

Premium Energy LLC  
Camp Branch  
777-00138  
G40-0075  
Lee

**PREMIUM ENERGY, LLC**

**CAMP BRANCH SURFACE MINE  
CRUSHER/SCREENING PLANT  
ID NO. PENDING**

**GENERAL PERMIT G40-C**

**DIVISION OF AIR QUALITY**

**Submittal Date: October 2015**

# ***P & A Engineers and Consultants, Inc.***

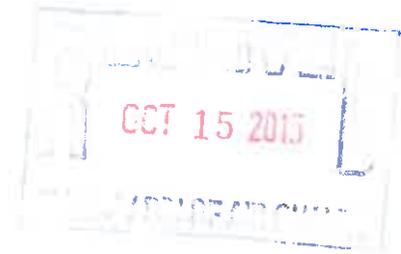
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312 Justice Avenue  
Logan, WV 25601

Phone (304) 752-8320  
Fax (304) 752-7488

October 6, 2015

Mr. William F. Durham  
Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304



RE: Premium Energy, LLC  
G40C Relocation Application  
Facility ID: Pending

Dear Mr. Durham:

On behalf of Premium Energy, P & A Engineers and Consultants, Inc. submits the enclosed G40C Initial Application for the above-referenced facility. The submittal fee is being held from a previously withdrawn application for Premium Energy and should be applied to this application.

The application addresses the construction and operation of a rock crusher/screening system to be used in the upkeep and maintenance of haulroads.

If additional information or clarification is needed, please contact me at the Logan address listed above or call 304-752-8320.

Sincerely,

Donna J. Toler  
Air Quality Project Manager

[donnatoler@suddenlink.net](mailto:donnatoler@suddenlink.net)

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

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

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

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

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

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

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

**SECTION I. GENERAL INFORMATION**

1. NAME OF APPLICANT (AS REGISTERED WITH THE WV SECRETARY OF STATE'S OFFICE):  
**PREMIUM ENERGY, LLC**

2. FEDERAL EMPLOYER ID NO. (FEIN):  
**20-3562770**

3. APPLICANT'S MAILING ADDRESS:

**PO BOX 1098, HOLDEN, WV 25625**

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

**ALPHA NATURAL RESOURCES**

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

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

**SECTION II. FACILITY INFORMATION**

7. TYPE OF PLANT OR FACILITY (STATIONARY SOURCE) TO BE CONSTRUCTED, MODIFIED, RELOCATED OR ADMINISTRATIVELY UPDATED (E.G., COAL PREPARATION PLANT, PRIMARY CRUSHER, ETC.):

**ROCK CRUSHING AND SCREENING PLANT**

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

**1422**

<p>9A. DAQ PLANT I.D. NO. (FOR AN EXISTING FACILITY):</p> <p><b>Pending</b></p>	<p>10A. LIST ALL CURRENT 45CSR13 AND 45CSR30 (TITLE V) PERMIT NUMBERS ASSOCIATED WITH THIS PROCESS (FOR EXISTING FACILITY ONLY):</p> <p><b>None</b></p>
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**PRIMARY OPERATING SITE INFORMATION**

<p>11A. NAME OF PRIMARY OPERATING SITE:</p> <p><b>CAMP BRANCH SURFACE MINE</b></p>	<p>12A. MAILING ADDRESS OF PRIMARY OPERATING SITE:</p> <p><b>SAME AS ABOVE</b></p>
--	--

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: **OWNED AND OPERATED BY ALPHA NATURAL RESOURCES**

⇒ 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.

**Route 119 South toward Logan, take Route 10 toward Man, follow about 5 miles, take left onto Rum Creek or Dehue Road, follow to foot of Blair Mountain at guard shack and ask for directions to site.**

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INCLUDE A MAP AS ATTACHMENT F.

<p>15A. NEAREST CITY OR TOWN:</p> <p><b>Logan</b></p>	<p>16A. COUNTY:</p> <p><b>Logan</b></p>
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<p>17A. UTM NORTHING (KM):</p> <p>81-53-03</p> <p><b>422.3532</b></p>	<p>18A. UTM EASTING (KM): 37-52-20</p> <p><b>378.72222</b></p>	<p>19A. UTM ZONE:</p> <p><b>17</b></p>
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**2<sup>ND</sup> 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 <i>PROPOSED SITE</i> ? <input type="checkbox"/> YES <input type="checkbox"/> 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 <i>PRESENT LOCATION</i> OF THE FACILITY FROM THE NEAREST STATE ROAD; ⇨ FOR CONSTRUCTION OR RELOCATION PERMITS, PLEASE PROVIDE DIRECTIONS TO <i>THE PROPOSED NEW SITE LOCATION</i> 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: <b>November 30, 2015</b> ⇨ 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:  <b>November 30, 2015</b>
22. PROVIDE MAXIMUM PROJECTED OPERATING SCHEDULE OF ACTIVITY/ ACTIVITIES OUTLINED IN THIS APPLICATION:  HOURS PER DAY <b>24</b> DAYS PER WEEK <b>7</b> WEEKS PER YEAR <b>52</b> PERCENTAGE OF OPERATION <b>100%</b>		

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

ISSUED TO:  
**PREMIUM ENERGY LLC  
COUNTY RD 10-2  
WHARNCLIFFE, WV 25651-0000**

**BUSINESS REGISTRATION ACCOUNT NUMBER: 1010-7200**

This certificate is issued on: 06/24/2011

*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.

## **ATTACHMENT B**

### **PROCESS DESCRIPTION**

**Rock is transported by truck from adjacent areas and dumped into a stockpile @ TP-01(UL-MDH), then transferred to a partially enclosed endloader bin BS-01(PW) @ TP-02(UD-PW). Material from BS-01 transfers to a 400TPH crusher CR-01(PW) @ TP-03(TC-PW) and then to the screen SS-01(PW) @ TP-04(TC-PW). Screened material is sent to stockpile OS-01(SW-WS) and OS-02(SW-WS) for truck delivery via two belt conveyors BC-01(NC) and BC-02(NC) at transfer points TP-05(TC-PW) thru TP12(UL-MDH).**

**Company officials have agreed to install a portable water spray system to control fugitive emissions as required by the General Permit Program.**

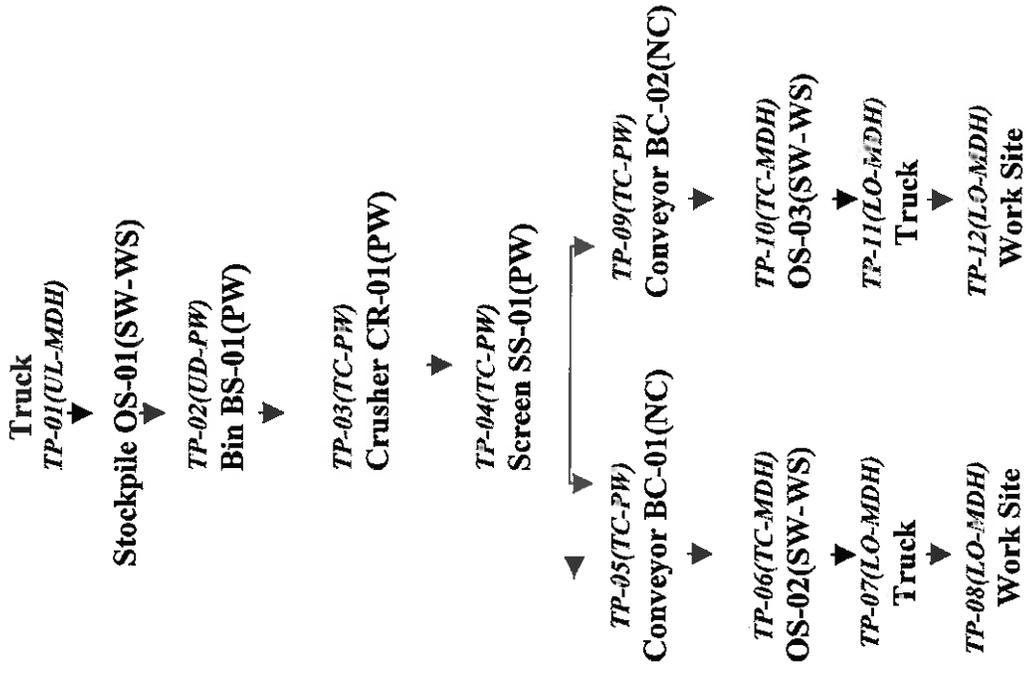
## **ATTACHMENT C**

### **DESCRIPTION OF FUGITIVE EMISSIONS**

**Potential sources of fugitive particulate emissions for this facility include emissions, which are not captured by pollution control equipment and emissions from open stockpiles and vehicular traffic on unpaved haulroads and work areas. The haulroads and work areas will be controlled by water truck. The water truck will be operated three times daily, and more as needed in dry periods.**

