Manager

ir

cc: file
Bizzack Construction, LLC

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
- ☐ **G20-B** – Hot Mix Asphalt
- ☐ **G30-D** – Natural Gas Compressor Stations
- ☐ **G33-A** – Spark Ignition Internal Combustion Engines
- ☐ **G35-A** – Natural Gas Compressor Stations (Flare/Glycol Dehydration Unit)
- ☒ **G40-C** – Nonmetallic Minerals Processing
- ☐ **G50-B** – Concrete Batch
- ☐ **G60-C** - Class II Emergency Generator
- ☐ **G65-C** – Class I Emergency Generator
- ☐ **G70-A** – Class II Oil and Natural Gas Production Facility

SECTION I. GENERAL INFORMATION

1. Name of applicant (as registered with the WV Secretary of State's Office):
Bizzack Construction, LLC

2. Federal Employer ID No. **(FEIN):**
20-3814182

3. Applicant's mailing address:
3009 Atkinson Ave. Suite 200
Lexington, KY 40509

4. Applicant's physical address:
3009 Atkinson Ave. Suite 200
Lexington, KY 40509

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

6. **WV BUSINESS REGISTRATION.** Is the applicant a resident of the State of West Virginia? ☐ **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.):
Extec S-5 Portable Screening Unit

8a. Standard Industrial Classification AND 8b. North American Industry
Classification (SIC) code: 1429
System (NAICS) code: 212319

9. DAQ Plant ID No. (for existing facilities only):
_____

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

RECEIVED
OCT 23 2015
WVDEP / DIV. OF AIR QUALITY

Date of Last Application Revision 10/18/2013

A: PRIMARY OPERATING SITE INFORMATION

11A. Facility name of primary operating site:	12A. Address of primary operating site:
Bizzack Construction, LLC Job 313106 Coalfields Expressway Raleigh County, West Virginia	Mailing: 301 McKinney Mountain Road, Sophia, WV 25921 Physical: Coalfields Expressway, Helen, WV 25853

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: Bizzack Construction has a construction contract with the West Virginia Dept. of Transportation to construct a portion of the Coalfields Expressway in Raleigh Co. The proposed location is within the right-of-way limits of this construction project.

➪ 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.**

The screening unit will be located on the proposed Coalfields Expressway. A map has been included as Attachment F to show the location.

15A. Nearest city or town:	16A. County:	17A. UTM Coordinates:
Helen, WV	Raleigh County	Northing (KM): 4165213.6 Easting (KM): 470544.5 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):
The portable crusher is being utilized on the Coalfields Expressway road project to crush Sandstone.	Latitude: 37.63358 Longitude: -81.33384

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

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

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

➪ IF **YES**, please explain:

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

14B. ➪ For **Modifications or Administrative Updates** at an existing facility, please provide directions to the present location of the facility from the nearest state road;

➪ For Construction or Relocation permits, please provide directions to the proposed new site location from the nearest state road. Include a **MAP** as **Attachment F.**

15B. Nearest city or town:	16B. County:	17B. UTM Coordinates: Northing (KM): _____ Easting (KM): _____ Zone: _____
18B. Briefly describe the proposed new operation or change (s) to the facility:		19B. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits): Latitude: _____ Longitude: _____

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

11C. Name of 2nd alternate operating site:	12C. Address of 2nd alternate operating site: Mailing: _____ Physical: _____

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

➪ IF **YES**, please explain: _____

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

14C. ➪ For **Modifications or Administrative Updates** at an existing facility, please provide directions to the present location of the facility from the nearest state road;

➪ For Construction or Relocation permits, please provide directions to the proposed new site location from the nearest state road. Include a **MAP** as **Attachment F**.

_____

_____

_____

15C. Nearest city or town:	16C. County:	17C. UTM Coordinates: Northing (KM): _____ Easting (KM): _____ Zone: _____
18C. Briefly describe the proposed new operation or change (s) to the facility:		19C. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits): Latitude: _____ Longitude: _____

20. Provide the date of anticipated installation or change: 11 / 01 / 15 ☐ 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: 12 / 15 / 15

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 10 Days per week 5 Weeks per year 20 Percentage of operation 75%

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~~ Vice President & Director

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 _____ 10/20/2015
(please use blue ink) Responsible Official Date

Name & Title Lester Wimpy, Vice President
(please print or type)

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

Applicant's Name Bizzack Construction, LLC

Phone & Fax 859-299-8001 859-299-0480
Phone Fax

Email lwimpy@bizzackconstruction.com

RECEIVED
OCT 23 2015
WV DEP / DIV. OF AIR QUALITY

Date of Last Application Revision 10/18/2013

Bizzack Construction, LLC
3009 Atkinson Ave.
Suite 200
Lexington, KY 40509
859-299-8001

Application for General Permit Registration
G40-C Nonmetallic Minerals Processing

Attachment A:
Current Business Certificate

WEST VIRGINIA
STATE TAX DEPARTMENT
BUSINESS REGISTRATION CERTIFICATE

ISSUED TO:
BIZZACK CONSTRUCTION LLC
2265 EXECUTIVE DR
LEXINGTON, KY 40505-4809

BUSINESS REGISTRATION ACCOUNT NUMBER: **1010-8586**

This certificate is issued on: **06/27/2011**

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.

atL006 v.4
L2108849280

State of West Virginia

Certificate

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

BIZZACK CONSTRUCTION, LLC

was duly authorized under the laws of this state to transact business in West Virginia as a foreign limited liability company on December 29, 2005.

The company is filed as an at-will company, for an indefinite period.

I further certify that the LLC (PLLC) has not been revoked by the State of West Virginia nor has a Certificate of Cancellation been issued.

Therefore, I hereby issue this

CERTIFICATE OF AUTHORIZATION

Validation ID:4WV8D_XD8ND

Given under my hand and the Great Seal of the State of West Virginia on this day of October 28, 2013

Natalie E. Tennant

Secretary of State

Notice: A certificate issued electronically from the West Virginia Secretary of State's Web site is fully and immediately valid and effective. However, as an option, the issuance and validity of a certificate obtained electronically may be established by visiting the Certificate Validation Page of the Secretary of State's Web site, https://apps.wv.gov/sos/business/entitysearch/validate.aspx entering the validation ID displayed on the certificate, and following the instructions displayed. Confirming the issuance of a certificate is merely optional and is not necessary to the valid and effective issuance of a certificate.

Commonwealth of Kentucky
Elaine N. Walker, Secretary of State

Elaine N. Walker
Secretary of State
P. O. Box 718
Frankfort, KY 40602-0718
(502) 564-3490
http://www.sos.ky.gov

Certificate of Existence

Authentication number: 114226
Visit https://app.sos.ky.gov/ftshow/certvalidate.aspx to authenticate this certificate.

I, Elaine N. Walker, Secretary of State of the Commonwealth of Kentucky, do hereby certify that according to the records in the Office of the Secretary of State,

BIZZACK CONSTRUCTION, LLC

is a limited liability company duly organized and existing under KRS Chapter 14A and KRS Chapter 275, whose date of organization is October 21, 2005 and whose period of duration is perpetual.

I further certify that all fees and penalties owed to the Secretary of State have been paid; that articles of dissolution have not been filed; and that the most recent annual report required by KRS 14A.6-010 has been delivered to the Secretary of State.

IN WITNESS WHEREOF, I have hereunto set my hand and affixed my Official Seal at Frankfort, Kentucky, this 2nd day of June, 2011, in the 220th year of the Commonwealth.

COMMONWEALTH OF KENTUCKY
OFFICE OF SECRETARY OF STATE

Elaine N. Walker
Secretary of State
Commonwealth of Kentucky
114226/0624128

Bizzack Construction, LLC
3009 Atkinson Ave.
Suite 200
Lexington, KY 40509
859-299-8001

Application for General Permit Registration
G40-C Nonmetallic Minerals Processing

Attachment B:
Extec S-5 Portable Screening Unit Process Description

The purpose of this Application for General Permit Registration is to set up a portable rock screening unit to screen crushed rock from the roadway excavation of the Coalfields Expressway, in Raleigh County, West Virginia. This processed rock will be used on the project as subgrade and or backfill for paving activities.

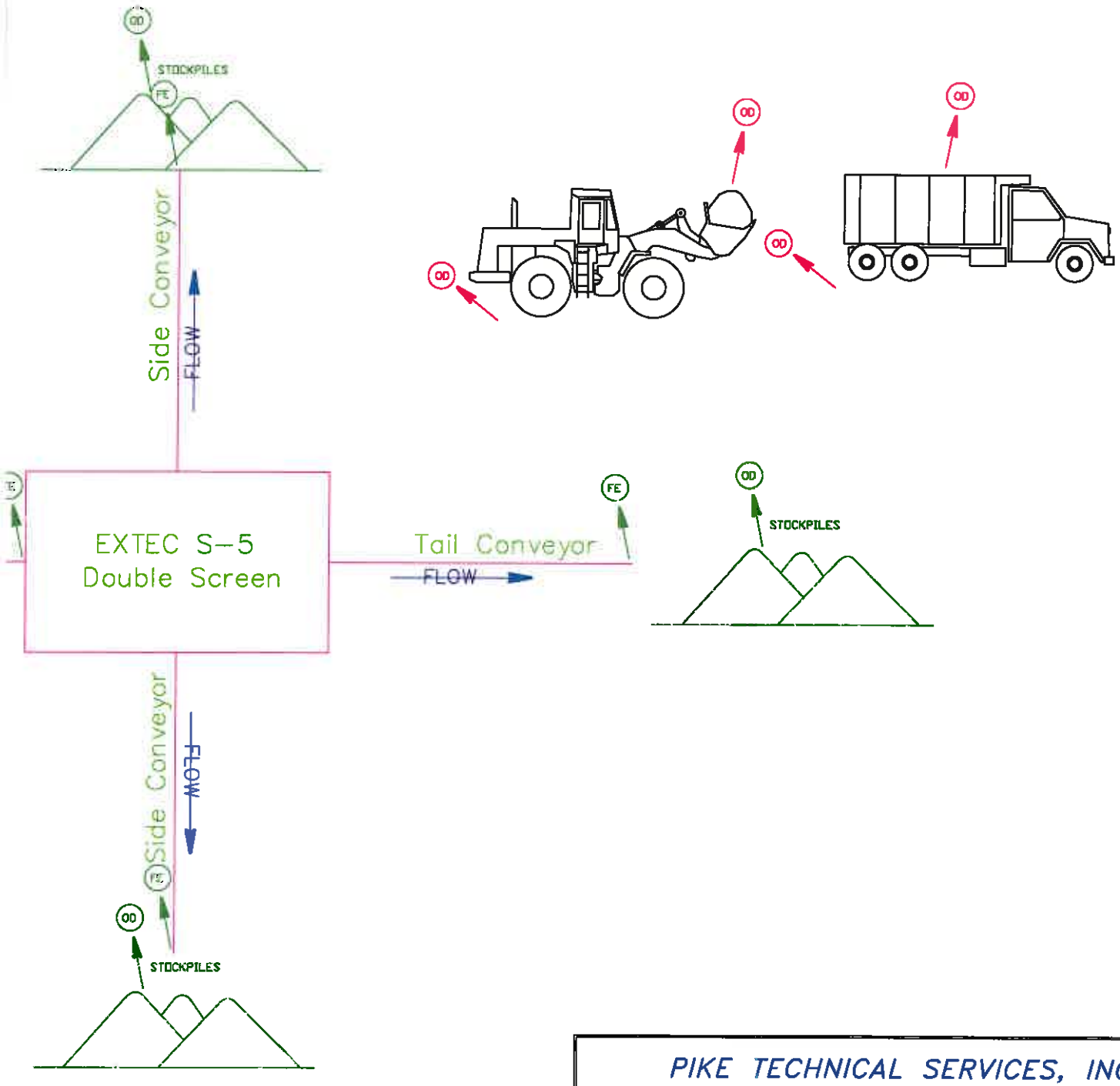
The portable screening unit will receive its' power to operate from an electric generator, powered by a Duetz BF4M2012 Engine, Tier 4 Final, Stage IV Technology. The Duetz BF4M2012 Engine is designed to meet exhaust regulation EU-RL 97/68 (Step 2) and US-EPA Nonroad (Tier 2) standards.

