



Id. No. 109-00039 Reg. G30-D198
Company Enervest Operating, LLC
Facility Laurel Branch Region 5
Initials JEM

9/18/2015

WEST VIRGINIA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DIVISION OF AIR QUALITY
601 57th Street, SE
Charleston, WV 25304

Subject: EnerVest Operating Compression Downsizing Project Laurel Branch G30 Permit application (109-00039).

Dear Sir or Madame,

We are removing the Ajax DPC-360 rated at 346HP currently at this facility and placing a Caterpillar G3306 rated at 145HP at this facility. This facility had determination in the past but due to an increase in emissions this facility will require a permit now. If you have any additional questions please feel free to call me at 304-414-8171 or email me at mdearing@enervest.net.

Sincerely,

Michael Dearing
Air Emissions Supervisor

Entire Document
NON-CONFIDENTIAL



ENERVEST

Laurel Branch Compressor Station Permit Application



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

9 CONSTRUCTION **9 MODIFICATION** 9 RELOCATION 9 CLASS I ADMINISTRATIVE UPDATE
 9 CLASS II ADMINISTRATIVE UPDATE

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

- | | |
|---|--|
| 9 G10-D – Coal Preparation and Handling | 9 G40-C – Nonmetallic Minerals Processing |
| 9 G20-B – Hot Mix Asphalt | 9 G50-B – Concrete Batch |
| 9 G30-D – Natural Gas Compressor Stations | 9 G60-C – Class II Emergency Generator |
| 9 G33-A – Spark Ignition Internal Combustion Engines | 9 G65-C – Class I Emergency Generator |
| 9 G35-A – Natural Gas Compressor Stations (Flare/Glycol Dehydration Unit) | 9 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): EnerVest Operating, LLC		2. Federal Employer ID No. (FEIN): . 76-0460809	
3. Applicant's mailing address: 300 Capitol Street, Suite 200, Charleston, WV, 25301		4. Applicant's physical address: _____ _____	
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? 9 YES 9 NO			
<input type="checkbox"/> 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.			
<input type="checkbox"/> 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.): natural gas compressor	8a. Standard Industrial Classification Classification (SIC) code: 1311	AND	8b. North American Industry System (NAICS) code: 211111
9. DAQ Plant ID No. (for existing facilities only): 109 - 00039	10. List all current 45CSR13 and other General Permit numbers associated with this process (for existing facilities only): _____ _____		

A: PRIMARY OPERATING SITE INFORMATION

<p>11A. Facility name of primary operating site:</p> <p>Laurel Branch Compressor Station</p> <p>_____</p>	<p>12A. Address of primary operating site:</p> <p>Mailing: 300 Capitol Street, Suite 200, Charleston, WV, 25301</p> <p>Physical: _____</p>	
<p>13A. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? 9 YES 9 NO</p> <p>— IF YES, please explain: <u> Enervest has lease agreement with the land owner </u></p> <p>_____</p> <p>— IF NO, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.</p>		
<p>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;</p> <p>— 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.</p> <p>Get on Ravencliff Rd and stay on the road for 0.3 Miles Turn Left onto Laurel Creek Rd. and stay on the road for 1.1 miles</p> <p>_____</p>		
<p>15A. Nearest city or town: Sabine</p>	<p>16A. County: Wyoming</p>	<p>17A. UTM Coordinates:</p> <p>Northing (KM): <u> 4556.028 </u></p> <p>Easting (KM): <u> 4169.279 </u></p> <p>Zone: <u> 17S </u></p>
<p>18A. Briefly describe the proposed new operation or change (s) to the facility:</p> <p>Swapping compressors</p>		<p>19A. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits):</p> <p>Latitude: _____</p> <p>Longitude: _____</p>

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

<p>11B. Name of 1st alternate operating site:</p> <p>_____</p> <p>_____</p>	<p>12B. Address of 1st alternate operating site:</p> <p>Mailing: _____ Physical: _____</p> <p>_____</p>
<p>13B. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? 9 YES 9 NO</p> <p>— IF YES, please explain: _____</p> <p>_____</p> <p>— IF NO, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.</p>	

