

CARETTA MINERALS, LLC

**CARETTA COAL PREPARATION PLANT FACILITY
ID NO. 047-00145**

GENERATOR APPLICATION

DIVISION OF AIR QUALITY

Submittal Date: February 2015

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WVDAQ Registration Application

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*****Information requested by Reviewer due to recent facility modification**



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

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

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

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

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** – 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

NAME OF APPLICANT (AS REGISTERED WITH THE WV SECRETARY OF STATE'S OFFICE):

CARETTA MINERALS, LLC

2. FEDERAL EMPLOYER ID NO. (FEIN):
 22-1767560

3. APPLICANT'S MAILING ADDRESS:

**PO BOX 309
 407 PROSPERITY ROAD
 PROSPERITY, WV 25909**

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

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.):

Permit generator to be used for light plants at refuse area until permanent lighting can be installed

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

1222

<p>9A. DAQ PLANT I.D. NO. (FOR AN EXISTING FACILITY):</p> <p>047-00145</p>	<p>10A. LIST ALL CURRENT 45CSR13 AND 45CSR30 (TITLE V) PERMIT NUMBERS ASSOCIATED WITH THIS PROCESS (FOR EXISTING FACILITY ONLY):</p> <p>G10-D153A</p>
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PRIMARY OPERATING SITE INFORMATION

<p>11A. NAME OF PRIMARY OPERATING SITE:</p> <p>Caretta Coal Preparation Plant Facility</p>	<p>12A. MAILING ADDRESS OF PRIMARY OPERATING SITE:</p> <hr/> <hr/>
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<p>13A. DOES THE APPLICANT OWN, LEASE, HAVE AN OPTION TO BUY, OR OTHERWISE HAVE CONTROL OF THE <i>PROPOSED SITE</i>?</p> <p><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>⇒ IF YES, PLEASE EXPLAIN: Owner/Operator</p> <p>⇒ IF NO, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.</p>
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<p>14A. ⇒ 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;</p> <p>⇒ FOR CONSTRUCTION OR RELOCATION PERMITS, PLEASE PROVIDE DIRECTIONS TO <i>THE PROPOSED NEW SITE LOCATION</i> FROM THE NEAREST STATE ROAD.</p> <p>From Charleston, take I77 North toward Beckley – take exit 42 Rt. 16 Mabscott toward Route 97W Sophia-Mullens – straight onto WV121 Coalfields Expway – right onto Slab Fork Rd – turn right onto WV97 Saulsville Mtn Rd, right onto Bearhole Road Route 97 – left onto WV10 App Hwy, take 1st left onto WV10 – turn left onto WV 16 S/McDowell St., continue on WV16S – turn right onto US52/WV16 Coney Island Road, continue on WV16 – left onto WV16 Tennessee Avenue - Arrive Caretta</p> <hr/> <p>INCLUDE A MAP AS ATTACHMENT F.</p>
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<p>15A. NEAREST CITY OR TOWN:</p> <p>Caretta</p>	<p>16A. COUNTY:</p> <p>McDowell</p>
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<p>17A. UTM NORTHING (KM):</p> <p>4131.6812</p>	<p>18A. UTM EASTING (KM):</p> <p>439.4629</p>	<p>19A. UTM ZONE:</p> <p>17</p>
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1ST ALTERNATE OPERATING SITE INFORMATION (G20-B, G40-C, G50-C only)

11B. NAME OF PRIMARY OPERATING SITE: _____		12B. MAILING ADDRESS OF PRIMARY OPERATING SITE: _____	
13B. DOES THE APPLICANT OWN, LEASE, HAVE AN OPTION TO BUY, OR OTHERWISE HAVE CONTROL OF THE <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.			
14B. ⇨ 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 .			
15B. NEAREST CITY OR TOWN:		16B. COUNTY:	
17B. UTM NORTHING (KM):		18B. UTM EASTING (KM):	19B. UTM ZONE:

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

11C. NAME OF PRIMARY OPERATING SITE: _____	12C. MAILING ADDRESS OF PRIMARY OPERATING SITE: _____	
<p>13C. DOES THE APPLICANT OWN, LEASE, HAVE AN OPTION TO BUY, OR OTHERWISE HAVE CONTROL OF THE <i>PROPOSED SITE</i>?</p> <p><input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>⇨ IF YES, PLEASE EXPLAIN: _____</p> <p>_____</p> <p>⇨ IF NO, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.</p>		
<p>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;</p> <p>⇨ FOR CONSTRUCTION OR RELOCATION PERMITS, PLEASE PROVIDE DIRECTIONS TO <i>THE PROPOSED NEW SITE LOCATION</i> FROM THE NEAREST STATE ROAD.</p> <p>_____</p> <p>_____</p> <p>_____</p> <p>INCLUDE A MAP AS ATTACHMENT F.</p>		
15C. NEAREST CITY OR TOWN:	16C. COUNTY:	
17C. UTM NORTHING (KM):	18C. UTM EASTING (KM):	19C. UTM ZONE:
<p>20. PROVIDE THE DATE OF ANTICIPATED INSTALLATION OR CHANGE: June 1, 2015</p> <p>⇨ IF THIS IS AN AFTER-THE-FACT PERMIT APPLICATION, PROVIDE THE DATE UPON WHICH THE PROPOSED CHANGE DID HAPPEN: ____/____/____</p>		<p>21. DATE OF ANTICIPATED START-UP IF REGISTRATION IS GRANTED:</p> <p align="center">June 1, 2015</p>
<p>22. PROVIDE MAXIMUM PROJECTED OPERATING SCHEDULE OF ACTIVITY/ ACTIVITIES OUTLINED IN THIS APPLICATION:</p> <p>HOURS PER DAY 24 DAYS PER WEEK 7 WEEKS PER YEAR 52 PERCENTAGE OF OPERATION 100%</p>		

CRITERIA POLLUTANTS

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

	214	kW
Diesel Fuel Engine	324	hp
Max. Hours of Operation (12 hrs/day, 5 days/week, 26 weeks/year)	1560	hrs/year
Heating Value for diesel	128700	Btu/gal

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	10.0440	7.834
CO	AP42	0.00668	0.95	D	2.1643	1.688
SOx	AP42	0.00205	0.29	D	0.6642	0.518
PM/PM10	AP42	0.00220	0.31	D	0.7128	0.556
TOC	AP42	0.00247	0.35	D	0.8003	0.624

HAZARDOUS AIR POLLUTANTS

AP-42 5th Edition Section 3.3 Gasoline and Diesel Industrial Engines (10/96) - Table 3.3-2
45CSR30 Table 45-30A Hazardous Air Pollutants

Diesel Fuel Engine	324	hp		
Maximum Hours of Operation (12 hrs/day, 5 days/week, 26 weeks/year)			1560	hours/year
Maximum diesel usage, based on EPA WebFIRE/AP-42 3.4-1 assumptions on diesel			19000	Btu/lb
			7.1	lb/gal
Heating Value for diesel			134900	BTU/US gal
Maximum diesel usage at 1800 rpm			13.9	gal/hour

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

CAS NO.		Emission Factor (lb/MMBtu)	Rating	lb/hour	TPY
71-43-2	Benzene	0.000933	E	0.0017	0.001365
108-88-3	Toluene	0.000409	E	0.0008	0.000598
	Xylenes	0.000285	E	0.0005	0.000417
	1,3-Butadiene	0.0000391	E	7E-05	5.72E-05
50-00-0	Formaldehyde	0.00118	E	0.0022	0.001726
	Acetaldehyde	0.000767	E	0.0014	0.001122
	Acrolein	0.0000925	E	0.0002	0.000135
91-20-3	Naphthalene	0.0000848	E	0.0002	0.000124
	Burning diesel fuel:		Total HAPs	0.0071	0.005544
				lb/hour	TPY

Legal Advertisement

**AIR QUALITY PERMIT NOTICE
Notice of Application**

Notice is given that Caretta Minerals, LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a General Permit Generator Application for a coal preparation plant facility located near Caretta in McDowell County, West Virginia. The coordinates for the facility are: latitude 37.3316667 and longitude -81.683333.

The applicant estimates the potential to discharge the following Criteria Air Pollutants will be: NOx 7.834 tons per year, CO 1.688 tons per year, VOC 0.624 tons per year, SO2 0.518 tons per year, PM10 0.556 tons per year. The applicant estimates the potential to discharge the following Hazardous Air Pollutants will be: Benzene 0.001365 tons per year, Butadiene 5.72E-05, Toluene 0.000598 tons per year, Xylenes 0.000417 tons per year, Acetokdehyde 0.001122 tons per year, Formaldehyde 0.001726 tons per year, Acrolein 0.000135 tons per year, Naphthalene 0.000124 tons per year.