The process will begin with a wheel loader transferring the crushed rock from the surge pile to the portable screen receiving hopper. A water truck will provide dust suppression for the haul road and surge pile. The receiving hopper feeds the rock onto the screen. The material will go from the screen onto the two side conveyors and tail conveyor. A factory installed water spray bar will provide dust suppression for the main product conveyor. The screened rock will go from the conveyors to the stockpiles. A water truck will provide dust suppression for the stockpiles. The screened rock will be stockpiled and utilized as needed.

Bizzack Construction, LLC
3009 Atkinson Ave.
Suite 200
Lexington, KY 40509
859-299-8001

Application for General Permit Registration
G40-C Nonmetallic Minerals Processing

Attachment D:
Process Flow Diagram



PIKE TECHNICAL SERVICES, INC.
PTSI 183 TOLLAGE CREEK PIKEVILLE, KY 41501 PTSI
PHONE: (606) 432-0300 FAX: (606) 433-1820

COMPANY: BIZZACK CONSTRUCTION, LLC
TITLE: PORTABLE SCREENING UNIT FLOW DIAGRAM
SCALE: NTS
DR. BY: IR/LS DATE: 10-19-2015

Bizzack Construction, LLC
3009 Atkinson Ave.
Suite 200
Lexington, KY 40509
859-299-8001

Application for General Permit Registration
G40-C Nonmetallic Minerals Processing

Attachment C:
Portable Screening Unit Description of Fugitive Emissions

The sources and potential sources of fugitive particulate emissions are as follows:

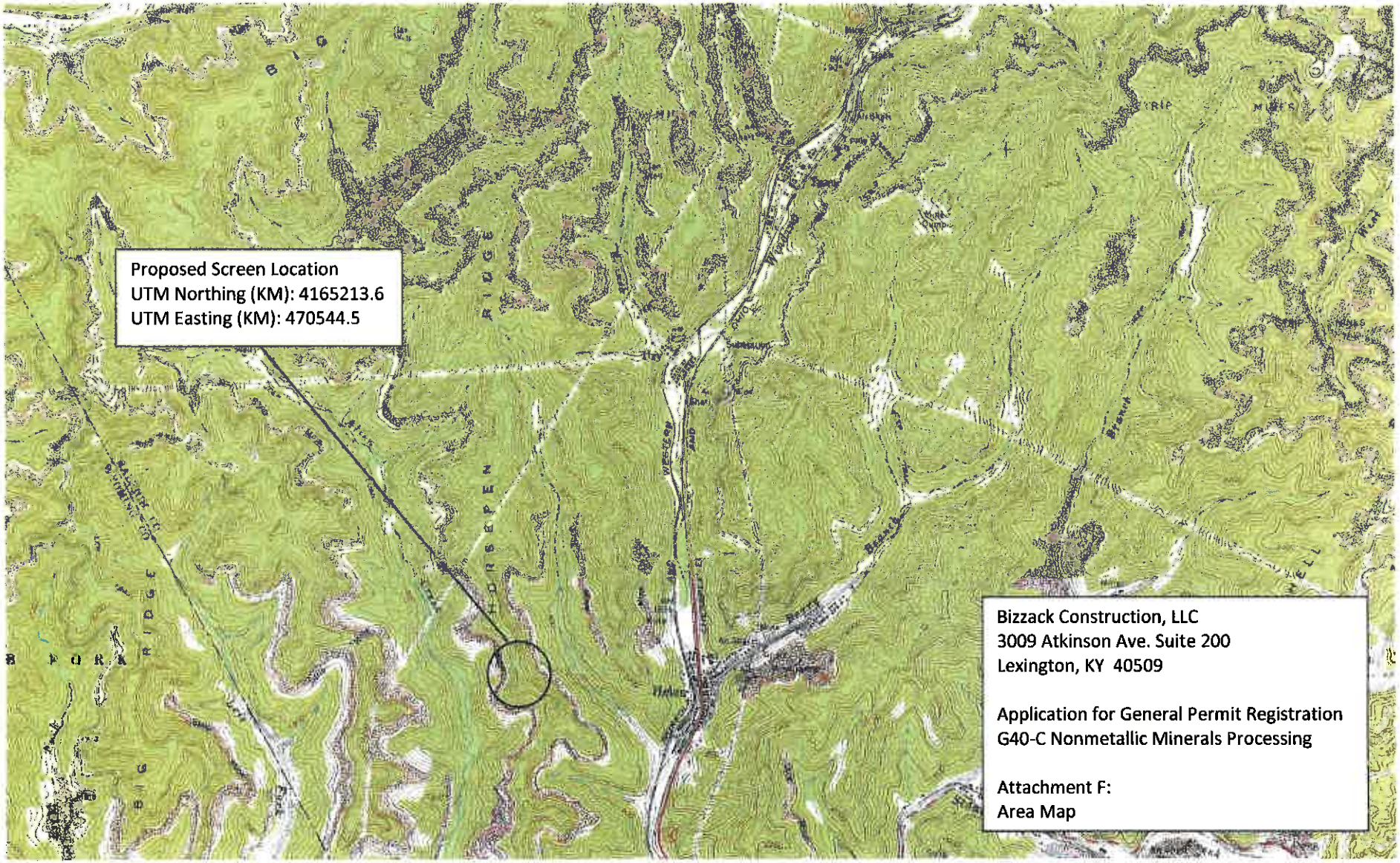
- Surge Pile
- Loadout from Surge Pile
- Receiving Hopper
- Double Deck Screen
- Hopper Belt
- Main Conveyor
- Tail Conveyor
- Side Conveyor
- Dumping from Conveyors to Stockpiles
- Stockpiles
- Loadout From Stockpiles

The primary fugitive dust control equipment will be a 2,000 gallon water truck. The water truck will be used primarily to control fugitive particulate emissions on the haul roads, and stock piles. By wetting the material in the surge pile and stock piles, fugitive particulate emissions will also be controlled at the receiving hopper, double deck screen and conveyors by moisture carry over. The water truck has a maximum application rate of approximately 150 gallons per hour and the application frequency will depend on environmental conditions. The frequency will vary from zero during rainy conditions to approximately four to five applications per day during extremely dry conditions. In addition to the water truck, a factory installed spray bar on the main product conveyor will also be used. This spray system has a maximum application rate of approximately 26 gallons per hour. Again the frequency rate will vary depending upon environmental conditions. The spray bar will be used continuously during operation.

Bizzack Construction, LLC
3009 Atkinson Ave.
Suite 200
Lexington, KY 40509
859-299-8001

Application for General Permit Registration
G40-C Nonmetallic Minerals Processing

Attachment F:
Area Map


Proposed Screen Location
UTM Northing (KM): 4165213.6
UTM Easting (KM): 470544.5
Bizzack Construction, LLC
3009 Atkinson Ave. Suite 200
Lexington, KY 40509
Application for General Permit Registration
G40-C Nonmetallic Minerals Processing
Attachment F:
Area Map

Bizzack Construction, LLC
3009 Atkinson Ave.
Suite 200
Lexington, KY 40509
859-299-8001

Application for General Permit Registration
G40-C Nonmetallic Minerals Processing

Attachment G:
Affected Source Sheets

CRUSHING AND SCREENING AFFECTED SOURCE SHEET

Source Identification Number[1]		DD-1					
Type of Crusher or Screen[2]		DD					
Make, Model No., Serial No.[3]		Extec S-5					
Date of Construction, Reconstruction, or Modification (Month/Year)[4]		2004					
Maximum Throughput[5]	tons/hour	500					
	tons/year	500,000					
Material sized from/to:[6]		-3"					
Average Moisture Content (%)[7]		2					
Control Device ID Number[8]		CS-FE					
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	10					
	days/year	100					
	hours/year	1000					

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		
BC-1	2004	SM	-3"	500	500,000	2	TC-WS
BC-2	2004	SM	-3"	500	500,000	2	TC-WS
BC-3	2004	SM	-3"	500	500,000	2	TC-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]	OS-1	OS-2	OS-3	OS-4		
Type of Material Stored[2]	RM	SM	SM	SM		
Average Moisture Content (%)[3]	2	2	2	2		
Maximum Yearly Storage Throughput (tons)[4]	250,000	250,000	125,000	125,000		
Maximum Storage Capacity (tons)[5]	15,000	14,000	10,000	10,000		
Maximum Base Area (ft^2)[6]	20,000 SF	25,000 SF	27,000 SF	27,000 SF		
Maximum Pile Height (ft)[7]	20'	15'	10'	10'		
Method of Material Load-in[8]	NA	NA	NA	NA		
Load-in Control Device Identification Number[9]	TD	MC	MC	MC		
Storage Control Device Identification Number[9]	SW-WS	SW-WS	SW-WS	SW-WS		
Method of Material Load-out[8]	NA	NA	NA	NA		
Load-out Control Device Identification Number[9]	OT	FE	FE	FE		

1. Enter the appropriate Source Identification Number for each storage activity using the following codes. For example, if the facility utilizes three storage bins, four open stockpiles and one storage building (full enclosure), the Source Identification Numbers should be BS-1, BS-2, and BS-3; OS-1, OS-2, OS-3, and OS-4; and SB-1, respectively.
   - BS Bin or Storage Silo (full enclosure)
   - E3 Enclosure (three sided enclosure)
   - OS Open Stockpile
   - SB Storage Building (full enclosure)
   - SF Stockpiles with wind fences
   - OT Other
2. Describe the type of material stored or stockpiled. (e.g. 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.