14B. <input type="checkbox"/> For Modifications or Administrative Updates at an existing facility, please provide directions to the present location of the facility from the nearest state road; <input type="checkbox"/> 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 . <hr/> <hr/>		
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 2 nd alternate operating site: _____	12C. Address of 2 nd alternate operating site: Mailing: _____ Physical: _____	
13C. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? 9 YES 9 NO <input type="checkbox"/> IF YES, please explain: _____ _____ <input type="checkbox"/> IF NO, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.		
14C. <input type="checkbox"/> For Modifications or Administrative Updates at an existing facility, please provide directions to the present location of the facility from the nearest state road; <input type="checkbox"/> 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 . <hr/> <hr/>		
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: _____

<p>20. Provide the date of anticipated installation or change:</p> <p style="text-align: center;">___ 9 ___ / ___ 30 ___ / ___ 15 ___</p> <p><input type="checkbox"/> If this is an After-The-Fact permit application, provide the date upon which the proposed change did happen: :</p> <p style="text-align: center;">___ / ___ / ___</p>	<p>21. Date of anticipated Start-up if registration is granted:</p> <p style="text-align: center;">___ 9 ___ / ___ 30 ___ / ___ 15 ___</p>
<p>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).</p> <p>Hours per day ___ 24 ___ Days per week ___ 7 ___ Weeks per year ___ 52 ___ Percentage of operation ___ 100 ___</p>	

SECTION III. ATTACHMENTS AND SUPPORTING DOCUMENTS

<p>23. Include a check payable to WVDEP – Division of Air Quality with the appropriate application fee (per 45CSR22 and 45CSR13).</p>
<p>24. Include a Table of Contents as the first page of your application package.</p>
<p>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.</p>
<p>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.</p> <ul style="list-style-type: none"> 9 ATTACHMENT A : CURRENT BUSINESS CERTIFICATE 9 ATTACHMENT B: PROCESS DESCRIPTION 9 ATTACHMENT C: DESCRIPTION OF FUGITIVE EMISSIONS 9 ATTACHMENT D: PROCESS FLOW DIAGRAM 9 ATTACHMENT E: PLOT PLAN 9 ATTACHMENT F: AREA MAP 9 ATTACHMENT G: EQUIPMENT DATA SHEETS AND REGISTRATION SECTION APPLICABILITY FORM 9 ATTACHMENT H: AIR POLLUTION CONTROL DEVICE SHEETS 9 ATTACHMENT I: EMISSIONS CALCULATIONS 9 ATTACHMENT J: CLASS I LEGAL ADVERTISEMENT 9 ATTACHMENT K: ELECTRONIC SUBMITTAL 9 ATTACHMENT L: GENERAL PERMIT REGISTRATION APPLICATION FEE 9 ATTACHMENT M: SITING CRITERIA WAIVER 9 ATTACHMENT N: MATERIAL SAFETY DATA SHEETS (MSDS) 9 ATTACHMENT O: EMISSIONS SUMMARY SHEETS 9 OTHER SUPPORTING DOCUMENTATION NOT DESCRIBED ABOVE (Equipment Drawings, Aggregation Discussion, etc.) <p>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.</p>

SECTION IV. CERTIFICATION OF INFORMATION

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

FOR A CORPORATION (domestic or foreign)

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

FOR A PARTNERSHIP

I certify that I am a General Partner

FOR A LIMITED LIABILITY COMPANY

I certify that I am a General Partner or General Manager

FOR AN ASSOCIATION

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

FOR A JOINT VENTURE

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

FOR A SOLE PROPRIETORSHIP

I certify that I am the Owner and Proprietor

I hereby certify that (please print or type) James McKinney 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 _____
(please use blue ink)



Responsible Official

9/16/15
Date

Name & Title Sr. Vice President and General Manager EVOC
(please print or type)