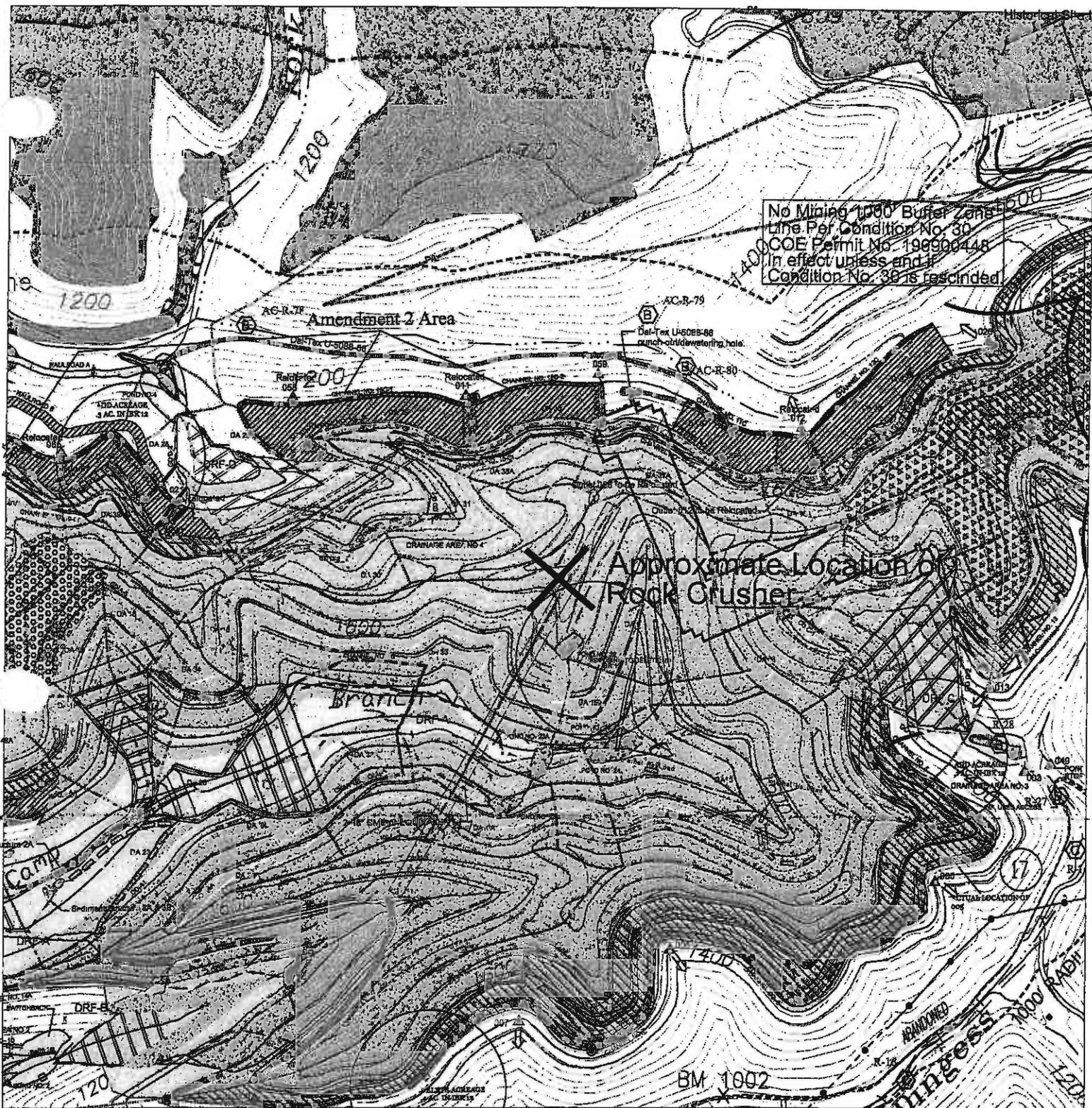
**An additive to prevent freezing will be utilized in the winter months when freezing conditions are present. New course gravel base material will be added to unpaved haulroads as needed.**

**PREMIUM ENERGY, LLC  
 MATERIAL FLOW DIAGRAM  
 CRUSHING SCREENING SYSTEM**



**PREMIUM ENERGY, LLC  
MATERIAL FLOW DIAGRAM  
CRUSHING SCREENING SYSTEM**

**PREMIUM ENERGY HAS AGREED TO INSTALL A PORTABLE WATER SPRAY SYSTEM AS CONTROL FOR  
FUGITIVE EMISSIONS.**



# Premier Energy

P.O. Box 1098 Holden, WV 25625

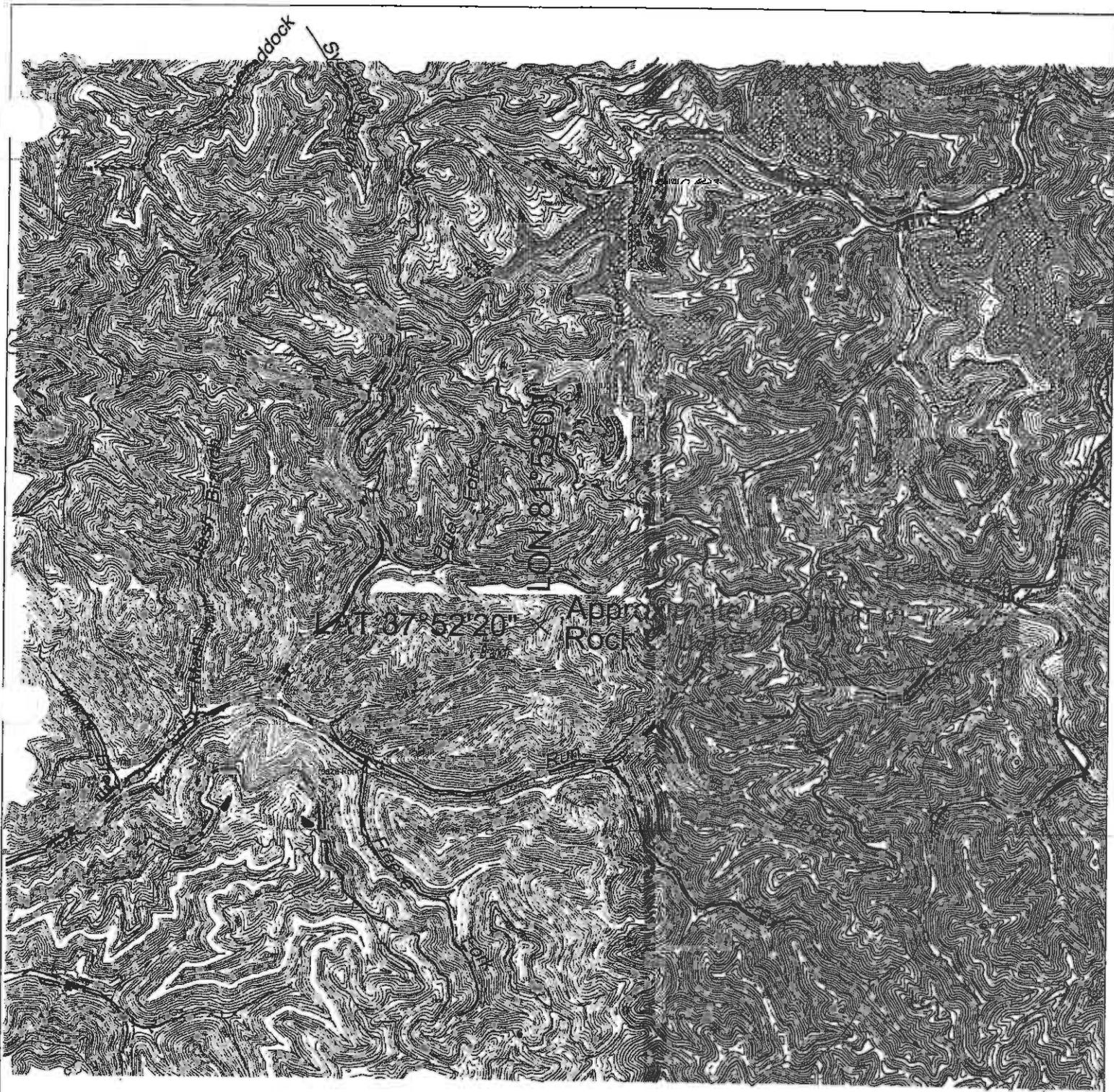
## CAMP BRANCH SURFACE MINE Division of Air Quality

PERMIT NO. S-5013-90

### SITE MAP



16162.dwg



# Premier Energy

P.O. Box 1098 Holden, WV 25625

CAMP BRANCH SURFACE MINE  
Division of Air Quality

PERMIT NO. S-5013-90  
LOCATION MAP



15163.dwg

## CRUSHING AND SCREENING AFFECTED SOURCE SHEET

Source Identification Number <sup>1</sup>		CR-01				
Type of Crusher or Screen <sup>2</sup>		DR				
Date of Manufacture <sup>3</sup>		2011				
Maximum Throughput <sup>4</sup>	tons/hour	400				
	tons/year	3,504,000				
Material sized from/to: <sup>5</sup>		6 x 0				
Average Moisture Content (%) <sup>6</sup>		3				
Control Device ID Number <sup>7</sup>		PW				
Baghouse Stack Parameters <sup>8</sup>	height (ft)	N/A				
	diameter (ft)					
	volume (ACFM)					
	exit temp (°F)					
	UTM Coordinates					
Maximum Operating Schedule <sup>9</sup>	hours/day	24				
	days/year	365				
	hours/year	8760				
Percentage of Operation <sup>10</sup>	January-March	25				
	April-June	25				
	July-September	25				
	Oct-December	25				

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	OT	Other
GC	Gyratory Crusher		
OT	Other - Quadroll		
3. Enter the date that each crusher and screen was manufactured.
4. Enter the maximum throughput for each crusher and screen in tons per hour and tons per year.
5. Describe the nominal material size reduction (e.g. +2" / -").
6. Enter the average percent moisture content of the material processed.
7. 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.
8. Enter the appropriate stack parameters if a baghouse control device is used.
9. Enter the maximum operating schedule for each crusher and screen in hours per day, days per year and hours per year.
10. Enter the estimated percentage of operation throughout the year for each crusher and screen.