ENGINE DATA SHEET

Source Identification Number[1]							
Engine Manufacturer and Model		Duetz BF4M 2012					
Manufacturer's Rated bhp/rpm		100@220					
Source Status[2]		NS					
Date Installed/Modified/Removed (Month/Year)[3]		11/15					
Engine Manufactured/Reconstruction Date[4]		2004					
Is this a Certified Stationary Compression Ignition Engine according to 40CFR60 Subpart IIII? (Yes or No)[5]		Yes					
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart JJJJ? (Yes or No)[6]		No					
Engine, Fuel and Combustion Data	Engine Type[7]	LB4S					
	APCD Type[8]	SCR					
	Fuel Type[9]	2FO					
	H_2S (gr/100 scf)						
	Operating bhp/rpm	100 bph @ 2200 rpm					
	BSFC (Btu/bhp-hr)						
	Fuel throughput (ft^3/hr)	0.60 ft^3/hr					
	Fuel throughput ($MMft^3$/yr)						
	Operation (hrs/yr)	1,000 +/-					
Reference[10]	Potential Emissions[11]	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
MD	NO_X	0.01	.005				
MD	CO	0.01	.005				
	VOC						
	SO_2						
MD	PM_{10}	0.0	0.0				
	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

Bizzack Construction, LLC
3009 Atkinson Ave.
Suite 200
Lexington, KY 40509
859-299-8001

Application for General Permit Registration
G40-C Nonmetallic Minerals Processing

Attachment I:
Emissions Calculations

INPUTS

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

Name of applicant: Bizzack Construction, LLC
Name of plant: Raleigh County, WV

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

1a. PRIMARY CRUSHING

Primary Crusher ID Number	Description	Maximum Material Processing Capacity TPH	Maximum Material Processing Capacity TPY	Control Device ID Number	Control Efficiency %

1b. SECONDARY AND TERTIARY CRUSHING

Secondary & Tertiary Crusher ID	Description	Maximum Material Processing Capacity TPH	Maximum Material Processing Capacity TPY	Control Device ID Number	Control Efficiency %

1c. SCREENING

Secondary & Tertiary Crusher ID	Description	Maximum Material Processing Capacity TPH	Maximum Material Processing Capacity TPY	Control Device ID Number	Control Efficiency %
DD-1	Extec S-5 Double Screen	500	500,000	CS-FW	97

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 %
TP-1	From Stockpile OS-1 to Screen DD-1	2	500	500,000	HR-WS1	80
TP-2	From Screen DD-1 to Conveyor BC-1	2	500	500,000	TC-WS	80
TP-3	From Screen DD-1 to Conveyor BC-2	2	500	500,000	TC-WS	80
TP-4	From Screen DD-1 to Conveyor BC-3	2	500	500,000	TC-WS	80
TP-5	From Conveyor BC-1 to Stockpile OS-2	2	500	500,000	TC-WS	80
TP-6	From Conveyor BC-2 to Stockpile OS-3	2	500	500,000	TC-WS	80
TP-7	From Conveyor BC-2 to Stockpile OS-4	2	500	500,000	TC-WS	80

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

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

Source ID No.	Stockpile Description	Silt Content of Material %	Stockpile base area Max. sqft	Control Device ID Number	Control Efficiency %
OS-1	Raw Material Stockpile	10	20,000	HR-WS	85
OS-2	Sized Material Stockpile	10	25,000	HR-WS	85
OS-3	Sized Material Stockpile	10	27,000	HR-WS	85
OS-4	Sized Material Stockpile	10	27,000	HR-WS	85

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									
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: Bizzack Construction, LLC
Name of plant: Raleigh County, WV

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

	Uncontrolled PM		Controlled PM	
	lb/hr	TPY	lb/hr	TPY
FUGITIVE EMISSIONS				
Stockpile Emissions	1.27	5.55	0.19	0.83
Unpaved Haulroad Emissions	0.00	0.00	0.00	0.00
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	**1.27**	**5.55**	**0.19**	**0.83**
POINT SOURCE EMISSIONS				
Equipment Emissions	12.50	6.25	1.25	0.63
Transfer Point Emissions	12.84	6.42	2.57	1.28
Point Source Emissions Total*	**25.34**	**12.67**	**3.82**	**1.91**
Facility Emissions Total	**26.60**	**18.22**	**4.01**	**2.74**

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

***Facility Potential to Emit (PTE) (Baseline Emissions) = 1.91**

(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	0.60	2.61	0.09	0.39
Unpaved Haulroad Emissions	0.00	0.00	0.00	0.00
Paved Haulroad Emissions	0.00	0.00	0.00	0.00
Fugitive Emissions Total	**0.60**	**2.61**	**0.09**	**0.39**
POINT SOURCE EMISSIONS				
Equipment Emissions	4.35	2.18	0.44	0.22
Transfer Point Emissions	6.07	3.04	1.21	0.61
Point Source Emissions Total*	**10.42**	**5.21**	**1.65**	**0.82**
Facility Emissions Total	**11.02**	**7.82**	**1.74**	**1.22**

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

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	0.000	0.000	0.000	0.000	0.000	0.000	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
TOTAL	0.000	0.000	0.000	0.000	0.000	0.000	0.000	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
DD-1	12.500	6.250	1.250	0.625	4.350	2.175	0.435	0.218
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	12.500	6.250	1.250	0.625	4.350	2.175	0.435	0.218

Crushing and Screening	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
TOTAL	12.500	6.250	1.250	0.625	4.350	2.175	0.435	0.218

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
TP-1	1.834	0.917	0.367	0.183	0.867	0.434	0.173	0.087
TP-2	1.834	0.917	0.367	0.183	0.867	0.434	0.173	0.087
TP-3	1.834	0.917	0.367	0.183	0.867	0.434	0.173	0.087
TP-4	1.834	0.917	0.367	0.183	0.867	0.434	0.173	0.087
TP-5	1.834	0.917	0.367	0.183	0.867	0.434	0.173	0.087
TP-6	1.834	0.917	0.367	0.183	0.867	0.434	0.173	0.087
TP-7	1.834	0.917	0.367	0.183	0.867	0.434	0.173	0.087
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
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
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
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

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	12.836	6.418	2.567	1.284	6.071	3.035	1.214	0.607

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-1	0.256	1.121	0.038	0.168	0.120	0.527	0.018	0.079
OS-2	0.320	1.401	0.048	0.210	0.150	0.658	0.023	0.099
OS-3	0.345	1.513	0.052	0.227	0.162	0.711	0.024	0.107
OS-4	0.345	1.513	0.052	0.227	0.162	0.711	0.024	0.107
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	1.267	5.548	0.190	0.832	0.595	2.607	0.089	0.391

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	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
13.2.2 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)

Bizzack Construction, LLC
3009 Atkinson Ave.
Suite 200
Lexington, KY 40509
859-299-8001

Application for General Permit Registration
G40-C Nonmetallic Minerals Processing

Attachment J:
Class I Legal Advertisement

AIR QUALITY PERMIT NOTICE
Notice of Application

Notice is given that **Bizzack Construction, LLC** has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a **Construction Permit, General Permit Registration (G40-C)** for a **Portable Screening Unit** located on **Coalfields Expressway near the city of Helen**, in **Raleigh** County, West Virginia. The latitude and longitude coordinates are: **37.63358, -81.33384**

The applicant estimates the potential to discharge the following Regulated Air Pollutants will be:

Nitrogen Oxides (NO_X) –0.005 tpy
Carbon Monoxide (CO) – 0.005 tpy
Particulate Matter (PM) Uncontrolled – 5.55 tpy
Particulate Matter (PM) Controlled – 0.83 tpy
Particulate Matter-10 (PM-10) Uncontrolled – 2.61 tpy
Particulate Matter-10 (PM-10) Controlled - 0.39 tpy

Startup of operation is planned to begin on or about the **15th** day of **December, 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 1250, during normal business hours.
Dated this the **26th** day of **October, 2015.**

By: **Bizzack Construction, LLC**
Lester Wimpy
Vice President
3009 Atkinson Ave. Suite 200
Lexington, KY 40509

Bizzack Construction, LLC
3009 Atkinson Ave.
Suite 200
Lexington, KY 40509
859-299-8001

Application for General Permit Registration
G40-C Nonmetallic Minerals Processing

Attachment K:
Electronic Submittal

Note: Microsoft Word Format would not download in a format that was readily changed and was included as a PDF submittal for the purpose of electronic submittal.

Bizzack Construction, LLC
3009 Atkinson Ave.
Suite 200
Lexington, KY 40509
859-299-8001

Application for General Permit Registration
G40-C Nonmetallic Minerals Processing

Attachment L:
General Permit Application Fee

Bizzack Construction, LLC
3009 Atkinson Ave.
Suite 200
Lexington, KY 40509
859-299-8001

Application for General Permit Registration
G40-C Nonmetallic Minerals Processing

Extec S-5
Duetz Engine
Additional Information

- Dust Mask
- Close fitting Overalls
- Safety Boots
- Industrial Gloves
- High Visibility Vest or Jacket.