Signature _____
(please use blue ink)

Authorized Representative (if applicable)

Date

Applicant's Name _____

Phone & Fax _____

Phone

Fax

Email _____

Attachment A - Current Business Certificate

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

**ISSUED TO:
ENERVEST OPERATING LLC EASTERN DIVISION
300 CAPITOL ST 200
CHARLESTON, WV 25301-1794**

BUSINESS REGISTRATION ACCOUNT NUMBER: 1051-6031

This certificate is issued on: 05/27/2011

*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.**

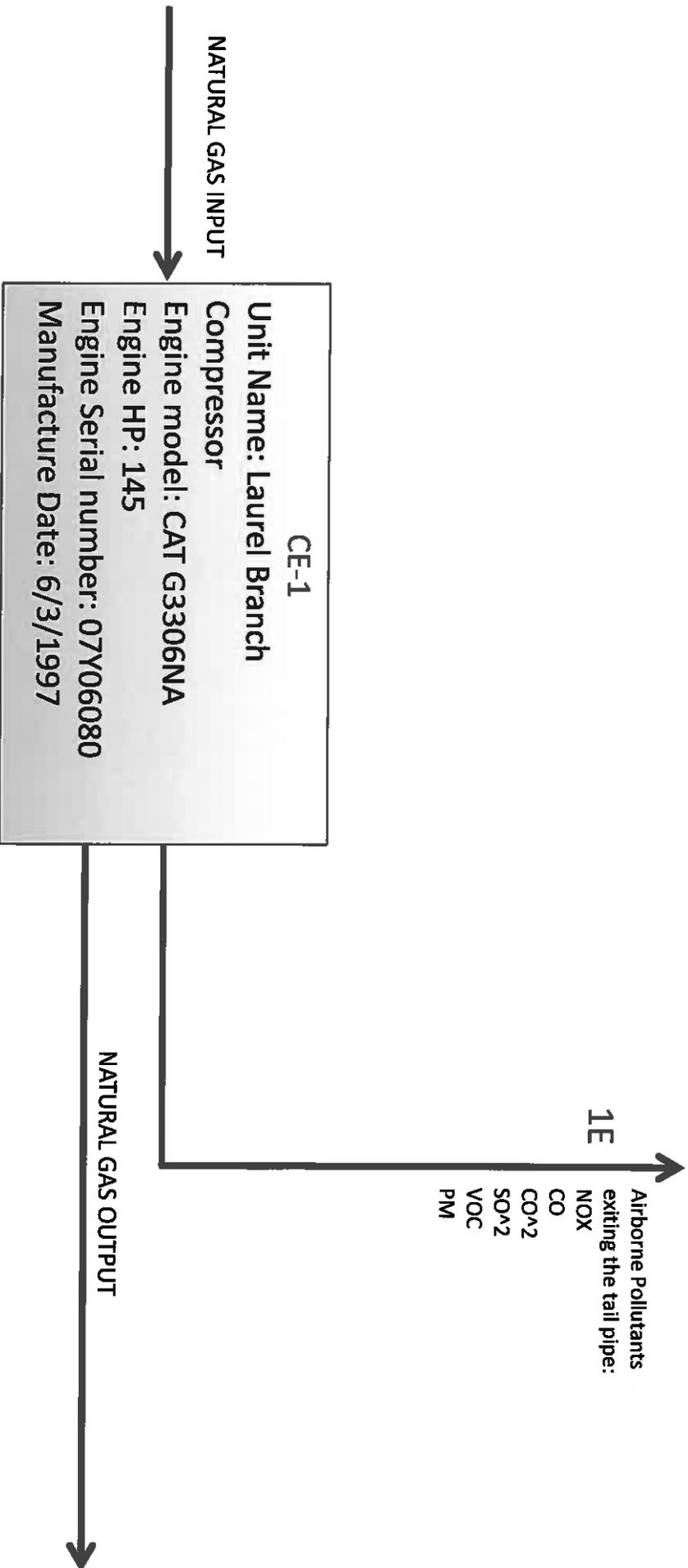
Attachment B - Process Description

Natural Gas is produced from Coalbed Methane wells as well as conventional wells where is then transported via pipeline to the Laurel Branch compressor station. Natural gas is then combusted in the engine and natural gas is compressed so that EnerVest may produce more efficiently.