## CRUSHING AND SCREENING AFFECTED SOURCE SHEET

Source Identification Number <sup>1</sup>		SS-01				
Type of Crusher or Screen <sup>2</sup>		DD				
Date of Manufacture <sup>3</sup>		2011				
Maximum Throughput <sup>4</sup>	tons/hour	400				
	tons/year	3,504,000				
Material sized from/to: <sup>5</sup>		6 x 0				
Average Moisture Content (%) <sup>6</sup>		3				
Control Device ID Number <sup>7</sup>		PW				
Baghouse Stack Parameters <sup>8</sup>	height (ft)	N/A				
	diameter (ft)					
	volume (ACFM)					
	exit temp (°F)					
	UTM Coordinates					
Maximum Operating Schedule <sup>9</sup>	hours/day	24				
	days/year	365				
	hours/year	8760				
Percentage of Operation <sup>10</sup>	January-March	25				
	April-June	25				
	July-September	25				
	Oct-December	25				

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8. Enter the appropriate stack parameters if a baghouse control device is used.
9. Enter the maximum operating schedule for each crusher and screen in hours per day, days per year and hours per year.
10. Enter the estimated percentage of operation throughout the year for each crusher and screen.





## STORAGE ACTIVITY AFFECTED SOURCE SHEET

Source Identification Number <sup>1</sup>	<b>BS-01</b>					
Type of Material Stored <sup>2</sup>	<b>Rock</b>					
Average Moisture Content (%) <sup>3</sup>	<b>3</b>					
Maximum Yearly Storage Throughput (tons) <sup>4</sup>	<b>3,504,000</b>					
Maximum Storage Capacity (tons) <sup>5</sup>	<b>10</b>					
Maximum Base Area (ft <sup>2</sup> ) <sup>6</sup>						
Maximum Pile Height (ft) <sup>7</sup>						
Method of Material Load-in <sup>8</sup>	<b>Endloader</b>					
Load-in Control Device Identification Number <sup>9</sup>	<b>UD-PW</b>					
Storage Control Device Identification Number <sup>9</sup>	<b>PW</b>					
Method of Material Load-out <sup>8</sup>	<b>SS</b>					
Load-out Control Device Identification Number <sup>9</sup>	<b>TC-PW</b>					

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

BS Bin or Storage Silo (full enclosure)	E3 Enclosure (three sided enclosure)
OS Open Stockpile	SB Storage Building (full enclosure)
SF Stockpiles with wind fences	OT Other

2. Describe the type of material stored or stockpiled (e.g. clean coal, raw coal, refuse, etc).  
 3. Enter the average percent moisture content of the stored material.  
 4. Enter the maximum yearly storage throughput for each storage activity.  
 5. Enter the maximum storage capacity for each storage activity in tons (e.g. silo capacity, maximum stockpile size, etc.)  
 6. For stockpiles, enter the maximum stockpile base area.  
 7. For stockpiles, enter the maximum stockpile height.  
 8. Enter the method of load-in or load-out to/from stockpiles or bins using the following codes:

CS Clamshell	SS Stationary Conveyor/Stacker
FC Fixed Height Chute from Bins	ST Stacking Tube
FE Front Endloader	TC Telescoping Chute from Bins
MC Mobile Conveyor/Stacker	TD Truck Dump
UC Under-pile or Under-Bin Reclaim Conveyor	PC Pneumatic Conveyor/Stacker
RC Rake or Bucket Reclaim Conveyor	OT Other

## STORAGE ACTIVITY AFFECTED SOURCE SHEET

Source Identification Number <sup>1</sup>	<b>OS-1</b>	<b>OS-2</b>	<b>OS-3</b>		
Type of Material Stored <sup>2</sup>	<b>Rock</b>	<b>Rock</b>	<b>Rock</b>		
Average Moisture Content (%) <sup>3</sup>	<b>3</b>	<b>3</b>	<b>3</b>		
Maximum Yearly Storage Throughput (tons) <sup>4</sup>	<b>3,504,000</b>	<b>3,504,000</b>	<b>3,504,000</b>		
Maximum Storage Capacity (tons) <sup>5</sup>	<b>5,000</b>	<b>2,500</b>	<b>2,500</b>		
Maximum Base Area (ft <sup>2</sup> ) <sup>6</sup>	<b>18,869</b>	<b>8,869</b>	<b>8,869</b>		
Maximum Pile Height (ft) <sup>7</sup>	<b>25'</b>	<b>25'</b>	<b>25'</b>		
Method of Material Load-in <sup>8</sup>	<b>TD</b>	<b>SS</b>	<b>SS</b>		
Load-in Control Device Identification Number <sup>9</sup>	<b>UD-MDH</b>	<b>TC-MDH</b>	<b>TC-MDH</b>		
Storage Control Device Identification Number <sup>9</sup>	<b>SW-WS</b>	<b>SW-WS</b>	<b>SW-WS</b>		
Method of Material Load-out <sup>8</sup>	<b>FE</b>	<b>FE</b>	<b>FE</b>		
Load-out Control Device Identification Number <sup>9</sup>	<b>LO-MDH</b>	<b>LO-MDH</b>	<b>LO-MDH</b>		

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

BS Bin or Storage Silo (full enclosure)	E3 Enclosure (three sided enclosure)
OS Open Stockpile	SB Storage Building (full enclosure)
SF Stockpiles with wind fences	OT Other

2. Describe the type of material stored or stockpiled (e.g. clean coal, raw coal, refuse, etc).
3. Enter the average percent moisture content of the stored material.
4. Enter the maximum yearly storage throughput for each storage activity.
5. Enter the maximum storage capacity for each storage activity in tons (e.g. silo capacity, maximum stockpile size, etc.)
6. For stockpiles, enter the maximum stockpile base area.
7. For stockpiles, enter the maximum stockpile height.
8. Enter the method of load-in or load-out to/from stockpiles or bins using the following codes:
- |   |                                |
|---|--------------------------------|
| CS Clamshell                                | SS Stationary Conveyor/Stacker |
| FC Fixed Height Chute from Bins             | ST Stacking Tube               |
| FE Front Endloader                          | TC Telescoping Chute from Bins |
| MC Mobile Conveyor/Stacker                  | TD Truck Dump                  |
| UC Under-pile or Under-Bin Reclaim Conveyor | PC Pneumatic Conveyor/Stacker  |
| RC Rake or Bucket Reclaim Conveyor          | OT Other                       |

### ENGINE DATA SHEET

Source Identification Number <sup>1</sup>		E-1					
Engine Manufacturer and Model		Scania					
Manufacturer's Rated bhp/rpm		1800					
Source Status <sup>2</sup>		NS					
Date Installed/Modified/Removed (Month/Year) <sup>3</sup>		April 2011					
Engine Manufactured/Reconstruction Date <sup>4</sup>		April 2011					
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart IIII? (Yes or No) <sup>5</sup>		Yes					
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart JJJJ? (Yes or No) <sup>6</sup>		No					
Engine, Fuel and Combustion Data	Engine Type	4 Stroke					
	APCD Type <sup>8</sup>	N/A					
	Fuel Type <sup>9</sup>	Diesel					
	H <sub>2</sub> S (gr/100 scf)	N/A					
	Operating bhp/rpm	N/A					
	BSFC (Btu/bhp-hr)	N/A					
	Fuel throughput (ft <sup>3</sup> /hr)	13.9 GPH					
	Fuel throughput (MMft <sup>3</sup> /yr)	14,456 GPY					
Operation (hrs/yr)	1040						
Reference <sup>10</sup>	Potential Emissions <sup>11</sup>	lbs/hr	tons/yr				
	NO <sub>x</sub>	8.5250	4.433				
	CO	1.8370	0.955				
	VOC	0.6793	0.353				
	SO <sub>2</sub>	0.5638	0.293				
	PM <sub>10</sub>	0.6050	0.315				
	Formaldehyde	0.00221	0.001151				

1. Enter the appropriate Source Identification Number for each reciprocating internal combustion compressor/generator engine located at the facility. Multiple compressor engines should be designated CE-1, CE-2, CE-3 etc. Emergency Generator engines should be designated EG-1, EG-2, EG-3 etc. If more than three (3) engines exist, please use additional sheets.
2. Enter the Source Status using the following codes:  
     NS    Construction of New Source (installation)                  ES    Existing Source

MS Modification of Existing Source                      RS Removal of Source

3. Enter the date (or anticipated date) of the engine's installation (construction of source), modification or removal.
4. Enter the date that the engine was manufactured, modified or reconstructed.
5. Is the engine a certified stationary compression ignition internal combustion engine according to 40CFR60 Subpart IIII. If so, the engine and control device must be operated and maintained in accordance with the manufacturer's emission-related written instructions. You must keep records of conducted maintenance to demonstrate compliance, but no performance testing is required. If the certified engine is not operated and maintained in accordance with the manufacturer's emission-related written instructions, the engine will be considered a non-certified engine and you must demonstrate compliance according to 40CFR§60.4210 as appropriate.

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

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

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

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

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

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

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

9. Enter the Fuel Type using the following codes:

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

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

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

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







## ATTACHMENT H

### BAGHOUSE AIR POLLUTION CONTROL DEVICE SHEET *Not applicable for this facility*

Complete a Baghouse Air Pollution Control Device Sheet for each baghouse control device.