1.8 Measured Noise Level

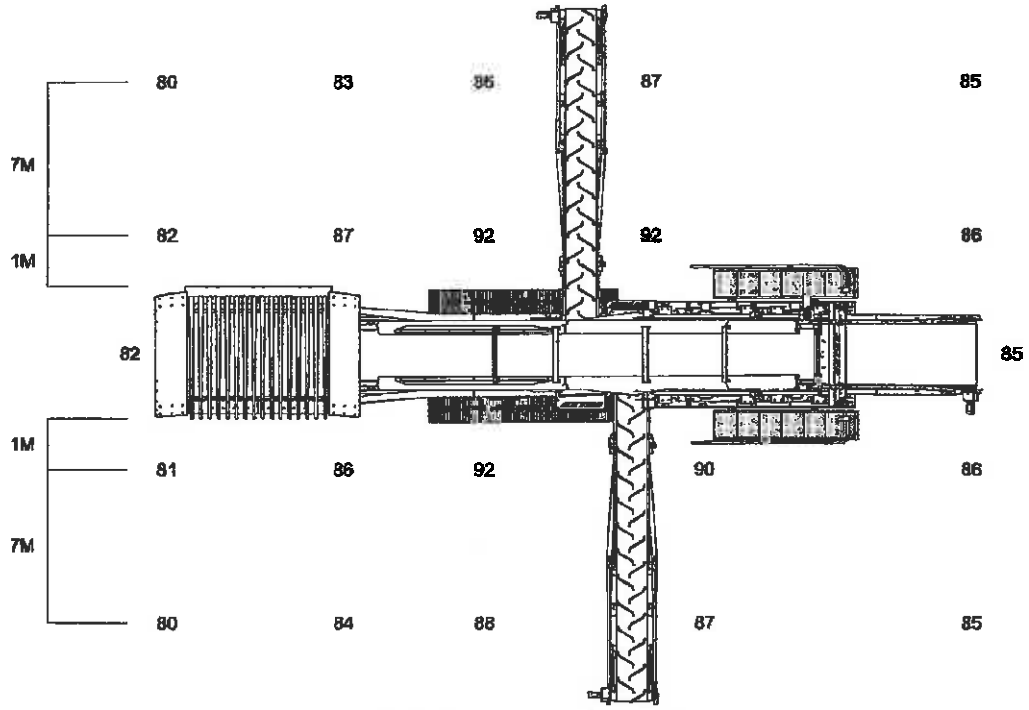


Figure 1-1: Measured Noise Level

The above diagram indicates the measured noise levels at a measured distance.

i.e. 7 m - 85 dB indicates at 7 meters the sound recorded was 85 decibels. The readings were measured using a Castle GA101/701 meter with a calibration date of 05/06/04 and with all systems running situated on the factory assembly line.

The product and local conditions will affect the noise levels.

Ear protection is compulsory within 10 meters of the machine when the engine and all other parts of the machine are running.

2.2 Machine Transportation Dimensions

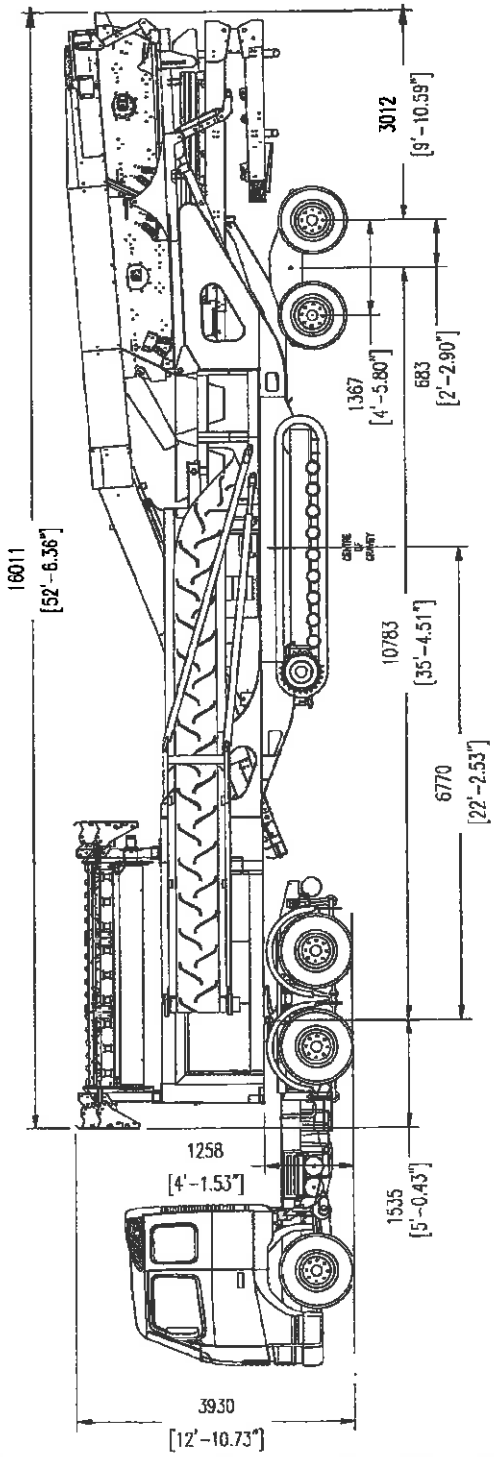


Figure 2-1: Machine Transportation Dimensions

3.6 Machine Layout Indicating Main Components

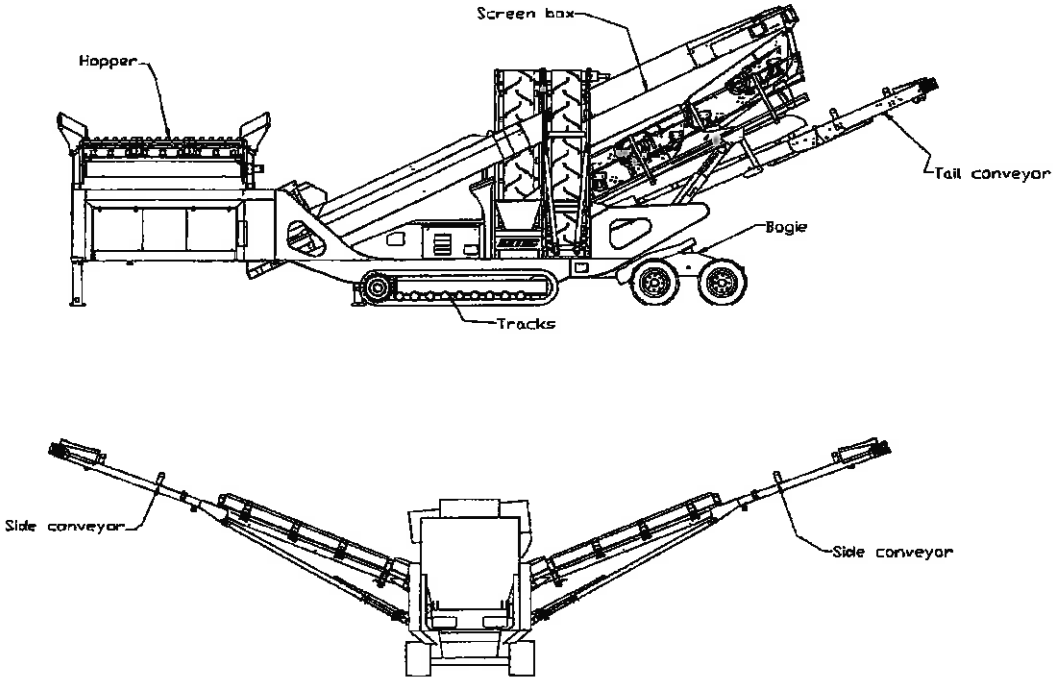


Figure 3-1: Main Components

3.7 Machine Layout Indicating Emergency Stop Positions

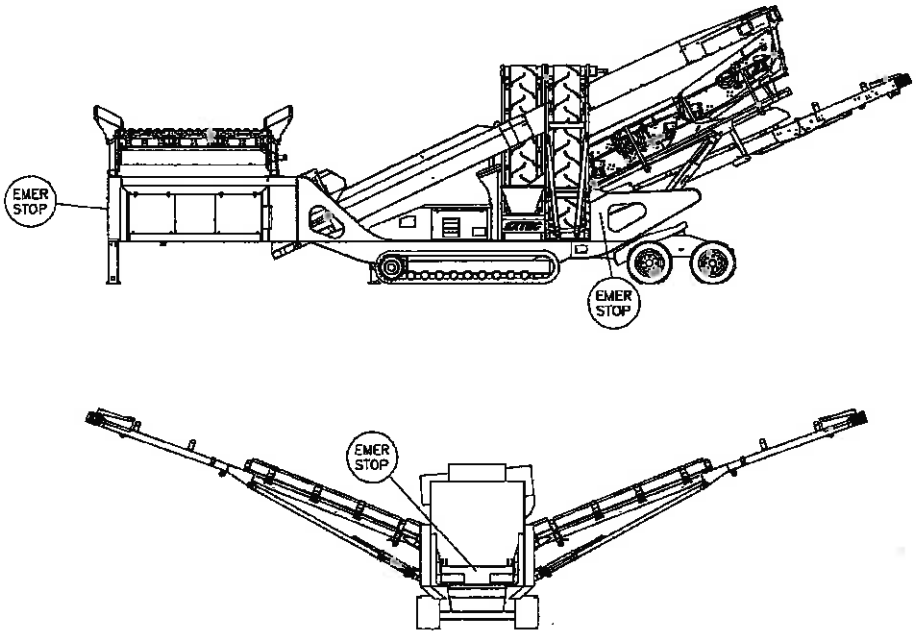


Figure 3-2: Emergency Stops

3.8 Data

Screen size

Double screen box assembly:

First screen box	1500 x 2500 mm
Second screen box	1500 x 2500 mm

Belts

Hopper belt	1200 x 3500 mm (hydraulic drive)
Main conveyor	1000 x 11125 mm (hydraulic drive)
Tail conveyor	1200 x 7140 mm (hydraulic drive)
Side conveyor	700 x 9715 mm (hydraulic drive)

Dimensions

Transport Length	16011 mm
Transport Width	2590 mm
Transport Height	3930 mm
Working Length	17835 mm
Working Width	17051 mm
Working Height	6165 mm
Weight	33500 kg

Engine Details

Engine	Deutz BF4M2012
Engine maximum power	74.9 kW @ 2200 rpm (98ps)
Fuel Tank Capacity	290 litres
Hydraulic Tank Capacity	370 litres

Fuel Consumption Guide

100% Full load, continuous	17 litres/ hour

3.9 Extec S-5 Double Screen Transport Dimensions

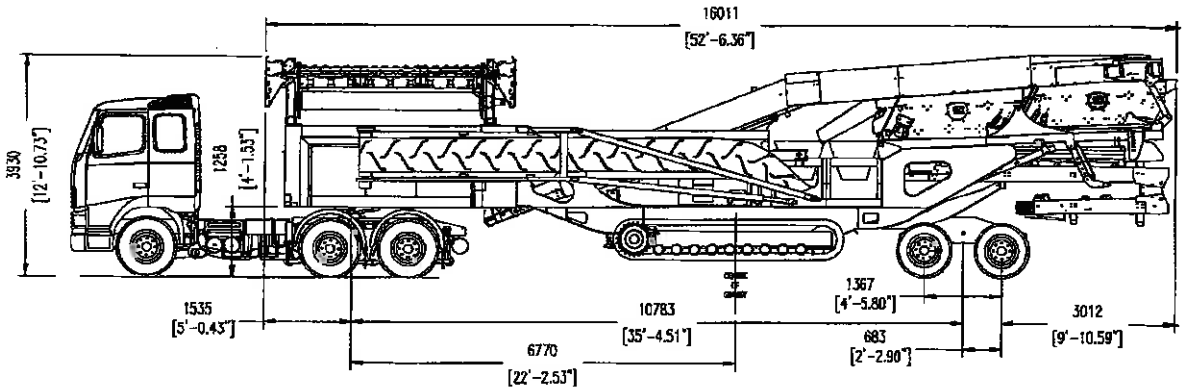


Figure 3-3: Machine Transport Dimensions

The Extec S-5

SANDVIK

Features and Benefits Book

Welcome to Extec Screens & Crushers - a member of the Sandvik group

EXTEC

EXTEC S - 5

The ultimate mobile screening system designed for the truly serious contractor or quarry operator. The S-5 represents a great innovation in mobile screening systems as it resolves the conflicting principles previously associated with providing larger screening areas on mobile plants. Massive throughput, mobility and a class leading screening area results in the ultimate profit generator.