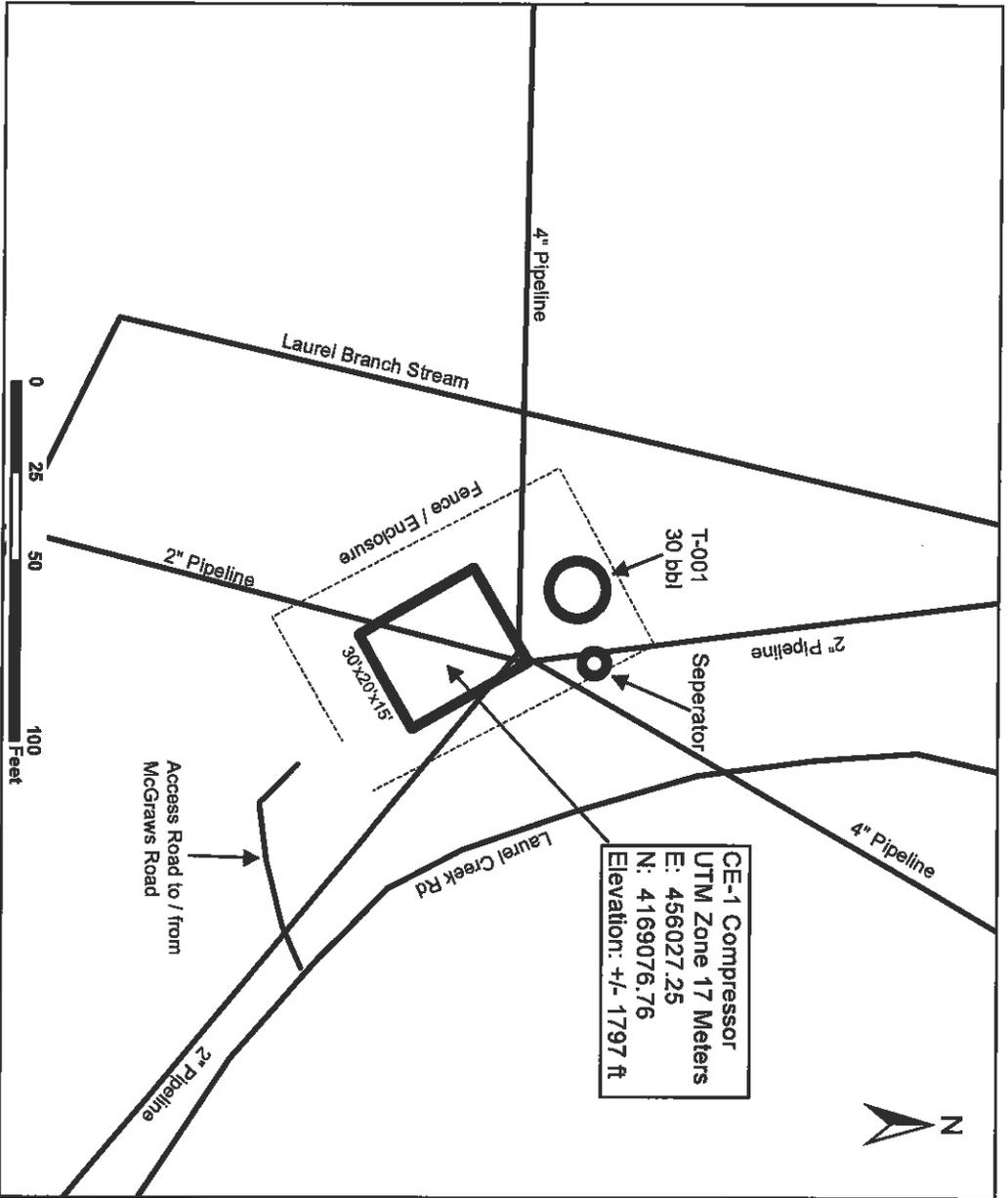
Attachment C – Description of Fugitive Emissions

Fugitive emissions occur at the threaded and flanged connections of the piping on the site as well on the seals and connections on the compressor.