1. Baghouse Control Device Identification Number:
2. Manufacturer's name and model identification:
3. Number of compartments in baghouse:
4. Number of compartments online during normal operation and conditions:
5. Gas flow rate into baghouse: \_\_\_\_\_ ACFM @ \_\_\_\_\_ °F and \_\_\_\_\_ PSIA
6. Total cloth area: \_\_\_\_\_ ft<sup>2</sup>
7. Operating air to cloth ratio: \_\_\_\_\_ ft/min
8. Filter media type: \_\_\_\_\_
9. Stabilized static pressure drop across baghouse: \_\_\_\_\_ inches H<sub>2</sub>O
10. Baghouse operation is:  
 Continuous     Automatic     Intermittent
11. Method used to clean bags:  
 Shaker                       Pulse jet                       Reverse jet                       Other
12. Emission rate of particulate matter entering and exiting baghouse at maximum design operating conditions:  
Entering baghouse: \_\_\_\_\_ lb/hr and \_\_\_\_\_ grains/ACF  
Exiting baghouse: \_\_\_\_\_ lb/hr and \_\_\_\_\_ grains/ACF
13. Guaranteed minimum baghouse collection efficiency: \_\_\_\_\_ %
14. Provide a written description of the capture system (e.g. hooding and ductwork arrangement), size of ductwork and hoods and air volume, capacity and operating horsepower of fan:
  
15. Describe the method of disposal for the collected material:

TERIA POLLUTANTS

AP-42 5th Edition Section 3.3 Gasoline and Diesel Industrial Engines (10/96) - Table 3.3-1 for Diesel Fuel

	<b>202</b>	<b>kW</b>
Diesel Fuel Engine	<b>275</b>	<b>hp</b>
Max. Hours of Operation (8 hrs/day, 5 days/week, 26 weeks/year)	<b>1040</b>	<b>hrs/year</b>
Heating Value for diesel	<b>128700</b>	<b>Btu/gal</b>

E (hourly) = Emission Factor (lb/hp-hr) \* Horse Power (hp)

E (annual) = Emission Factor (lb/hp-hr) \* Horse Power (hp) \* Maximum Hours of Operation \* 1 ton  
 per 2000 lb

Pollutant		Emission Factor (lb/hp-hr)	Emission Factor (lb/MMBtu)	Rating	lb/hour	TPY
NOx	AP42	0.03100	4.41	D	8.5250	4.433
CO	AP42	0.00668	0.95	D	1.8370	0.955
SOx	AP42	0.00205	0.29	D	0.5638	0.293
PM/PM10	AP42	0.00220	0.31	D	0.6050	0.315
TOC	AP42	0.00247	0.35	D	0.6793	0.353

**HAZARDOUS AIR POLLUTANTS**

12 5th Edition Section 3.3 Gasoline and Diesel Industrial Engines (10/96) - Table 3.3-2  
 40 CSR30 Table 45-30A Hazardous Air Pollutants

	Diesel Fuel Engine	<b>275</b>	<b>hp</b>		
Maximum Hours of Operation (8 hrs/day, 5 days/week, 26 weeks/year)				<b>1040</b>	<b>hours/year</b>
Maximum diesel usage at 1800 rpm				<b>19000</b>	<b>Btu/lb</b>
				<b>7.1</b>	<b>lb/gal</b>
	Heating Value for diesel			<b>134900</b>	<b>BTU/US gal</b>
	Maximum diesel usage at 1800 rpm			<b>13.9</b>	<b>gal/hour</b>

E (hourly) = Emission Factor (lb/hp-hr) \* Horse Power (hp)

E (annual) = Emission Factor (lb/hp-hr) \* Horse Power (hp) \* Maximum Hours of Operation \* 1 ton  
 per 2000 lb

<b>CAS NO.</b>		<b>Emission Factor (lb/MMBtu)</b>	<b>Rating</b>	<b>lb/hour</b>	<b>TPY</b>
71-43-2	Benzene	0.000933	E	0.00175	0.00091
108-88-3	Toluene	0.000409	E	0.00077	0.000399
	Xylenes	0.000285	E	0.00053	0.000278
	1,3-Butadiene	0.0000391	E	7.3E-05	3.81E-05
50-00-0	Formaldehyde	0.00118	E	0.00221	0.001151
	Acetaldehyde	0.000767	E	0.00144	0.000748
	Acrolein	0.0000925	E	0.00017	9.02E-05
91-20-3	Naphthalene	0.0000848	E	0.00016	8.27E-05
	<b>Burning diesel fuel:</b>		<b>Total HAPs</b>	<b>0.00711</b>	<b>0.003696</b>
				<b>lb/hour</b>	<b>TPY</b>







# EMISSIONS SUMMARY

Name of applicant: Premium Energy  
 Name of plant: Rock Crusher

## 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>	0.47	2.05	0.12	0.51
<i>Unpaved Haulroad Emissions</i>	362.23	1,586.57	90.56	396.64
<i>Paved Haulroad Emissions</i>	0.00	0.00	0.00	0.00
<b>Fugitive Emissions Total</b>	<b>362.70</b>	<b>1,588.62</b>	<b>90.67</b>	<b>397.16</b>

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	12.88	56.41	2.58	11.28
<i>Transfer Point Emissions</i>	0.04	0.17	0.03	0.11
<b>Point Source Emissions Total*</b>	<b>12.92</b>	<b>56.59</b>	<b>2.60</b>	<b>11.40</b>

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

<b>Facility Emissions Total</b>	<b>375.62</b>	<b>1,645.21</b>	<b>93.28</b>	<b>408.55</b>
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**\*Facility Potential to Emit (PTE) (Baseline Emissions) = 11.40**  
 (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>	0.22	0.96	0.06	0.24
<i>Unpaved Haulroad Emissions</i>	72.72	318.54	18.18	79.63
<i>Paved Haulroad Emissions</i>	0.00	0.00	0.00	0.00
<b>Fugitive Emissions Total</b>	<b>72.95</b>	<b>319.50</b>	<b>18.24</b>	<b>79.87</b>

POINT SOURCE EMISSIONS				
<i>Equipment Emissions</i>	6.13	26.86	1.23	5.37
<i>Transfer Point Emissions</i>	0.02	0.08	0.01	0.06
<b>Point Source Emissions Total*</b>	<b>6.15</b>	<b>26.95</b>	<b>1.24</b>	<b>5.43</b>

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

<b>Facility Emissions Total</b>	<b>79.10</b>	<b>346.45</b>	<b>19.48</b>	<b>85.30</b>
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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
CR-01	0.28	1.23	0.06	0.25	0.13	0.58	0.03	0.12
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>0.28</b>	<b>1.23</b>	<b>0.06</b>	<b>0.25</b>	<b>0.13</b>	<b>0.58</b>	<b>0.03</b>	<b>0.12</b>

**1b. Secondary and Tertiary Crushing**

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

**1c. Screening**

Screen ID Number	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
SS-01	12.60	55.19	2.52	11.04	6.00	26.28	1.20	5.26
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTAL</b>	<b>12.60</b>	<b>55.19</b>	<b>2.52</b>	<b>11.04</b>	<b>6.00</b>	<b>26.28</b>	<b>1.20</b>	<b>5.26</b>

Crushing and Screening	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
<b>TOTAL</b>	<b>12.68</b>	<b>56.41</b>	<b>2.58</b>	<b>11.28</b>	<b>6.13</b>	<b>26.86</b>	<b>1.23</b>	<b>5.37</b>

**1. Emissions From CRUSHING AND SCREENING (Continued)**

**EMISSION FACTORS**

source: AP42, Fifth Edition, Revised 01/95  
(lb/ton of material throughput)

PM	
Primary Crushing	0.0007
Tertiary Crushing	0.00504
Screening	0.0315

PM-10	
Primary Crushing	0.000333
Tertiary Crushing	0.0024
Screening	0.015



## 2. Emissions From TRANSFER POINTS (continued)

Transfer Point ID No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<b>TOTALS</b>	<b>0.04</b>	<b>0.17</b>	<b>0.03</b>	<b>0.11</b>	<b>0.02</b>	<b>0.08</b>	<b>0.01</b>	<b>0.06</b>

Source:

*AP-42 Fifth Edition*

13.2.4 Aggregate Handling and Storage Piles

Emissions From Batch Drop

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

Where:

		PM	PM-10
k =	Particle Size Multiplier (dimensionless)	0.0029	0.0014
U =	Mean Wind Speed (mph)		
M =	Material Moisture Content (%)		

Assumptions:

k - Particle size multiplier

For PM (< or equal to 30um) k = 0.0029

For PM-10 (< or equal to 10um) k = 0.0014

For PM  $E(M) = 1.437E-05 \cdot [1 / ((M/2)^{1.4})] = \text{pounds/ton}$

For PM-10  $E(M) = 6.938E-06 \cdot [1 / ((M/2)^{1.4})] = \text{pounds/ton}$

For lb/hr  $[\text{lb/ton}] \cdot [\text{ton/hr}] = [\text{lb/hr}]$

For Tons/year  $[\text{lb/ton}] \cdot [\text{ton/yr}] \cdot [\text{ton}/2000\text{lb}] = [\text{ton/yr}]$

### 3. Emissions From WIND EROSION OF STOCKPILES

Stockpile ID No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
OS-01	0.24	1.06	0.06	0.26	0.11	0.50	0.03	0.12
OS-02	0.11	0.50	0.03	0.12	0.05	0.23	0.01	0.06
OS-03	0.11	0.50	0.03	0.12	0.05	0.23	0.01	0.06
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	0.47	2.05	0.12	0.51	0.22	0.96	0.06	0.24

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

For PM  $E(s) = 1.3374941 * s = \text{lb/day/acre}$

For PM-10  $E(s) = 0.6286222 * s = \text{lb/day/acre}$

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	179.84	787.71	44.96	196.93	36.09	158.07	9.02	39.52
2	179.84	787.71	44.96	196.93	36.09	158.07	9.02	39.52
3	2.54	11.14	0.64	2.78	0.55	2.40	0.14	0.60
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	362.23	1586.57	90.56	396.64	72.72	318.54	18.18	79.63