Also available with optional:

- Remote control
- Shredder box
- Vibrating grid
- Patented transport bogey

Applications include:

- Sand, gravel, coal, limestone, granite, iron ore
- Soil, concrete, building and demolition, landfill, road planings

The following features document includes:

- Key features of S-5 Doublescreen
- S-5 Technical Specification
- S-5 Screen Box
- Double deck vibrating grid
- Product features
- Application photographs
- Transport & Working drawings

Key features of the S-5 Doublescreen

- Patented Doublescreen box design
- High throughput
- Hydraulic raise of the main conveyor
- Low Height facilitates standard low loader
- Screening facility consists of two individual screening units, each having it's own separate drive and each being independently angled
- First screen box used for fines, second screen box operates as a grader
- The Doublescreen produces grades of material of the most precise specification

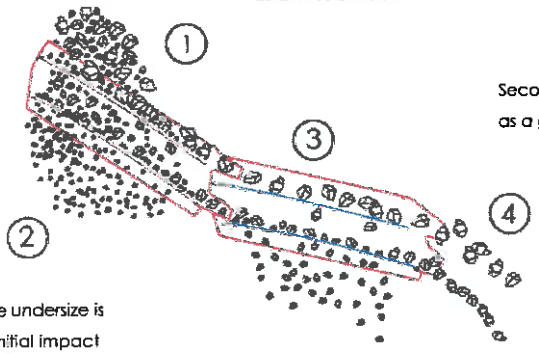
S-5 Technical Specification

1st Screen box	2439mm x 1524mm (8' x 5')	
2nd Screen box	2439mm x 1524mm (8' x 5')	
Length working	17935mm	(58' 6")
Height working	6165mm	(20' 3")
Width working	17051mm	(55' 8")
Engine model	Deutz BF4M 2012 Turbocharged	
Fuel consumption 100% loading	4.33g/Hour	5.20 US/g Hour
Fuel consumption 50% loading	2.31g/Hour	2.77 US/g Hour
Engine power	100.4hp/74.9 kW @ 2200rpm	
Machine weight operation	28000kg	(61729 lbs)
Machine weight transport	33500kg	(73853 lbs)
Tail conveyor height	4564mm	(14'9")
Side conveyor height	4620mm	(15' 2")
Hopper conveyor width	1200mm	(48")
Main conveyor width	1000mm	(40")
Tail conveyor width	1200mm	(48")
Side conveyor width	700mm	(28")

S-5 Doublescreen box

- The doublescreen facility consists of two individual screening units, each having its own separate drive and each independently angled.

First screen box is used as a fines extractor



Second Box operates as a grader.

Clean Gradings at very high output are produced as material is exposed to a very large screening area

The majority of the undersize is removed during initial impact

1st Screen box size 2nd Screen box size	2439mm x 1524mm (8' x 5') 2439mm x 1524mm (8' x 5')
Direct drive	1200 rpm
Max angle 1st screen box	37°
Max angle 2nd screen box	27°
Mesh size	1397mm (Width) x 1981mm (Length) 4' 6" (Width) x 6' 4" (Length)

Doublescreen Box features and benefits

Screen Boxes can be set hydraulically at different angles for each screen box	Fine materials can be separated much more efficiently as the first box can remove most of the fine materials leaving the second box to act as a grader
Separate drive motors enable a reverse throw of materials.	Further increases in efficiency and greater separation of fine materials Increased force against the flow of materials enabling greater effectiveness
Reduced area needed to house the screen boxes	Many structural benefits can be gained with much reduced size for the amount of productivity. Strength can be increased and rigidity of the frame is better Better vibration can also be gained through the smaller screening area
Separate variable speed motors for each screen box	An extremely accurate screening of materials can be achieved through the individual set up of each box to produce the most precise specification.

Double deck vibrating grid

Opening between grid flares	3169mm	(10' 4")
Grid bar opening	101mm x 127mm	(3" x 5")
Screen mesh (top and bottom deck)	939mm (Width) x 1905mm (Length) x 3 3' (Width) x 6' 2" (Length) x 3	
Weight	5216kg	(11499 lbs)

Remote tipping vibrating grid

Hydraulic hopper raise – lower legs

First screen box max angle 37°

Second screen box max angle 27°

Manual ratchet system for quick mesh change

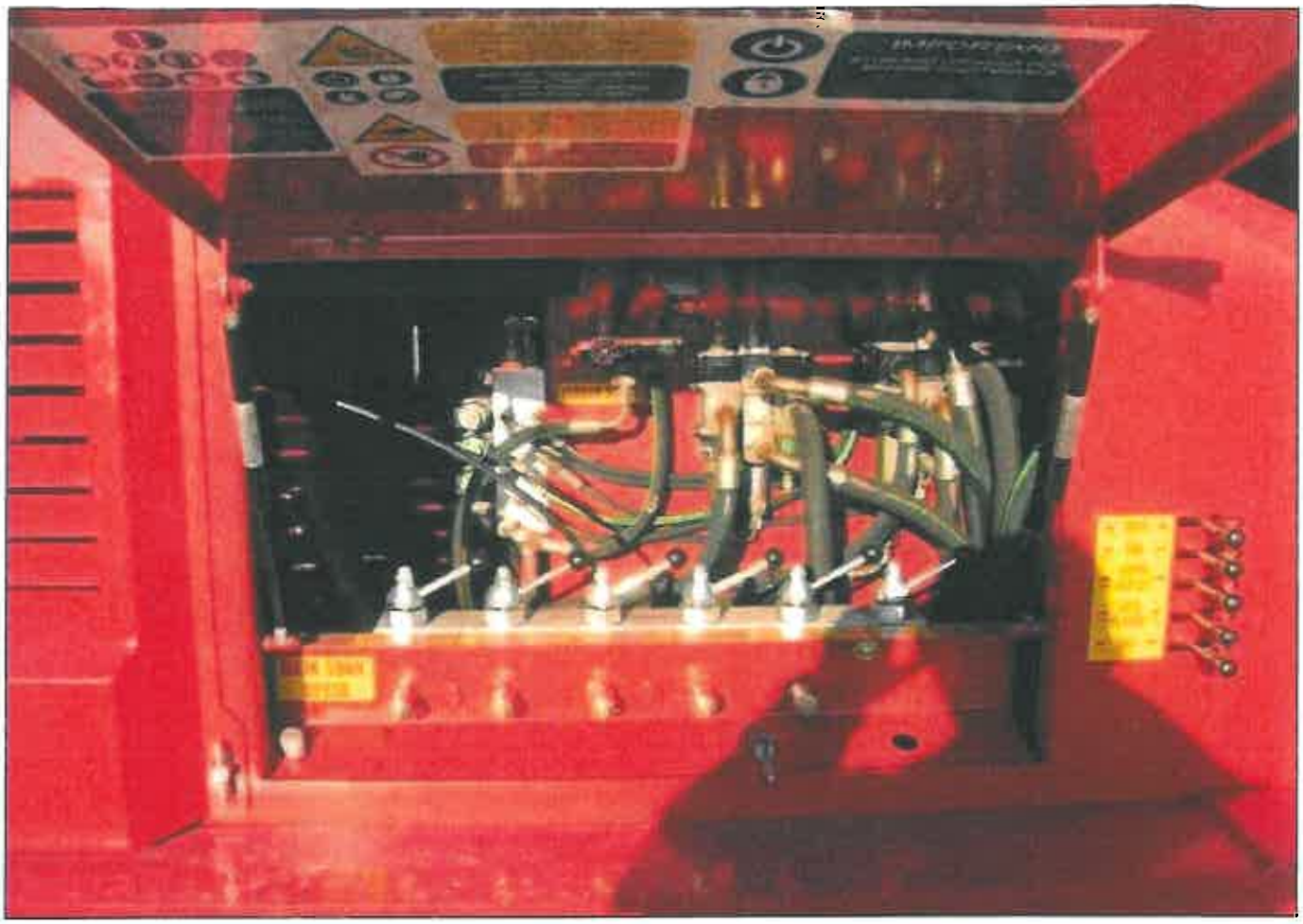
Screen box design allows for mesh change without the need to remove spring bar