Attachment D – Process Flow Diagram



Attachment E – Plot Plan



EnerVest Operating, LLC

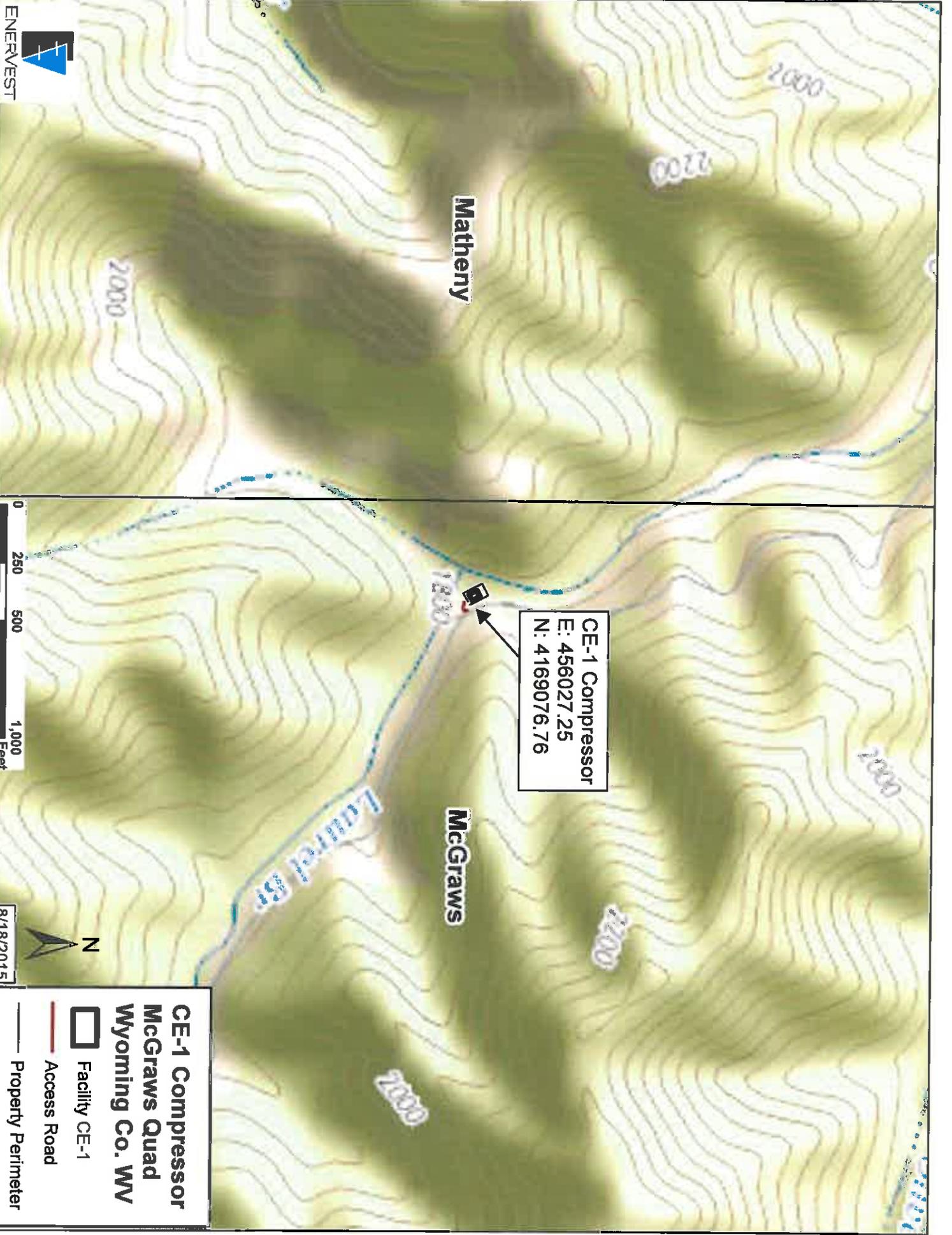
CE-1 Compressor
 Wyoming Co. WV
 Attachment "E"