Source:

AP-42 9/98 Edition

13.2.2 Unpaved Roads

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

$$E = [(k*(s/12)^a * (W/3)^b) / ((M_{dry}/0.2)^c)] * [(365-p)/365] = \text{lb / Vehicle Mile Traveled (VMT)}$$

Where:

		PM	PM-10
k =	particle size multiplier	10.00	2.60
a =	empirical constant	0.8	0.8
b =	empirical constant	0.5	0.4
c =	empirical constant	0.4	0.3
M <sub>dry</sub> =	surface material moisture content (%) - dry conditions	0.2	
p =	number of days with at least 0.01 inches of precipitation	157	
s =	silt content of road surface material (%)	10	
W =	Mean vehicle weight (tons)		

### 5. Emissions From INDUSTRIAL PAVED HAULROADS

Item No.	PM				PM-10			
	Uncontrolled		Controlled		Uncontrolled		Controlled	
	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY	lb/hr	TPY
1	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
2	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
3	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
4	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
5	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
6	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
7	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

Source:

AP-42 10/01 Edition

13.2.1 PAVED ROADS

Emission Estimate For Paved Haulroads

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

Where:

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

Legal Advertisement

**AIR QUALITY PERMIT NOTICE  
Notice of Application**

Notice is given that Premium Energy, LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a General Permit for a rock crushing/screening facility to be located on the Camp Branch Surface Mine, located near Ethel, Logan County, WV. The facility coordinates are as follows: latitude 37.872222 and longitude -81.884167.

The applicant estimates the potential to discharge the following Regulated Air Pollutants will be 11 tons of particulate matter baseline emissions per year, 5 tons of point source emissions particulate matter less than 10 microns total per year, and 409 tons of the controlled facility emission total per year. The potential to emit criteria pollutants for the engine is estimated to be: NOx 4.433 tons per year, CO 0.955 ton per year, VOC 0.353 tons per year, SOx 0.293 tons per year and PM10 0.315 tons per year. The potential to emit hazardous pollutants from the engine is estimated to be: Benzene 0.00091 tons per year, Toluene 0.000399 tons per year, Xylene 0.000278 tons per year, Acetaldehyde 0.000748 tons per year, and Formaldehyde 0.001151 tons per year.

Startup of operation is planned to begin upon permit approval. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57<sup>th</sup> Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1250, during normal business hours.

Dated this the 14th day of October 2015

By: Premium Energy, LLC  
Michael G. Smith  
Authorized Agent  
PO Box 1098  
Holden, WV 25625

**ATTACHMENT K**

**ELECTRONIC SUBMITTAL**

**LOCATED IN ORIGINAL COPY OF REGISTRATION  
APPLICATION**

SECTION IV. CERTIFICATION OF INFORMATION

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

FOR A CORPORATION (domestic or foreign)

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

FOR A PARTNERSHIP

I certify that I am a General Partner

FOR A LIMITED LIABILITY COMPANY

I certify that I am a General Partner or General Manager

FOR AN ASSOCIATION

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

FOR A JOINT VENTURE

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

FOR A SOLE PROPRIETORSHIP

I certify that I am the Owner and Proprietor

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

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

Signature \_\_\_\_\_

(please use blue ink)

Responsible Official

Date

Name & Title MICHAEL G. SMITH, AUTHORIZED REPRESENTATIVE

(please print or type)

Signature \_\_\_\_\_

(please use blue ink)

Authorized Representative (if applicable)

Date



10-5-15

Applicant's Name **PREMIUM ENERGY, LLC**

Phone

**304-239-2300**

Phone

Email: [jelia@alphanr.com](mailto:jelia@alphanr.com) (contact) or [msmith@alphanr.com](mailto:msmith@alphanr.com)

PREMIUM ENERGY, LLC

TO

MICHAEL G. SMITH

APPOINTMENT OF AUTHORIZED AGENT

KNOW ALL MEN BY THESE PRESENTS, that **Premium Energy, LLC**, a limited liability company duly organized and existing under the laws of the State of Delaware ("Company"), has made, constituted and appointed, and by these presents hereby makes, constitutes and appoints **Michael G. Smith** ("Appointee") of the Town of Turkey Creek, Pike County, in the Commonwealth of Kentucky, to be its true and lawful Authorized Agent, who may act for it and in its name, and as and for its act and deed, (i) to sign, acknowledge for record, execute and deliver, in the ordinary and regular course of the Company's business, applications, revisions, amendments, reports, information and data certifications, performance bonds (including, but not limited to, reclamation bonds), notices, stipulations and other documents and instruments with respect to the acquisition, maintenance and administration of coal mining permits, licenses, authorizations and certifications, environmental permits, licenses, authorizations and certifications, and other permits, licenses, authorizations and certifications, issued or to be issued by state and federal regulatory agencies, including, but not limited to, the United States Army Corps of Engineers, the United States Environmental Protection Agency, the Mine Safety and Health Administration of the United States Department of Labor, the Office of Surface Mining Reclamation and Enforcement of the United States Department of the Interior, the West Virginia Department of Environmental Protection, and the West Virginia Office of Miners' Health, Safety and Training; and (ii) to do and perform any and all other proper acts and

things necessary to carry out the purposes relative thereto, including to sign, execute and deliver other similar instruments relating to or required in connection with the Company's lands, operations and permits, including reporting requirements regarding greenhouse gas (GHG) emissions associated with facilities and mines. This authority shall become effective on the 1<sup>st</sup> day of October, 2013 (the "Effective Date"), and shall expire on the 30<sup>th</sup> day of September, 2016, unless sooner revoked and shall automatically terminate if Appointee at any time during the term hereof becomes no longer employed by the Company or one of its affiliates. As of the Effective Date, any prior authorized agent or power of attorney appointment by Company to Appointee hereupon shall be null, void and of no further force and effect with respect to actions taken on or after the Effective Date, but authorized actions taken by Appointee before the Effective Date pursuant to any such prior authorized agent or power of attorney appointment shall not be affected.

IN TESTIMONY WHEREOF, Premium Energy, LLC, has caused these presents to be signed and acknowledged by its respective officer thereunto duly authorized, all as of the 1<sup>st</sup> day of October, 2013.

PREMIUM ENERGY, LLC

By   
Vaughn R. Groves, Vice President & Secretary

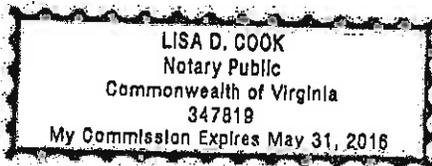
STATE OF VIRGINIA

CITY OF BRISTOL, to-wit:

I, Lisa D. Cook, a Notary Public in and for the State and City aforesaid, do hereby certify that Vaughn R. Groves, Vice President and Secretary of **PREMIUM ENERGY, LLC**, whose name as such is signed to the foregoing writing bearing date the 1<sup>st</sup> day of October, 2013, has this day, before me, in my said City, acknowledged the said writing.

Given under my hand and notarial seal this the 31st day of October, 2013.

My commission expires May 31, 2016



Lisa D. Cook  
NOTARY PUBLIC

**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.

**Joe R. Dotson**

---

**From:** Samuel Daniels  
**Sent:** Friday, September 11, 2015 7:45 AM  
**To:** Joe R. Dotson  
**Cc:** Ray Daugherty  
**Subject:** info for crusher

MAKE-POWERSCREEN  
MODEL XR400S  
YEAR 2011  
MASS 44,700kg  
PIDXR40SJ0MB42649

ENGINE  
SCANIA ENGINE  
CV AB  
ENGINE FAMILY-BY9XL127CAA  
9.3L DISPLACEMENT  
YEAR 04/2011  
EMISSION CONTROL-SCR

*Sam Daniels*  
*Purchasing Clerk*  
*Superior Surface*  
**Fax: 276-739-8442**  
**Phone: 304-946-2334**

## Specification and Plant Information

### Crusher Capacity

1. In order to obtain the optimum output from the crusher, its feed should be continuous and regulated. Additionally, all feed should be of a size that will readily enter the crusher chamber and, in order to avoid packing of the discharge opening and excessive wear of the plant jaws, under size material should be removed from the feed prior to entry to the crusher.

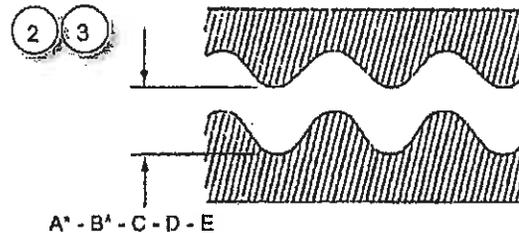
#### Setting Range + Typical Output

A* : (2in*	160 US tons/hour)
B* : (2.5in*	180 US tons/hour)
C : (3in	210 US tons/hour)
D : (4in	245 US tons/hour)
E : (5in	280 US tons/hour)

#### Setting Range + Typical Output

A* : 50mm*	140 tonnes/hour
B* : 63mm*	160 tonnes/hour
C : 75mm	185 tonnes/hour
D : 100mm	220 tonnes/hour
E : 125mm	250 tonnes/hour

2. The discharge rates given are based on crushing clean, dry limestone weighing approximately 1600kg/m<sup>3</sup> (100lbs/ft<sup>3</sup>) loose and having a specific gravity of 2.6. Wet feed material reduces the crusher discharge rate.
3. Closed jaw settings A\* and B\* are for re-cycling operations only. The crusher must not be operated at a discharge opening less than 75mm (3 inches) for quarry applications without prior consultation with Powerscreen®.
4. The only exception to this being for crushing bricks and demolition materials. Operating the crusher below this setting may result in extensive damage.



