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November 23, 2015

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

**Re: Equitrans, LP – Copley Run Compressor Station  
Facility ID No: 041-00009  
Application for Class II General Permit G60-C**

Dear Mr. Durham,

Equitrans, LP (Equitrans) is hereby submitting an application for a Class II General Permit # G60-C at the existing Copley Run Compressor Station (Copley) located near Weston in Lewis County, West Virginia. Copley is a natural gas transmission facility that currently operates under Title V Permit #R30-04100009-2012 (Title V Permit).

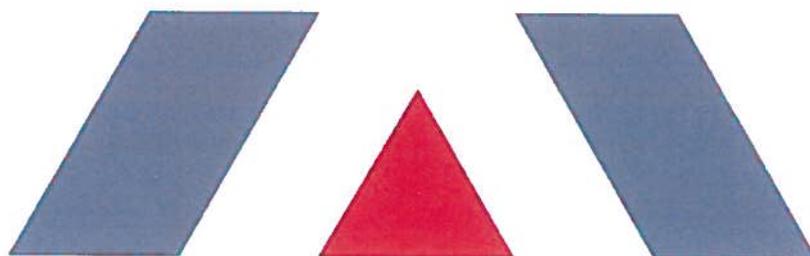
We are seeking a General Permit #G60-C for a new natural gas-fired emergency Generator to replace the existing natural gas-fired emergency generator in the current Title V Permit. Enclosed please find a signed original copy of the G60-C application and CDs with electronic copies of the application. We will contact you shortly for payment of the required permit fees by credit card.

Please contact me at 412-395-3654 or via email at [msowa@eqt.com](mailto:msowa@eqt.com) if you have any questions regarding this application.

Sincerely,

A handwritten signature in blue ink that reads "Mark A. Sowa".

Mark A. Sowa  
Senior Environmental Coordinator



## CLASS II GENERAL PERMIT APPLICATION

**EQUITRANS, LP**  
**Copley Run Compressor Station**

**G60C**

**TRINITY CONSULTANTS**  
4500 Brooktree Drive  
Suite 103  
Wexford, PA 15090  
(724) 935-2611

November 2015

Project 153901.0148

**Trinity**   
**Consultants**

*Environmental solutions delivered uncommonly well*

## TABLE OF CONTENTS

<b>1. INTRODUCTION</b>	<b>2</b>
<b>1.1. Facility and Project Description</b> .....	<b>2</b>
<b>1.2. Application Organization</b> .....	<b>2</b>
<b>2. EMISSION CALCULATION METHODOLOGY</b>	<b>3</b>
<b>3. REGULATORY APPLICABILITY ANALYSIS</b>	<b>4</b>
<b>3.1. Federal Regulatory Applicability</b> .....	<b>4</b>
3.1.1. <i>Prevention of Significant Deterioration (PSD) Source Classification</i> .....	4
3.1.2. <i>Title V Operating Permit Program</i> .....	4
3.1.3. <i>New Source Performance Standards</i> .....	5
3.1.4. <i>National Emission Standards for Hazardous Air Pollutants (NESHAP)</i> .....	5
<b>3.2. West Virginia Regulatory Applicability</b> .....	<b>6</b>
3.2.1. <i>45 CSR 2: To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers</i> .....	6
3.2.2. <i>45 CSR 16: Standards of Performance for New Stationary Sources</i> .....	6
<b>ATTACHMENT A</b>	<b>A</b>
<b>ATTACHMENT B</b>	<b>B</b>
<b>ATTACHMENT D</b>	<b>C</b>
<b>ATTACHMENT E</b>	<b>D</b>
<b>ATTACHMENT F</b>	<b>E</b>
<b>ATTACHMENT G</b>	<b>F</b>
<b>ATTACHMENT I</b>	<b>G</b>
<b>ATTACHMENT J</b>	<b>H</b>
<b>ATTACHMENT L</b>	<b>I</b>

## 1. INTRODUCTION

Equitrans, LP (Equitrans) is submitting this Class II general permit (G-60C) application to the West Virginia Department of Environmental Protection (WVDEP) to install a natural gas fired emergency generator at a natural gas compressor station located in Lewis County, West Virginia (Copley Run Compressor Station). Specifically, this application seeks to install a new natural gas-fired Kohler emergency generator (G-003) to replace the existing emergency generator (G-001). The Copley Run Station is currently operating under West Virginia Department of Environmental Protection (WVDEP) Division of Air Quality Title V operating permit R30-0410009-2012, issued on December 11, 2012.