Base Elevation: +/- 1797 ft
 Scale: 1in = 50 ft
 Map Date: 8/18/2015



ENERVEST

Attachment F – Area Map



ENERVEST



Matheny

CE-1 Compressor
E: 456027.25
N: 4169076.76

McGraws

Luttrell St



8/18/2015

**CE-1 Compressor
McGraws Quad
Wyoming Co., WV**

-  Facility CE-1
-  Access Road
-  Property Perimeter

Attachment G – Affected Source Sheets

G30-D REGISTRATION APPLICATION FORMS

NATURAL GAS COMPRESSOR/GENERATOR ENGINE DATA SHEET

Source Identification Number ¹		CE-1					
Engine Manufacturer and Model		Caterpillar G3306NA					
Manufacturer's Rated bhp/rpm		145 HP / 1800RPM					
Source Status ²							
Date Installed/Modified/Removed ³		9/20/15					
Engine Manufactured/Reconstruction Date ⁴		8/28/1995					
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart JJJJ? (Yes or No) ⁵		yes					
Engine, Fuel and Combustion Data	Engine Type ⁶	RB4S					
	APCD Type ⁷	NONE					
	Fuel Type ⁸	RG					
	H ₂ S (gr/100 scf)	0					
	Operating bhp/rpm	145 / 1800					
	BSFC (Btu/bhp-hr)	7543					
	Fuel throughput (ft ³ /hr)	1093					
	Fuel throughput (MMft ³ /yr)	9.58					
	Operation (hrs/yr)	8760					
Reference ⁹	Potential Emissions ¹⁰	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
MD	NO _x	7.707	33.758				
MD	CO	0.448	1.960				
MD	VOC	0.051	0.224				
AP-42	SO ₂	0.001	0.003				
AP-42	PM ₁₀	0.010	0.046				
MD	Formaldehyde	0.074	0.322				

1. Enter the appropriate Source Identification Number for each natural gas-fueled reciprocating internal combustion compressor/generator engine located at the compressor station. Multiple compressor engines should be designated CE-1, CE-2, CE-3 etc. Generator engines should be designated GE-1, GE-2, GE-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 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.

6. 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		

7. 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

8. Enter the Fuel Type using the following codes:

PQ	Pipeline Quality Natural Gas	RG	Raw Natural Gas
----	------------------------------	----	-----------------

9. 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)

10. 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*.

NATURAL GAS FIRED BOILER/LINE HEATER DATA SHEET

Source ID # ¹	Status ²	Design Heat Input (mmBtu/hr) ³	Hours of Operation (hrs/yr) ⁴	Fuel Heating Value (Btu/scf) ⁵	

1. Enter the appropriate Source Identification Numbers (Source ID #) for each boiler or line heater located at the compressor station. Boilers should be designated BLR-1, BLR-2, BLR-3, etc. Heaters or Line Heaters should be designated HTR-1, HTR-2, HTR-3, etc. Enter glycol dehydration unit Reboiler Vent data on the *Glycol Dehydration Unit Data Sheet*.
2. Enter the Status for each boiler or line heater using the following:
 EXIST Existing Equipment
 REM Equipment Removed
 NEW Installation of New Equipment
3. Enter boiler or line heater design heat input in mmBtu/hr.
4. Enter the annual hours of operation in hours/year for each boiler or line heater.
5. Enter the fuel heating value in Btu/standard cubic foot.