## NOTICES

On the XR model, DO NOT feed non crushable material larger than 200mm (8 inches) into the Hydraulic Release Jaw Crusher as serious damage may result.

On the XA model DO NOT feed non

## Specification and Plant Information

### Dimensions

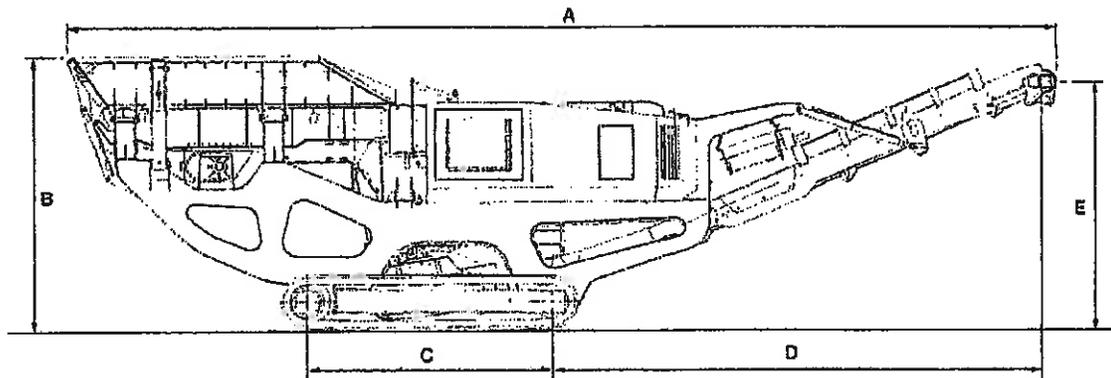
#### Working Dimensions

All dimensions are in millimetres.

(Approximate dimensions in Feet - Inches)

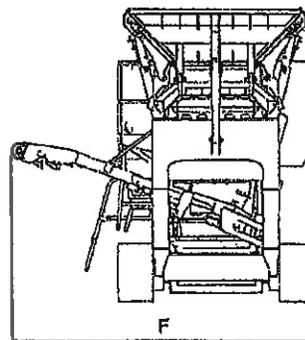
Feed Hopper Raised

Product Conveyor Fully Raised



A 14935mm  
B 4133mm  
C 3715mm  
D 7430mm  
E 3725mm  
F 4420mm

A (49ft)  
B (13ft-7in)  
C (12ft-2in)  
D (24ft-5in)  
E (12ft-3in)  
F (14ft-6in)



#### Transport Dimensions

Overall Length - 15000mm with product conveyor lowered

Overall Width - 2800mm with dirt conveyor folded

Overall Height [Excluding Transport Trailer]  
3440mm with feed hopper, feed chute grid and product conveyor all lowered.

#### Transport Dimensions

Overall Length - (49ft-2in) with product conveyor lowered

Overall Width - (9ft-2in) with dirt conveyor folded

Overall Height [Excluding Transport Trailer] (11ft-4in) with feed hopper, feed chute grid and product conveyor all lowered.

Select Language ▼

11901 Westport Road | Louisville, KY 40245 | Phone 1-800-227-0534

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[EQUIPMENT \(/USED-EQUIPMENT\)](#) [CUSTOMER SUPPORT \(/CUSTOMER-SUPPORT\)](#)

# JAW CRUSHERS

## POWERSCREEN XA400S XR400S



[INQUIRE ABOUT THIS MACHINE](#)

[\(CONTACT-US\)](#)  
[REQUEST A MANUAL \(/CUSTOMER-SUPPORT\)](#)

### SPECIFICATIONS

	Powerscreen XA400S	Power
Weight (Est)	44,750kgs (98,656lbs)	44 (98)
Transport Width	2.8m (9'2")	2.8
Transport Length	15.2m (49'10")	15.2m
Transport Height	3.4m (11'2")	3.4
Working Width	4.3m (14'1")	4.3
Working Length	15m (49'3")	15m
Working Height	4.1m (13'5")	4.1

### INTRODUCTION

The Powerscreen® X400S range of high performance primary jaw crushing plants are designed for medium scale operators in quarrying, demolition, recycling and mining applications.

The range includes the XA400S with hydraulic adjust and the XR400S with hydraulic release. User benefits include mobility for a quick set-up time (typically under 30 minutes), hydraulic crusher setting adjustment for total control of product size and crusher overload protection to prevent damage by uncrushable objects.

## **FEATURES & BENEFITS**

---

- Output Potential: up to 400tph (441 US tph)
- Excellent reduction capability
- Hydraulic folding feed hopper with boltless fixing system
- Excellent under crusher access with a hydraulic tilting conveyor system
- Economical to operate with a highly efficient direct drive system
- Forceful crushing action with high swing jaw
- Height adjustable product conveyor
- Extended hopper – hydraulically folding

## **OPTIONS**

---

- Deflector plate under crusher
- Dirt conveyor
- Single pole/ twin pole magnet
- Radio remote control
- Belt weigher
- Engine fire extinguisher system
- Electric refuelling pump
- Hydraulic water pump
- Underscreen wire mesh: 10, 20, 30, 40 or 50mm

[Click here \(http://www.youtube.com/user/Powerscreens/videos\)](http://www.youtube.com/user/Powerscreens/videos) to watch our machines action.

## **[Crushers \(/crushers/\)](#)**

[Jaw Crushers \(/crushers/jaw-crushers/\)](#)

[Impact Crushers](#)

[/crushers/impact-crushers/](#)

[Cone Crushers](#)

[/crushers/cone-crushers/](#)

**[Screeners \(/mobile-screening/\)](#)**

**[Parts \(/parts/\)](#)**

**[Used Equipment \(/used-equipment/\)](#)**

**[Customer Support](#)**



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<http://www.matecamerica.com/en/index.php>

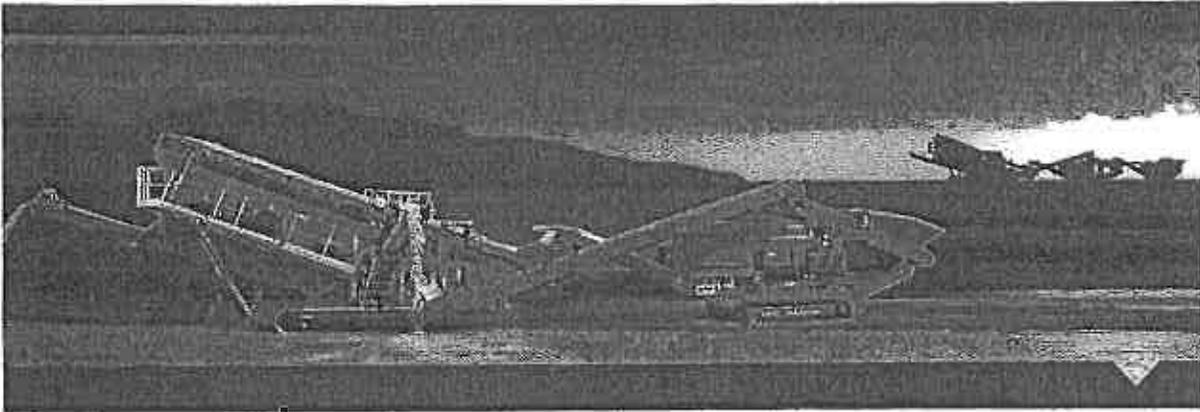


**TEREX**



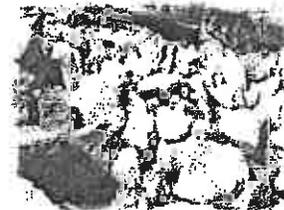
WASHING SYSTEMS

<http://www.terex.com/washing-systems/en/index.htm>



**Tier 4i Scania DC9 & DC13**

**Powerscreen Jaw & Impact Crusher  
Average Fuel Consumption  
Comparisons**



**XA400S - Scania DC9 Tier 4i 202kW**  
Medium Hard Limestone Site, Gloucester, UK  
Serial # PIDXA40SCOMA40017

3.5" — CSS: 90mm  
24" — Feed Material: -600mm Conglomerate (See page 4 for details)  
5" — End Product: -120mm  
Production: 180 TPH (Average)  
Engine Load: 64% (Average)

4.4gph — Diesel consumption: 16.65 Litres Per Hour Average (LPH Av.)  
0.4gph — Urea consumption; 1.6 LPH Av.

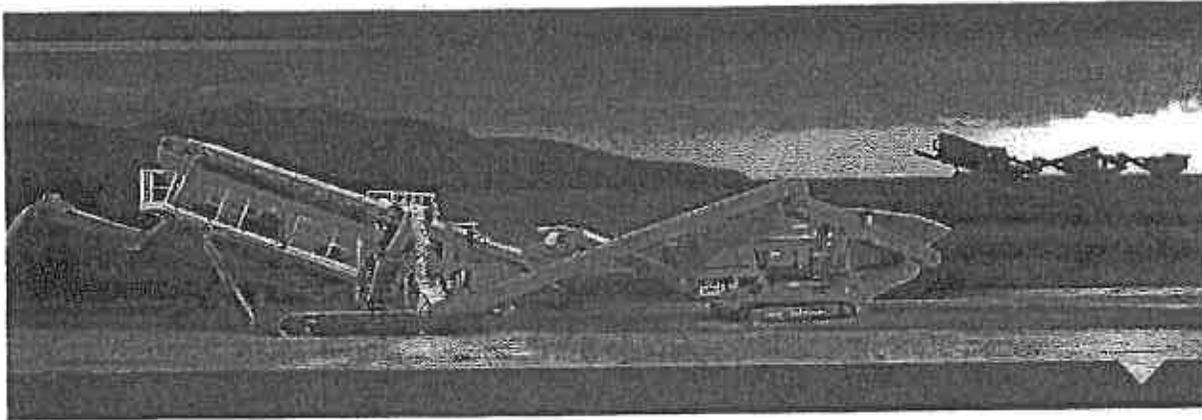
**XA400S - Tier 3 CAT powered in a similar application**

CSS: 90mm  
Feed Material: -600mm Conglomerate (See page 4 for details)  
End Product: -120mm  
Production: 180 TPH (Average)  
Engine Load: 64% (Average)  
Diesel consumption: 22 LPH Av.