### 1.1. FACILITY AND PROJECT DESCRIPTION

The Copley Run Compressor Station (Copley Run) is a natural gas transmission facility that compresses and dehydrates natural gas from storage wells for transportation across the pipeline. The station also dehydrates gas from nearby production wells. The station has the potential to operate 24 hours per day, 7 days per week. The Copley Run station currently consists of the following equipment:

- One (1) 1800-hp natural gas reciprocating engine/integral compressor
- Three (3) 1,350-hp natural gas reciprocating engine/integral compressor
- One (1) 2250-hp natural gas reciprocating engine/integral compressor
- Two (2) natural gas reciprocating engine driven generators
- One (1) electric compressor (3000-hp engine)
- One (1) triethylene glycol (TEG) dehydration unit equipped with an indirect heater/reboiler and flare
- Six (6) miscellaneous storage tanks of various sizes

Equitrans is proposing to install a 150 kilowatt (KW) Kohler emergency generator (G-003) to replace the existing natural gas fired electric generator (G-001). The proposed generator will be powered by a natural gas fired four-stroke rich burn engine and will provide emergency power to the station. A process flow diagram is included as Attachment D.

### 1.2. APPLICATION ORGANIZATION

This West Virginia Code of State Regulations, Title 45 (CSR) Series 13 (45 CSR 13) Class II general permit registration application is organized as follows:

- Section 2: Emission Calculation Methodology
- Section 3: Regulatory Applicability Analysis
- Attachment A: Current Business Certificate
- Attachment B: Process Description
- Attachment C: Description of Fugitive Emissions (Not Applicable)
- Attachment D: Process Flow Diagram
- Attachment E: Plot Plan
- Attachment F: Area Map
- Attachment G: Affected Source Sheets (SI ICE Data Sheet)
- Attachment H: Air Pollution Control Device Data Sheet (Not Applicable)
- Attachment I: Emission Calculations
- Attachment J: Class I Legal Advertisement
- Attachment K: Electronic Submittal
- Attachment L: General Permit Registration Application Fee

## 2. EMISSION CALCULATION METHODOLOGY

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The characteristics of air emissions from the emission units at the Copley Run Compressor Station, along with the methodology for calculating emissions, are briefly described in this section of the application. Detailed emissions calculations are presented in Attachment I.

As part of this proposed project, emissions will result from natural gas combustion in the emergency generator engine. Emissions of carbon monoxide (CO), volatile organic compounds (VOC), and nitrogen oxides (NO<sub>x</sub>), were calculated using manufacturer's emission data. All other criteria pollutants and hazardous air pollutants (HAPs) are calculated using the USEPA's AP-42 emission factors for natural gas fired combustion engines.<sup>1</sup> The project will not result in any emissions increase from the existing units (i.e., the compressor engines, TEG dehydrator, reboiler, and tanks). Emissions of the greenhouse gases (GHGs) carbon dioxide (CO<sub>2</sub>), methane (CH<sub>4</sub>), and nitrous oxide (N<sub>2</sub>O) are calculated in accordance with Subpart C (General Stationary Fuel Combustion Sources) of the GHG Mandatory Reporting Rule (MRR), contained in 40 CFR 98.

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<sup>1</sup> Table 3:3-3 Uncontrolled Emission Factors for 4-Stroke Rich Burn Engines.  
<http://www.epa.gov/ttn/chief/ap42/ch03/final/c03s03.pdf>

## 3. REGULATORY APPLICABILITY ANALYSIS

This section documents the applicability determinations made for Federal air quality regulations. Applicability or non-applicability of the following regulatory programs is addressed:

- Prevention of Significant Deterioration (PSD) permitting
- Title V of the 1990 Clean Air Act Amendments
- New Source Performance Standards (NSPS)
- National Emission Standards for Hazardous Air Pollutants (NESHAP)

In addition to providing a summary of applicable requirements, this section of the application also provides non-applicability determinations for certain regulations, allowing the WVDEP to confirm that identified regulations are not applicable. Note that explanations of non-applicability are limited to those regulations for which there may be some question of applicability to specific operations at the Copley Run Compressor Station. Regulations that are categorically non-applicable are not discussed (e.g., NSPS Subpart J, Standards of Performance for Petroleum Refineries).

### 3.1. FEDERAL REGULATORY APPLICABILITY

#### 3.1.1. Prevention of Significant Deterioration (PSD) Source Classification

Federal construction permitting programs regulate new and modified sources of attainment pollutants under Prevention of Significant Deterioration (PSD) and new and modified sources of non-attainment pollutants under Non-Attainment New Source Review (NNSR). PSD and NNSR regulations apply when a major source makes a change, such as installing new equipment or modifying existing equipment, and a significant increase in emissions results from the change. The Copley Run Station is located in an area classified as attainment for all pollutants. Therefore, NNSR is not applicable. The Copley Run Compressor Station is a major source with respect to the NSR program as its potential emissions on NO<sub>x</sub> are above all major thresholds. The emissions from the proposed project are below all major modification thresholds. As such, NSR/PSD permitting is not triggered by this construction activity. Equitrans will monitor future construction activities at the site closely and will compare any future increase in emissions with the NSR/PSD thresholds to ensure these activities will not trigger this program.