STORAGE TANK DATA SHEET

Source ID # ¹	Status ²	Content ³	Volume ⁴	Dia ⁵	Throughput ⁶	Orientation ⁷	Liquid Height ⁸
T01	exist	Pipeline liquids / lube oils	1260	7.25		Vert	2'

1. Enter the appropriate Source Identification Numbers (Source ID #) for each storage tank located at the compressor station. Tanks should be designated T01, T02, T03, etc.
2. Enter storage tank Status using the following:
 EXIST Existing Equipment
 REM Equipment Removed
 NEW Installation of New Equipment
3. Enter storage tank content such as condensate, pipeline liquids, glycol (DEG or TEG), lube oil, etc.
4. Enter storage tank volume in gallons.
5. Enter storage tank diameter in feet.
6. Enter storage tank throughput in gallons per year.
7. Enter storage tank orientation using the following:
 VERT Vertical Tank
 HORZ Horizontal Tank
8. Enter storage tank average liquid height in feet.

Attachment I - Emissions Calculations

Rich Burn Engines 4 Stroke AP 42 Table 3.2-1

Emissions Unit ID:	Laurel Branch C5	BHP	145	BTU Content of Gas:	1000
Fuel Usage in MMBTU/hr:	1.094	Fuel Consumption BTU/BHP-hr	7543	Date of manufacture:	6/3/1997
Make:	Caterpillar	Model:	G3306NA	Serial number:	07Y06080
Pollutants		Emission Factor	lbs./hr	Tons Year	G/bhp-hr
SOX ton/yr		0.000588	0.001	0.003	0.002
PM10 (filterable)		0.009500	0.010	0.046	0.033
PM Condensable		0.009910	0.011	0.047	0.034
Calculations		EF	MMBTU x EF = lbs/hr	(lbs/hr)/2000	(lbs-hr*453.592)/BPH

Emissions Calculator Based on Spec sheet Data @ 100% Load

Pollutant	Unit BHP	Emissions g/BHP-hr	Grams Per hour	lbs-hr	Tons/yr
NOX	145	24.11	3496.0	7.707	33.758
CO2	145	492	71340.0	157.278	688.876
VOC	145	0.16	23.2	0.051	0.224
CO	145	1.4	203.0	0.448	1.960
Formaldehyde (H2CO)	145	0.23	33.4	0.074	0.322
Calculations			(BHP*G/HP-hr)*8760	g-hr * 0.00220462	lbs-hr*8760/2000

Fuel Usage Calculator

Rated BHP	BTU/BHP-Hr	MMBTU/ Hr	BTU Content:	Total BTU/Hr.	Total BTU Year
145	7543	1.094	1000	1093735	9581118600
		(Bhp x Btu/Bhp-hr)/1,000,000		Bhp x Btu/Bhp-hr	Tbtu/Bhp-hr x 8760
MMBTU/hr	MCF/HOUR	SCF / HOUR	SCF/YR	MCF/YEAR	MMSCF/YR
1.093735	1.093735	1093.735	9581118.6	9581.1186	9.5811186
	SCF-HR/1000	Tbtu HR/ Btu Content	SCF-HR*8760	SCF-YR/1000	SCF-YR/1,000,000

TANKS 4.0.9d
Emissions Report - Summary Format
Tank Identification and Physical Characteristics

Identification

User Identification: T00111
 City: Charleston
 State: West Virginia
 Company: Enervest Operating
 Type of Tank: Vertical Fixed Roof Tank
 Description: Stop tank

Tank Dimensions

Shell Height (ft): 5.00
 Diameter (ft): 7.25
 Liquid Height (ft) : 4.40
 Avg. Liquid Height (ft): 1.00
 Volume (gallons): 1,358.79
 Turnovers: 1.00
 Net Throughput(gal/yr): 1,358.79
 Is Tank Heated (y/n): N