5.8gph —

**Conclusion:**  
**Average Fuel Savings = 25%**





**XH320 - Scania DC9 Tier 4i 202kW**  
Hard Limestone Site, Enniskillen, Northern Ireland  
Serial # AX899-P2U

6" — Top Apron: 150mm  
3" — Bottom Apron: 75mm  
20" — Feed Material: -500mm Medium Limestone  
5" — End Product: -120mm  
Production: 300 – 350 TPH Average  
Engine Load: 75% Approx.

9.4 gph — Diesel Consumption: 35.5 LPH  
0.5 gph — Urea Consumption: 1.76 LPH



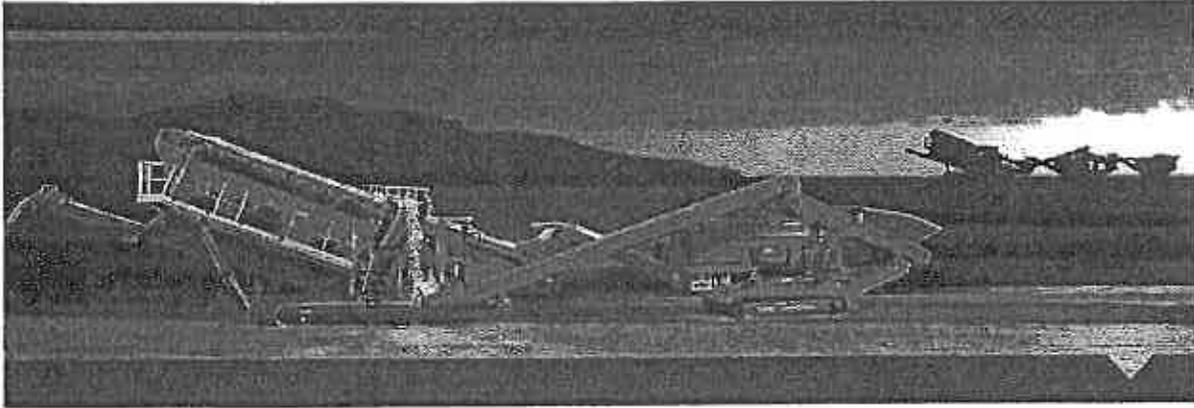
**XH320 - Tier 3 CAT powered in a similar application**

Top Apron: 150mm  
Bottom Apron: 75mm  
Feed Material: -500mm Medium Limestone  
End Product: -120mm  
Production: 300 – 350 TPH Average  
Engine Load: 75% Approx.  
Diesel Consumption: 42 LPH Av.

11 gph —

**Conclusion:**  
**Average Fuel Saving = 15%**





**XH500SR - Scania DC13 Tier 4i 331kw  
Medium Hard Limestone, Scotland**

10"  
4"  
20"  
5"  
8.75gph —  
0.4gph —

Top Apron: 250mm  
Bottom Apron: 100mm  
Feed Material: -500mm Limestone  
End Product: -120mm  
Production: 180 TPH Approx  
Engine Load: 50% Approx  
Diesel Consumption: 33.05 LPH Av.  
Urea Consumption: 1.5 LPH Av.



**XH500 - Tier 3 CAT powered in a similar application**

10"  
10.4gph —

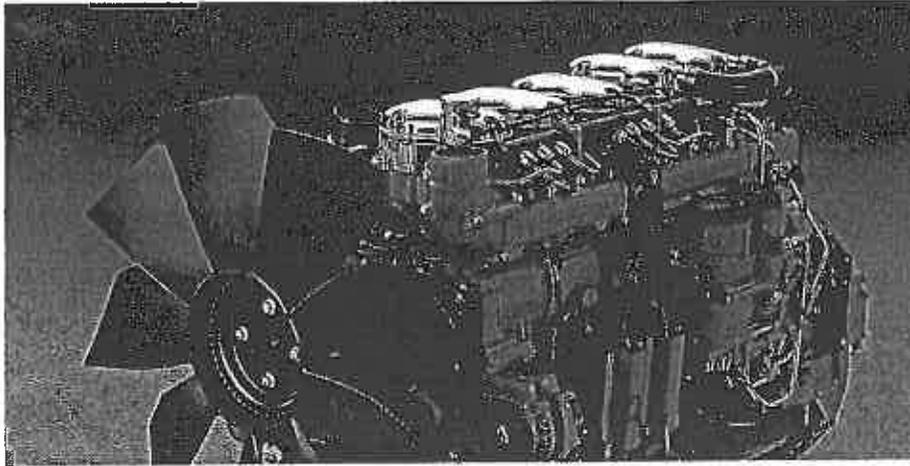
Top Apron: 250mm  
Bottom Apron: 100mm  
Feed Material: -500mm Limestone  
End Product: -120mm  
Production: 180 TPH Approx  
Engine Load: 50% Approx  
Diesel Consumption: 39.2 LPH Av.

**Conclusion:  
Average Fuel Saving = 18%**



# DC09 070A. 202 kW (275 hp)

US Tier 4i, EU Stage IIIB



The industrial engines from Scania are based on a robust design with a strength optimised cylinder block containing wet cylinder liners that can easily be exchanged. Individual cylinder heads with 4 valves per cylinder promotes reparability and fuel economy.

The engine is equipped with a Scania developed Engine Management System, EMS, in order to ensure the control of all aspects related to engine performance. The Injection system is Scania's XPI (Extra High Pressure Injection), a common rail system that in combination with SCR (Selective Catalytic Reduction) gives low exhaust emissions with good fuel economy and a high torque. The engine can be fitted with many accessories such as air cleaners, silencers, PTO:s and flywheels in order to suit a variety of installations.

	Rating	Engine speed (rpm)			
		1200	1500	1800	2100
Gross power (kW)	ICFN	195	202	202	202
Gross power (hp)	ICFN	265	275	275	275
Gross torque (Nm)	ICFN	1552	1286	1072	919
Spec fuel consumption, Full load (g/kWh)		193	194	204	223
Spec fuel consumption, 3/4 load (g/kWh)		193	197	209	234
Spec fuel consumption, 1/2 load (g/kWh)		198	206	223	257
Reductant consumption, Full load (g/kWh)		31	25	21	12
Heat rejection to cooling water (kW)		85	81	87	98

ICFN – Continuous service: Rated output available 1/1 h.  
Unlimited 1/year service time at a load factor of 100%

### Standard equipment

- Scania Engine Management System, EMS
- Extra high pressure fuel injection system, XPI
- Turbo charger
- Fuel filter and extra pre-filter with water separator
- Fuel heater
- Oil filter, full flow
- Centrifugal oil cleaner
- Oil cooler, integrated in block
- Oil filler, in valve cover
- Deep front oil sump
- Oil dipstick, in block
- Magnetic drain plug for oil draining
- Starter, 1-pole 5.5 kW
- Alternator, 1-pole 100A
- Flywheel, for use with friction clutch
- Silumin flywheel housing, SAE 1 flange
- Front mounted engine brackets
- SCR system
- Open crankcase ventilation
- Operator's manual

### Optional equipment

- Cooling package
- Puller and pusher fans
- Fan ring with sealing
- Hydraulic pump
- Air compressor
- AC compressor
- Side mounted PTO
- Front mounted PTO
- Exhaust connections
- Electrical base system
- Control and instrument panels
- Accelerator position sensor
- Engine heater
- Flywheels: SAE11.5", SAE14", DANA15/16", DANA17", flexplate, ZF-WG260
- Stiff rubber engine suspension
- Air cleaner
- Closed crankcase ventilation
- Studs in flywheel housing
- External thermostat for extra oil cooler
- Low coolant level reaction
- Variable idle speed setting
- Low oil sump
- Oil level sensor

This specification may be revised without notice.