Tail conveyor lowers to facilitate easy mesh change

Hydraulic raise of main conveyor ensures maximum access

Optional transport bogie

Hydraulically raises machine onto bogie



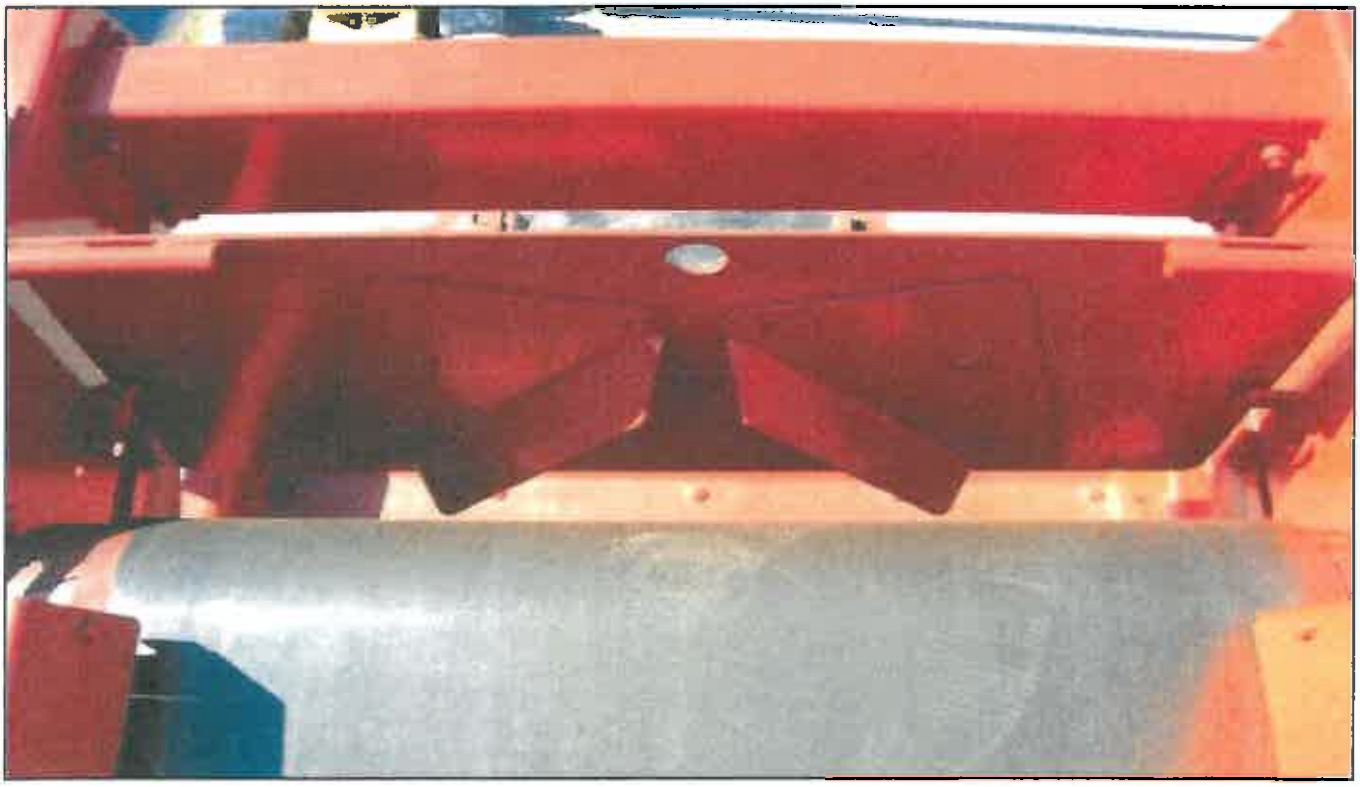
Easy access to full operating controls

Easy access to hydraulic tank

Machine tracks away from bogie

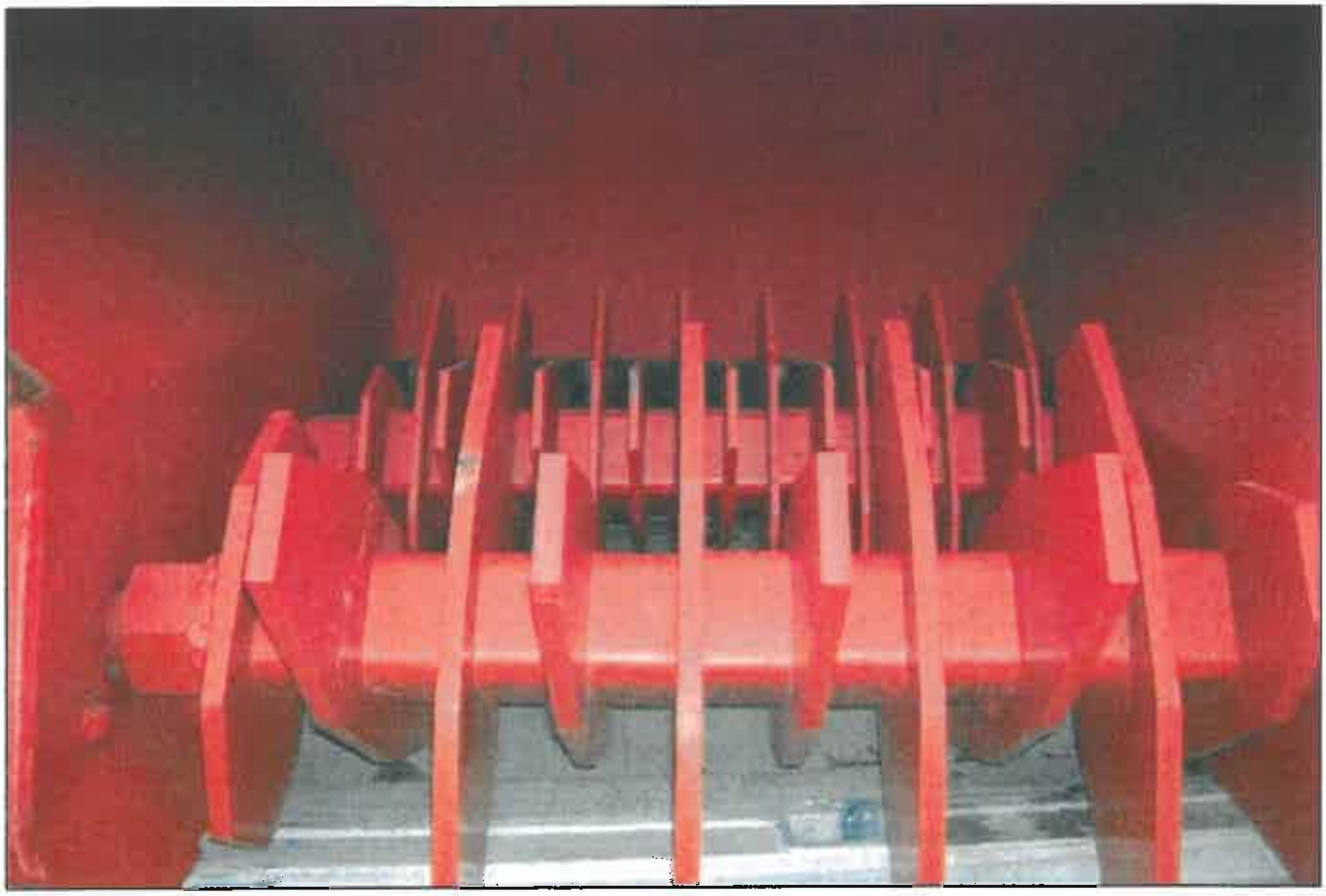
Hydraulic hitch pin ensures attachment of bogie.

Catwalk Assembly



Adjustable swinging spreader plate ensures even spread of materials across the screen box