Construction and 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 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1227, during normal business hours.

Dated this the 25th day of March 2015

By: Caretta Minerals, LLC
Sandeep Agarwal
Manager
407 Prosperity Road
Prosperity, WV 25909

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

ISSUED TO:
**CARETTA MINERALS, LLC
407 PROSPERITY RD
PROSPERITY, WV 25909-0000**

BUSINESS REGISTRATION ACCOUNT NUMBER: 2234-5994

This certificate is issued on: **07/20/2011**

*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.

ENGINE DATA SHEET

Source Identification Number ¹		Gen Set					
Engine Manufacturer and Model		Cummins					
Manufacturer's Rated bhp/rpm		324					
Source Status ²		NS					
Date Installed/Modified/Removed (Month/Year) ³		2015					
Engine Manufactured/Reconstruction Date ⁴		2013					
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart III? (Yes or No) ⁵		Yes					
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart JJJ? (Yes or No) ⁶							
Engine, Fuel and Combustion Data	Engine Type ⁷		LB4S				
	APCD Type ⁸		A/F				
	Fuel Type ⁹		#2FO				
	H ₂ S (gr/100 scf)						
	Operating bhp/rpm		1800				
	BSFC (Btu/bhp-hr)		128700				
	Fuel throughput (ft ³ /hr)		13.9 GAL				
	Fuel throughput (MMft ³ /yr)		34750				
	Operation (hrs/yr)		1560				
Reference ¹⁰	Potential Emissions ¹¹	lbs/hr	tons/yr			lbs/hr	tons/yr
	NO _x	10.044	7.834				
	CO	12.1643	1.688				
	VOC	0.3952	0.624				
	SO ₂	0.6642	0.518				
	PM ₁₀	0.7128	0.556				
	Formaldehyde	0.00221	0.001726				

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 III. 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 TM	OT	Other _____	(please list)

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

STORAGE TANK DATA SHEET

Source ID # ¹	Status ²	Content ³	Volume ⁴	Dia ⁵	Throughput ⁶	Orientation ⁷	Liquid Height ⁸
T1	NEW	#2FO	2,000	5'	70,000	HORZ	4'

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

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

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

<u>EMISSION SUMMARY SHEET FOR CRITERIA POLLUTANTS</u>										
						Registration Number <small>(Agency Use)</small> 047-00145				
	Potential Emissions (lbs/hr)					Potential Emissions (tons/yr)				
Source ID No.	NO_x	CO	VOC	SO₂	PM₁₀	NO_x	CO	VOC	SO₂	PM₁₀
GEN1	10.044	2.1643	0.8003	0.6642	0.7128	7.834	1.688	0.624	0.518	0.556
Total	10.044	2.1643	0.8003	0.6642	0.7128	7.834	1.688	0.624	0.518	0.556

<u>EMISSION SUMMARY SHEET FOR HAZARDOUS/TOXIC POLLUTANTS</u>												
							Registration Number <small>(Agency Use)</small> 047-00145					
	Potential Emissions (lbs/hr)						Potential Emissions (tons/yr)					
Source ID No.	Benzene	Butadiene	Toluene	Xylenes	Acetadehyde	Formaldehyde	Benzene	Butadiene	Toluene	Xylenes	Acetadehyde	Formaldehyde
GEN1	0.00175	7.3E-05	0.00077	0.00053	0.00144	0.00221	0.001365	5.72E-05	0.000598	0.000417	0.001122	0.001726
Source ID No.	Acrolein	Naphthalene					Acrolein	Naphthalene				
GEN1	0.00017	0.00016					0.000135	0.000124				
Total HAP	0.00711 LB/HOUR		0.005544 TPY									

*312 Justice Avenue
Logan, WV 25601
Phone (304) 752-8320
Fax (304) 752-7488*

March 18, 2015

**Mr. William F. Durham, Director
Division of Air Quality
601 57th Street SE
Charleston, WV 25304**

**RE: Caretta Minerals, LLC
General Permit Modification
G10-D153 047-00145**

Dear Mr. Durham:

On behalf of Caretta Minerals, we are submitting the enclosed Generator Application for the above-mentioned facility. The submittal fee of \$1,500 and additional copies are also being submitted.

The application addresses the addition of a generator to be used temporarily on the refuse area until permanent lighting can be installed. The application was previously discussed with Dan Roberts who recently reviewed a plant modification for Caretta Minerals.

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