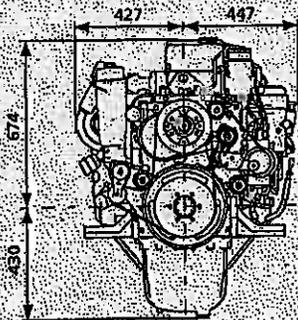
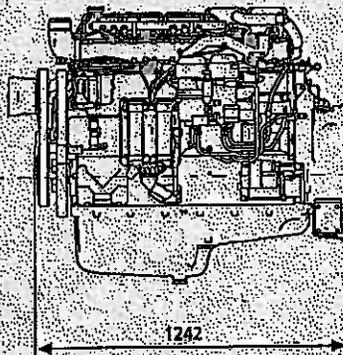


# DC09 070A. 202 kW (275 hp)

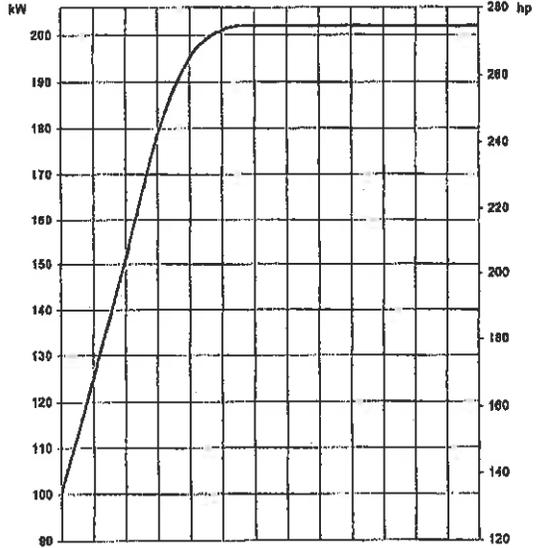
US Tier 4i, EU Stage IIIB

## Engine description

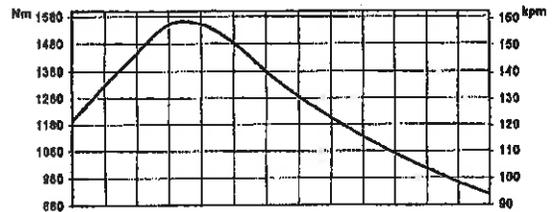
No of cylinders	5 in-line
Working principle	4-stroke
Firing order	1-2-4-5-3
Displacement	9.3 litres
Bore x stroke	130 x 140 mm
Compression ratio	16:1
Weight	950 kg (excl oil and coolant)
Piston speed at 1500 rpm	7.0 m/s
Piston speed at 1800 rpm	8.4 m/s
Camshaft	High position alloy steel
Pistons	Aluminium pistons
Connection rods	I-section press forgings of alloy steel
Crankshaft	Alloy steel with hardened and polished bearing surfaces
Oil capacity	32-38 dm <sup>3</sup>
Electrical system	1-pole 24V



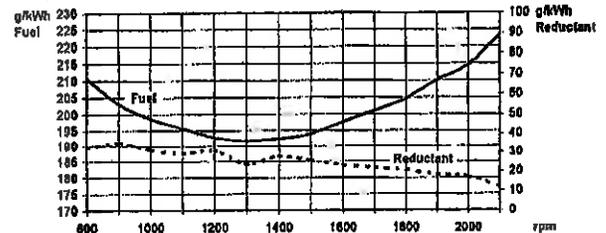
## Output



## Torque



## Spec fuel and reductant consumption



Test conditions: Air temperature +25°C, Barometric pressure 100 kPa (750 mmHg), Humidity 30%. Diesel fuel acc. to ACE R 24 Annex 6. Density of fuel 0.840 kg/lmt. Viscosity of fuel 3.0 cSt at 40°C. Energy value 42700 kJ/kg. Power test code ISO 7046. Power and fuel values +/-3%.

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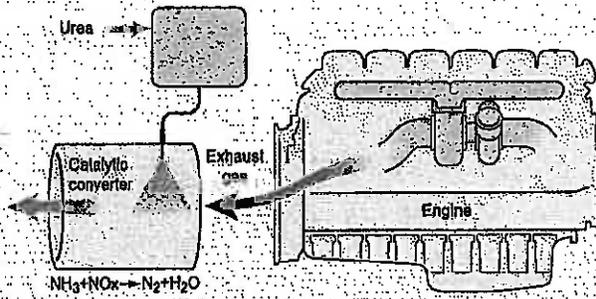
**SCANIA**  
Scania Engines

SE 151 87 Södertälje, Sweden  
Telephone +46 8 553 810 00  
Telefax +46 8 553 829 93  
www.scania.com  
engines@scania.com



## SCR system

US Tier 4i, EU Stage IIIB

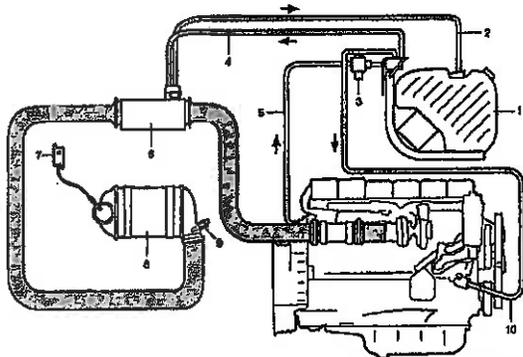


The principle for Scania SCR system

SCR (Selective Catalytic Reduction) technology is used on Scania's engines for Stage IIIB and Tier 4i to reduce the NO<sub>x</sub> content in the exhaust gases. A chemical process is started by injecting reductant, a urea and water mixture, into the exhaust gas stream. During injection the water evaporates and the urea breaks down to form ammonia. The ammonia then reacts with the nitrogen gases in the catalytic converter and forms harmless products such as nitrogen gas and water. Through the use of SCR the exhaust gases are purged of poisonous levels of NO<sub>x</sub> in the best possible way. Scania is making use of a system that is carefully developed and tested in our own laboratory.

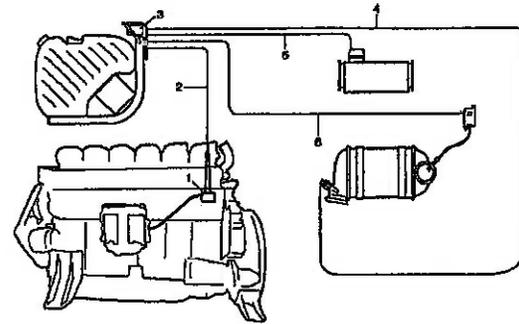
The reductant tank holds 38 or 60 litres and is heated by the engine's cooling system in order to avoid freezing of the urea solution, urea freezes at -11°C. The reductant tank and a pump module are delivered as a unit which is fitted to brackets for an easy installation. The Scania system contains all mechanical and electrical parts needed except from the exhaust piping which is to be adapted according to the customer's installation.

### Mechanical system



	Mechanical system	Standard	Optional
1	Reductant tank and pump module	38 l	60 l
2	Reductant fluid return line	2 m	3.5 m
3	Coolant valve	✓	-
4	Reductant pressure line	2 m	3.5 m
5	Coolant hose for tank and pump heating	-	-
6	Hydrolysis catalyst with reductant doser	✓	-
7	NO <sub>x</sub> sensor with control unit	✓	-
8	SCR catalyst	✓	-
9	Temperature sensor	✓	-
10	Coolant hose, return from tank and pump heating	-	-

### Electric system

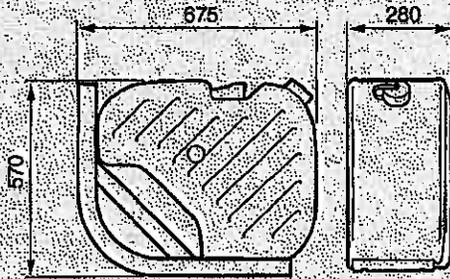


	Electric system	Standard	Optional
1	Customer interface, SCR system	✓	-
2	Pipe network between engine and SCR control unit	3 m	6 m
3	Electrical interface, SCR system	✓	-
4	Temperature sensor electrical cable	3 m	6 m
5	Reductant doser electrical cable	3 m	6 m
6	NO <sub>x</sub> sensor electrical cable	3 m	6 m

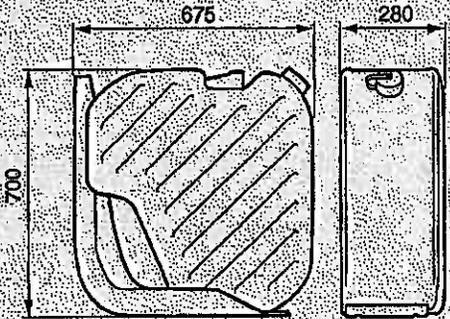
## SCR system

US Tier 4i, EU Stage IIIB

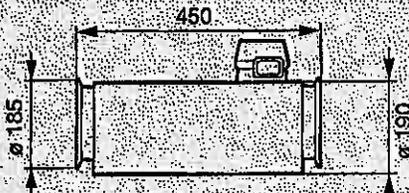
Reductant tank - 38 litres  
Total volume: 50 litres  
Filling volume: 38 litres



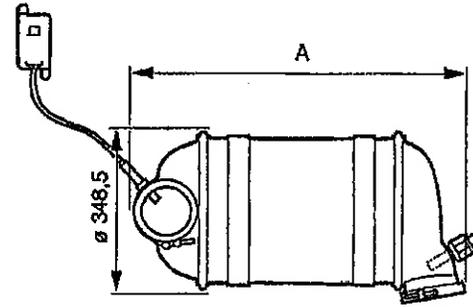
Reductant tank - 60 litres  
Total volume: 70 litres  
Filling volume: 60 litres



Hydrolysis catalyst  
with reductant doser

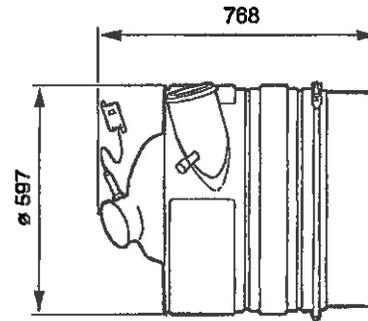


SCR catalyst



Engine	Power (kw)	Volume (litres)	Measure A (mm)
DC09	202-294	24	765
DC13	257-405	33	857
DC16	405-515	48	1060

SCR catalyst with silencer



Engine	Power (kw)	Volume (litres)
DC09	202-294	33
DC13	257-405	33
DC16	Not available	

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This specification may be revised without notice



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