Paint Characteristics

Shell Color/Shade: White/White
 Shell Condition: Good
 Roof Color/Shade: White/White
 Roof Condition: Good

Roof Characteristics

Type: Dome
 Height (ft) 0.50
 Radius (ft) (Dome Roof) 7.25

Breather Vent Settings

Vacuum Settings (psig): -0.03
 Pressure Settings (psig) 0.03

Meteorological Data used in Emissions Calculations: Huntington, West Virginia (Avg Atmospheric Pressure = 14.33 psia)

TANKS 4.0.9d
Emissions Report - Summary Format
Liquid Contents of Storage Tank

T00111 - Vertical Fixed Roof Tank
Charleston, West Virginia

Mixture/Component	Daily Liquid Surf. Temperature (deg F)			Liquid Bulk Temp (deg F)	Vapor Pressure (psia)			Vapor Mol. Weight	Liquid Mass Fract.	Vapor Mass Fract.	Mol. Weight	Basis for Vapor Pressure Calculations
	Month	Avg.	Min.		Max.	Avg.	Min.					
Crude oil (RVP 5)	All	56.53	51.44	61.62	54.87	2.6870	2.4256	2.9708	50.0000		207.00	Option 4: RVP=5

TANKS 4.0.9d
Emissions Report - Summary Format
Individual Tank Emission Totals

Emissions Report for: Annual

T00111 - Vertical Fixed Roof Tank
Charleston, West Virginia

Components	Losses(lbs)		Total Emissions
	Working Loss	Breathing Loss	
Crude oil (RVP 5)	3.26	78.55	81.81

Attachment L - General Permit Registration Application Fee

**AFFIDAVIT OF PUBLICATION
THE WYOMING COUNTY REPORT
WYOMING COUNTY, WEST VIRGINIA**

COPY OF PUBLICATION

STATE OF WEST VIRGINIA
COUNTY OF WYOMING, to wit:

I, Tara Meyer, of The Wyoming County Report, a weekly zoned edition newspaper published in Wyoming County, West Virginia, do Certify that the notice attached hereto under the caption:

AIR QUALITY PERMIT NOTICE /
NOTICE OF APPLICATION
(Description of Notice)

was published once a week for oen successive week on the following day: August 31, 2015.

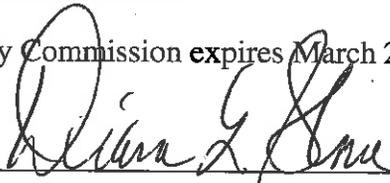
Publication Fee \$38.70

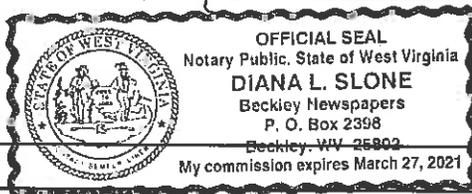
Signed:



Taken, subscribed and sworn before me this
31st day of August, 2015

My Commission expires March 27, 2021.





**AIR QUALITY
PERMIT NOTICE
Notice of Application**

Notice is given that EnerVest Operating, LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a General Permit Registration for a Natural Gas Compressor located on Laurel Creek Road, near Sabine, in Wyoming County, West Virginia. The latitude and longitude coordinates are: Latitude: 37.669641 Longitude: -81.4986605.

The applicant estimates the potential to discharge the following Regulated Air Pollutants will be: PM (0.047 TON/YR), PM10 (0.046 TON/YR), VOCS (0.224 TON/YR), CO (1.960 TON/YR), NOx (33.758 TON/YR), SO2 (0.003 TON/YR), and HAPS (0.322 TON/YR).

Startup of operation is planned to begin on or about the 30th day of September, 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 18th day of August, 2015.

By: EnerVest Operating, LLC.
James McKinney
Senior Vice President
and General Manager
EVOC
300 Capitol Street,
Suite 200
Charleston, WV 25301
8-31-WCR-1; LG 56