Optional shredder hydraulic raise & lower



Hydraulic drive shredder, double shafts, fixed blade 650rpm

Tail conveyor lowers to aid feeding of conveyors

Grid easily removed to accommodate crusher

Easy feed from Impactor , Jaw or Cone

Allowing closed circuit

Gravel application

Limestone application

Asphalt millings application

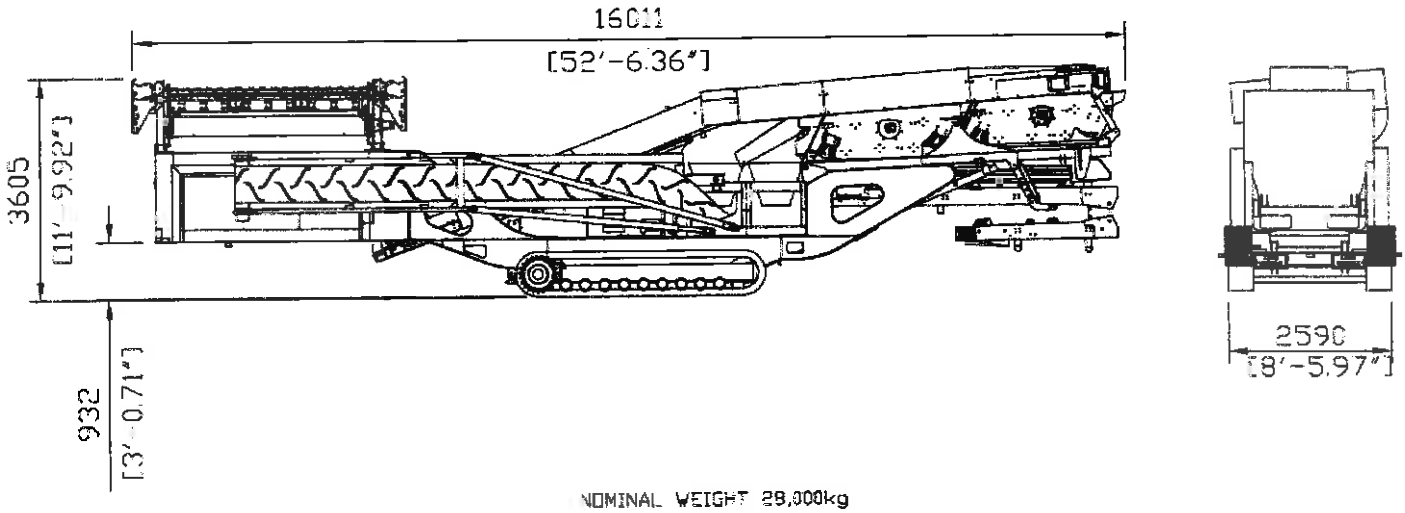
Sand & Gravel application

The S-5 processing Iron ore materials in India

S 5 Screening in a US Quarry

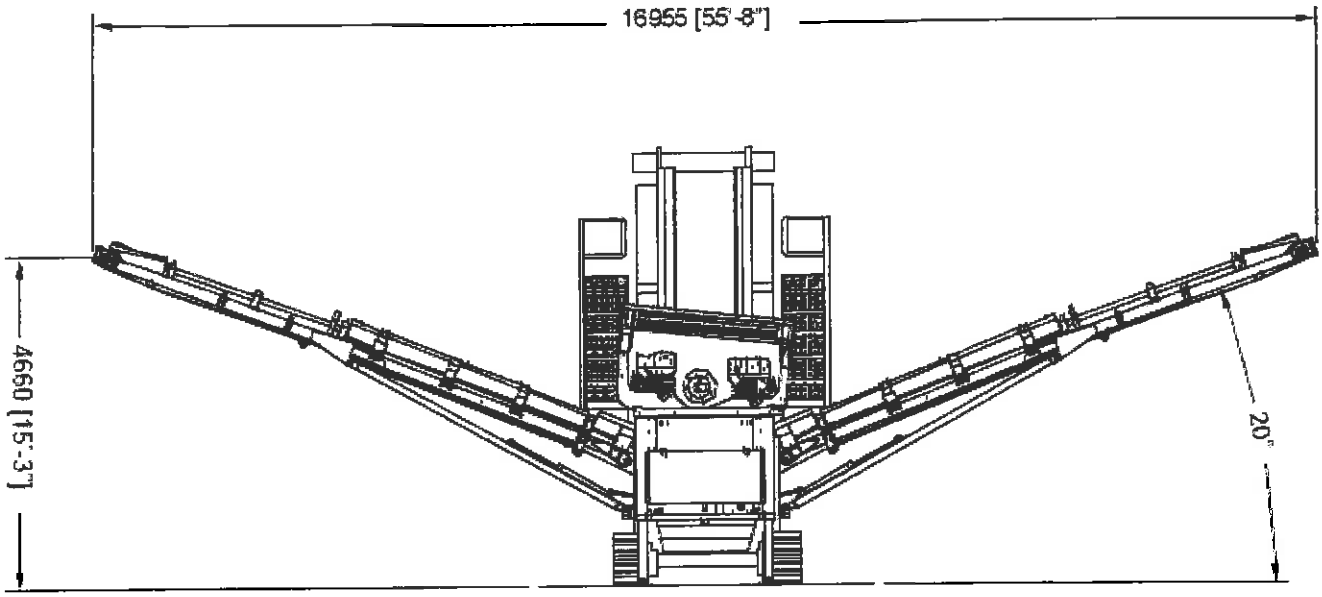
Working in conjunction with an X44 SBS

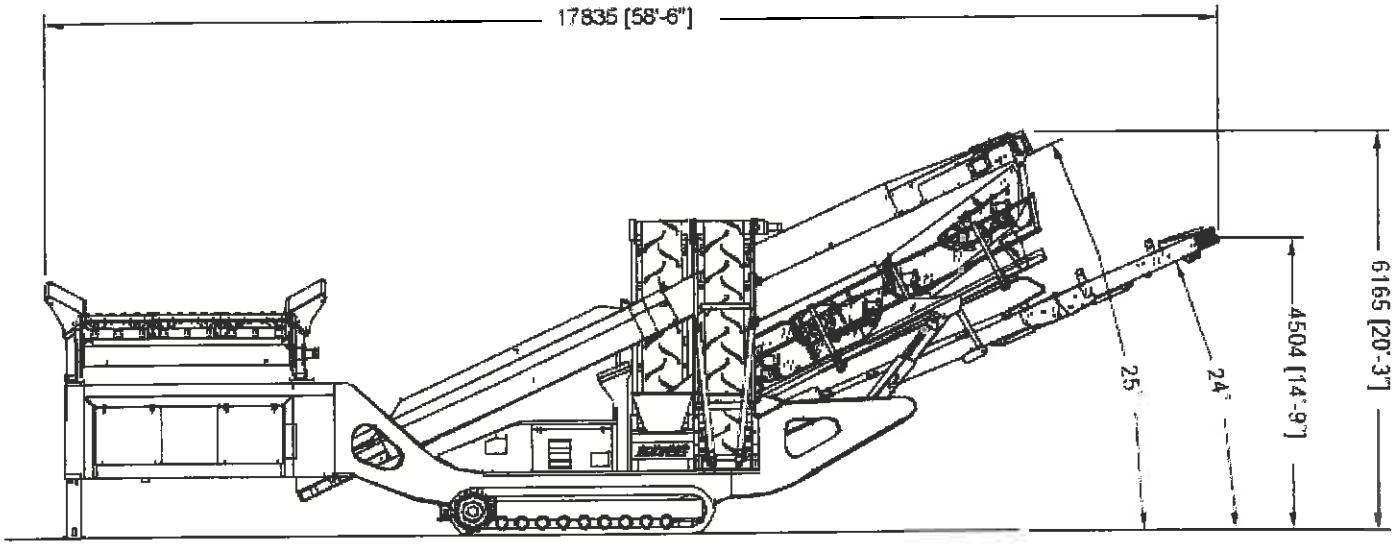
S-5 Transport Drawings



NOMINAL WEIGHT 28,000kg

S-5 Working Drawings





2012. The engine for construction equipment.

75 - 147 kW at 1500 - 2500 rpm

The new 1 litre class.

These are the characteristics of the 2012:

Modern liquid-cooled 4- and 6-cylinder in-line engines.
1 litre displacement per cylinder. Compact design and high power-to-volume-ratio.
Turbocharging and turbocharging with charge air cooling.
High-pressure fuel injection up to 1600 bar.
Electronic engine governor with diagnostic facilities and CAN-bus optional.
3 separate mounting options for gear-driven hydraulic pumps.
Easy accessible service points on one engine side.
Wedge ribbed belt drive with automatic belt tensioner optional.

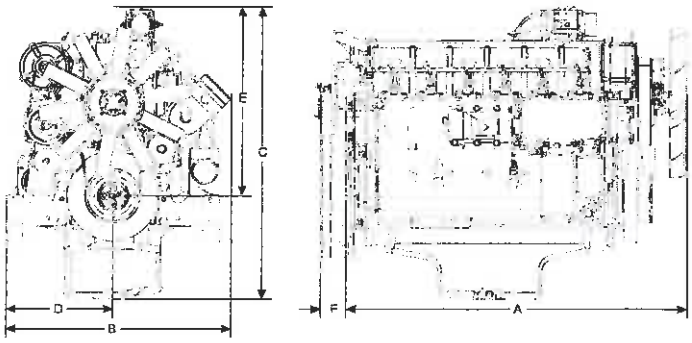
Your benefits:

- Fast and powerful response to changing operating duties, dynamic power development.
- Low cost for noise insulation measures. High comfort in the driver's cab because of low noise level. Low noise emission, low environmental impact.
- High operating economy thanks to low fuel consumption, long oil change intervals and low maintenance requirement.
- Low exhaust emission for a clean environment. Meets exhaust regulation EU-RL 97/68 (Step 2) and US-EPA Nonroad (Tier 2).
- High reliability even under extreme working conditions.

Engine description

Type of cooling:	Liquid cooling, thermostatically controlled at engine outlet. Charge-air-cooled engines with air-to-air charge air cooler.
Crankcase:	High grey cast iron crankcase, for monobloc construction.
Mass balance shafts:	4-cylinder optional with full mass balance by 2 shafts integrated into the crankcase.
Crankcase breather:	Closed-circuit crankcase breather.
Cylinder head:	Grey cast block-type cylinder head.
Valve arrangement/ timing:	Two valves per cylinder, actuated from gear driven camshaft via tappets, push rods and rocker arms.
Piston:	Three-ring aluminium piston.
Piston cooling:	Oil cooled with spray nozzles.
Connecting rod:	Forged steed rod.
Crankshaft:	Forged steel shaft with integral counterweights, 4-cylinder version with integral mass balancing shafts.
Camshaft:	Steel shaft.
Lubrication system:	Forced-feed circulation lubrication with gear pump.
Lube oil cooler:	Oil cooler integrated in coolant circuit.
Oil and fuel filter:	Paper-type microfilter as replaceable cartridge, optional exchangeable cup-shaped filter cartridges for environmentally compatible filter change from above.
Injection pump/ governor:	Single injection pumps integrated in crankcase. Mechanical centrifugal governor (standard); electronic engine governor (EMR) optional.
Fuel lift pump:	Mechanical gear pump integrated in v-belt drive.
Injection nozzle:	Six-hole nozzle, without leakoil.
Alternator:	Three-phase alternator 12 V or 24 V.
Starter motor:	12 V or 24 V.
old starting facilities:	Electric intake air preheater for spontaneous and environmentally compatible cold starting characteristics.
Heating system:	Optional connection for cab heating to engine cooling circuit.
Options:	Intake manifold, exhaust manifold, turbocharger positions, air compressor, hydraulic pump installation positions, SAE 2/3/4 flywheel housings, flywheels, 12 V or 24 V electrics, oil pans.

Dimensions



Engine with belt drive		A	B	C	D	E	F
BF 4 M 2012	mm	742	643	741	300	506	105
BF 4 M 2012 C	mm	742	643	835	300	600	105
BF 6 M 2012 C	mm	998	628	920	300	600	105

Engine with wedge ribbed belt drive (Poly-V)		A	B	C	D	E	F
BF 4 M 2012	mm	798	643	741	300	506	105
BF 4 M 2012 C	mm	798	643	835	300	600	105
BF 6 M 2012 C	mm	1015	628	920	300	600	105

Technical data

Engine type		BF 4 M 2012	BF 4 M 2012 C	BF 6 M 2012 C
Number of cylinders		4	4	6
Bore/stroke	mm	101/126	101/126	101/126
Displacement	l	4.04	4.04	6.06
Compression ratio		19	19	19
Max. rated speed	rpm	2500	2500	2500
Mean piston speed	m/s	10.5	10.5	10.5
Power ratings for construction equipment engines [1]				
Power ratings for industrial engines [2]	kW	74.9	103	155
at speed	rpm	2500	2500	2500
Mean effective pressure	bar	8.9	12.2	12.3
Max. torque	Nm	390	493	743
at speed	rpm	1500	1500	1500
Minimum idle speed	rpm	800	800	800
Specific fuel consumption [3]	g/kWh	208	202	202
Weight to DIN 70020, part 7A [4]	kg	391	391	509

Modell designation

BF 6 M 2012 C

C = Charge air cooler

Engine family designation

M = Liquit cooled

Number of cylinders

B = Turbocharging
F = High-speed four-stroke engine

1) Power ratings without deduction of fan power requirement.

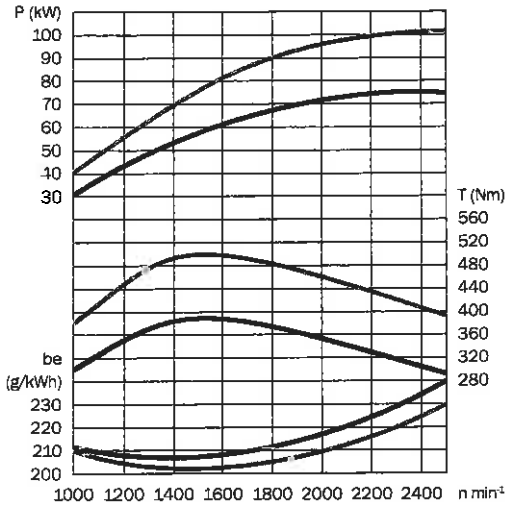
2) Fuel stop power to ISO 3046/1.

3) Specific fuel consumption based on diesel fuel with a specific gravity of 0.835 kg/dm³ at 15°C.

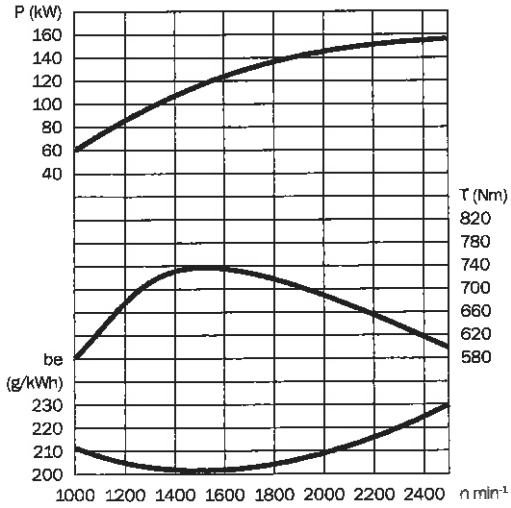
4) Without starter motor/alternator, radiator and liquids, however with flywheel and flywheel housing.

The values given in this data sheet are for information purposes only and not binding. The information given in the offer is decisive.

Standard engines



BF 4 M 2012 **BF 4 M 2012 C**



BF 6 M 2012 C

Order-Nr 0031 1969 / 05 / 2003 / VM-V

DEUTZ®

The engine company.

DEUTZ AG
DEUTZ MOTOR

Deutz-Mülheimer Str. 147-149
D-51063 Köln
Telephone: +49 (0) 2 21-8 22-0
Fax: +49 (0) 2 21-8 22-25 68
Internet: www.deutz.com
eMail: info@deutz.com

California Environmental Protection Agency AIR RESOURCES BOARD	DEUTZ AG	EXECUTIVE ORDER U-R-013-0118 New Off-Road Compression-Ignition Engines

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 system 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)
2004	4DZXL06.1038	6.057, 4.038	Diesel	8000

SPECIAL FEATURES & EMISSION CONTROL SYSTEMS	TYPICAL EQUIPMENT APPLICATION
Direct Diesel Injection, Turbocharger, Smoke Puff Limiter	Pump

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
37 ≤ kW < 75	Tier 2	STD	N/A	N/A	7.5	5.0	0.40	20	15	50
		CERT	-	-	6.6	0.7	0.10	2	1	3

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 30TH day of July 2003.

Allen Lyons, Chief
Mobile Source Operations Division

attachment 19 1 of 2

U-R-013-0118

ENGINE MODEL SUMMARY FORM

Manufacturer: DEUTZ AG
Engine Category: Nonroad CI
EPA Family Name: 3DZXL06.1038
Mfr. Family Name: BF4M1012
Process Code: New Submission

1. Engine code	2. Engine Model	3. BHP@	RPM	4. Fuel Rate @ Rated Power (mm3/stroke)	5. Fuel Rate (lbs./hr) Rated Power	6. Peak Torque (Nm) @ RPM		7. Peak Torque (mm³/stroke)	8. Fuel Rate (lbs./hr) @ Peak Torque	9. Emission Control Device (SAE J1930)
										EM, SPL DDI, TC
CE60	BF4M2012	80	2000	68.0	28	333	1450	76.0	24	EM, SPL
CE62	BF4M2012	83	2100	68.0	29	333	1450	76.0	24	EM, SPL
CE63	BF4M2012	84	2000	71.5	30	352	1450	80.0	25	EM, SPL
CE64	BF4M2012	86	2200	68.0	30	333	1450	76.0	24	EM, SPL
CE66	BF4M2012	88	2300	68.0	31	333	1450	76.0	24	EM, SPL
CE66/1	BF4M2012	88	2100	72.0	31	352	1450	80.0	25	EM, SPL
CE67	BF4M2012	90	2000	76.0	31	371	1450	85.0	26	EM, SPL
CE68	BF4M2012	91	2400	69.0	32	333	1450	76.0	24	EM, SPL
CE68/1	BF4M2012	91	2200	72.5	32	352	1450	80.0	25	EM, SPL
CE69	BF4M2012	92	2100	75.5	32	371	1450	85.0	26	EM, SPL
CE70	BF4M2012	94	2500	69.5	33	333	1450	76.0	24	EM, SPL
CE70/1	BF4M2012	94	2300	72.5	33	352	1450	80.0	25	EM, SPL
CE70/2	BF4M2012	94	2000	79.8	33	390	1450	90.0	28	EM, SPL
CE72	BF4M2012	96	2400	73.0	34	352	1450	80.0	25	EM, SPL
CE72/1	BF4M2012	96	2200	76.5	34	371	1450	85.0	26	EM, SPL
CE73	BF4M2012	98	2100	79.8	34	390	1450	90.0	28	EM, SPL
CE74	BF4M2012	99	2500	73.5	35	352	1450	80.0	25	EM, SPL
CE74,9	BF4M2012	100	2500	74.5	35	390	1450	90.0	28	EM, SPL
CE74,9/1	BF4M2012	100	2500	74.5	35	371	1450	85.0	26	EM, SPL
CE74,9/2	BF4M2012	100	2400	76.0	35	390	1450	90.0	28	EM, SPL
CE74,9/3	BF4M2012	100	2400	76.0	35	371	1450	85.0	26	EM, SPL
CE74,9/4	BF4M2012	100	2300	78.0	35	390	1450	90.0	28	EM, SPL
CE74,9/5	BF4M2012	100	2200	80.0	35	390	1450	90.0	28	EM, SPL
CE74/1	BF4M2012	99	2300	77.0	35	371	1450	85.0	26	EM, SPL
CE65	BF4M2012	87	2500	64.5	30	333	1450	76.0	24	EM, SPL
CE66	BF4M2012	88	1800	79.5	31	390	1450	90.0	28	EM, SPL
CE64	BF4M2012	86	1800	77.0	30	371	1450	85.0	26	EM, SPL
CE62	BF4M2012	83	1800	75.0	29	352	1450	80.0	25	EM, SPL
CE60/1	BF4M2012	80	1800	72.5	28	333	1450	76.0	24	EM, SPL
CE68	BF4M2012	91	1900	79.5	32	390	1450	90.0	28	EM, SPL
CE66	BF4M2012	88	1900	77.0	31	371	1450	85.0	26	EM, SPL
CE63	BF4M2012	84	1900	73.5	30	352	1450	80.0	25	EM, SPL
CE60/2	BF4M2012	80	1900	70.0	28	333	1450	76.0	24	EM, SPL
CE60/3	BF4M2012	80	2100	66.5	28	300	1450	69.0	21	EM, SPL

10

U-A-013-0118

ENGINE MODEL SUMMARY FORM

Manufacturer: DEUTZ AG
Engine Category: Nonroad CI
EPA Family Name: 3DZXL06.1038
Mfr. Family Name: BF4M1012
Process Code: New Submission

1. Engine code	2. Engine Model	3. BHP@	RPM	4. Fuel Rate @ Rated Power (mm3/stroke)	5. Fuel Rate (lbs./hr) Rated Power	6. Peak Torque (Nm) @ RPM		7. Peak Torque (mm³/stroke)	8. Fuel Rate (lbs./hr) @ Peak Torque	9. Emission Control Device (SAE J1930)
CE60/4	BF4M2012	80	2200	65.0	28	300	1450	69.0	21	EM, SPL PPI, TC
CE60/5	BF4M2012	80	2300	63.0	28	300	1450	69.0	21	EM, SPL
CE74,9/1	BF6M2012	100	2300	51.5	35	400	1200	60.0	24	EM, SPL
CE74,9/2	BF6M2012	100	2200	53.5	35	400	1200	60.0	24	EM, SPL
CE74,9/3	BF6M2012	100	2200	53.5	35	430	1200	64.5	25	EM, SPL
CE74,9/4	BF6M2012	100	2100	56.5	35	430	1200	64.5	25	EM, SPL
CE74,9/5	BF6M2012	100	2000	59.0	35	470	1200	70.5	28	EM, SPL
CE74,9/6	BF6M2012	100	1900	62.0	35	470	1200	70.5	28	EM, SPL
CE74,9/7	BF6M2012	100	1800	65.5	35	500	1200	75.0	29	EM, SPL
CE74,5	D4DRAE2	100	2200	80.0	35	390	1450	90.0	28	EM, SPL
CE73	D4DEAE2	98	2100	79.8	34	390	1450	90.0	28	EM, SPL
CE74,9	D4DLAE2	100	2200	80.0	35	390	1450	90.0	28	EM, SPL
CE64	D4DCAE2	86	2200	68.0	30	357	1450	82.0	25	EM, SPL
CE70	D4DCBE2	94	2200	80.0	33	390	1450	90.0	28	EM, SPL
CE74,5	D4DCCE2	100	2200	80.0	35	390	1450	90.0	28	EM, SPL
CE74,9/2	D4DCDE2	100	2500	74.5	35	390	1450	90.0	28	EM, SPL
CE62	D4DDAE2	83	2100	68.0	29	333	1450	76.0	24	EM, SPL
CE69	D4DDBE2	92	2100	75.5	32	371	1450	85.0	26	EM, SPL
CE59T	BF4M2012	78	2300	67.5	27	340	1300	78.0	22	EM, SPL
CE61T	BF4M2012	82	2300	68.0	29	345	1300	79.0	22	EM, SPL
CE56T	BF4M2012	75	2300	63.0	26	300	1300	69.0	19	EM, SPL
CE66	TD420VE	88	2100	72.0	31	352	1450	80.0	25	EM, SPL
CE73	TD420VE	98	2100	79.8	34	390	1450	90.0	28	EM, SPL
CE70	TD420VE	94	2300	72.5	33	352	1450	80.0	25	EM, SPL
CE74,9	TD420VE	100	2300	76.0	35	390	1450	90.0	28	EM, SPL
CE74	TD420VE	99	2500	73.5	35	352	1450	80.0	25	EM, SPL
CE74,9/1	TD420VE	100	2500	74.5	35	390	1450	90.0	28	EM, SPL

UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
WASHINGTON, DC 20460

2004 Model Year Certificate of Conformity

Manufacturer:	**Deutz AG**
Certificate Number:	**DZX-NR5-04-17**
Effective Date:	**12/19/03**
Date Issued:	**12/19/03**

Merrylin Zaw-Mon, Director
Certification and Compliance Division
Office of Transportation and Air Quality

Pursuant to Section 213 of the Clean Air Act (42 U.S.C. section 7547) and 40 CFR 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 nonroad engines, by engine family, more fully described in the documentation required by 40 CFR Part 89 and produced in the stated model year.

Nonroad Diesel Engine Family: **4DZXL05.7033**

This certificate of conformity covers only those new 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 89 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 89. This certificate of conformity does not cover nonroad engines imported prior to the effective date of the certificate.

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 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 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.