#### 3.1.2. Title V Operating Permit Program

Title 40 of the Code of Federal Regulations Part 70 (40 CFR 70) establishes the federal Title V operating permit program. West Virginia has incorporated the provisions of this federal program in its Title V operating permit program in West Virginia Code of State Regulations (CSR) 45-30. The major source thresholds with respect to the West Virginia Title V operating permit program regulations are 10 tons per year (tpy) of a single HAP, 25 tpy of any combination of HAP and 100 tpy of all other regulated pollutants.<sup>2</sup> The Copley Run station is currently classified as a major source for the Title V program and operates under Title V operating permit No. R30-04100009-2012. After the proposed project, the potential emissions of at least one regulated pollutant will remain above the corresponding threshold(s) at this facility. Therefore, the Copley Run Compressor Station will remain a major source for Title V purposes.

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<sup>2</sup> On June 23, 2014, the U.S Supreme Court decision in the case of *Utility Air Regulatory Group v. EPA* effectively changed the permitting procedures for GHGs under the PSD and Title V programs.

### **3.1.3. New Source Performance Standards**

New Source Performance Standards (NSPS), located in 40 CFR 60, require new, modified, or reconstructed sources to control emissions to the level achievable by the best demonstrated technology as specified in the applicable provisions. Moreover, any source subject to an NSPS is also subject to the general provisions of NSPS Subpart A, except where expressly noted. The following is a summary of applicability and non-applicability determinations for NSPS regulations of relevance to the Copley Run Compressor Station.

#### **3.1.3.1. NSPS Subpart JJJJ - Stationary Spark Ignition Internal Combustion Engines**

New Source Performance Standards 40 CFR Part 60 Subpart JJJJ (NSPS JJJJ) affects owners and operators of stationary spark ignition internal combustion engines (SI ICE) that commence construction, reconstruction or modification after June 12, 2006. Applicability dates are based on the date the engine was ordered by the operator. The proposed emergency generator engine is a 4-stroke rich burn, spark ignition engine manufactured after July 1, 2008, and as such will be subject to this subpart. The engine is certified to meet the emergency and non-emergency stationary emission standards in Table 1 of Subpart JJJJ. Equitrans will meet the compliance requirements in 60.4243(a)(1) and will maintain all applicable recordkeeping and reporting requirements in 60.4245(a)(1)-(3)

#### **3.1.3.2. NSPS Subpart OOOO - Oil and Natural Gas Production, Transmission, and Distribution**

This proposed subpart applies to certain affected facilities that have been constructed, reconstructed, or modified after August 23, 2011. The emergency generator is not an affected source under NSPS OOOO.

#### **3.1.3.3. Non-Applicability of All Other NSPS**

NSPS are developed for particular industrial source categories. Other than NSPS developed for natural gas processing plants (Subparts KKK and LLL) and associated equipment (Subparts D-Dc and K-Kb), the applicability of a particular NSPS to the Copley Run Compressor Station can be readily ascertained based on the industrial source category covered. All other NSPS are categorically not applicable to natural gas processing facilities.

### **3.1.4. National Emission Standards for Hazardous Air Pollutants (NESHAP)**

Part 63 NESHAP allowable emission limits are established on the basis of a maximum achievable control technology (MACT) determination for a particular major source. A HAP major source is defined as having potential emissions in excess of 25 tpy for total HAP and/or potential emissions in excess of 10 tpy for any individual HAP. The Copley Run facility is a major source of HAP as emissions are greater than applicable area source thresholds. Besides 40 CFR 63 Subpart A (NESHAP Subpart A), which is similar to 40 CFR 60 Subpart A (NSPS Subpart A), the following NESHAP could potentially apply to the Copley Run Compressor Station based on the proposed project:

#### **40 CFR Part 63 Subpart ZZZZ – Stationary Reciprocating Internal Combustion Engines (RICE)**

##### **3.1.4.1. 40 CFR 63 Subpart ZZZZ - Stationary Reciprocating Internal Combustion Engines**

Stationary reciprocating internal combustion engines (RICE) at both area and major sources of HAP emissions are potentially subject to Subpart ZZZZ – *NESHAP for Stationary Reciprocating Internal Combustion Engines (RICE)*. Stationary RICE at facilities that are major sources of HAP are considered new if they are ordered after June 12, 2006. New area source stationary RICE are required to meet the requirements of this MACT standard by meeting the applicable requirements of the applicable New Source Performance Standard in 40 CFR 60 (Subpart

III for compression ignition engines and Subpart JJJJ for spark ignition engines). No further requirements apply to such engines under NESHAP Subpart ZZZZ.

The proposed Kohler emergency generator engine at the Copley Run Station is a new major source RICE and will comply with Subpart ZZZZ by complying with 40 CFR 60, Subpart JJJJ as described in the previous section.

## **3.2. WEST VIRGINIA REGULATORY APPLICABILITY**

The station is potentially subject to regulations contained in the West Virginia Code of State Regulations, Chapter 45 (Code of State Regulations). The Code of State Regulations fall under two main categories, those regulations that are generally applicable (e.g., permitting requirements), and those that have specific applicability (e.g., PM standards for manufacturing equipment)

### **3.2.1. 45 CSR 2: To Prevent and Control Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers**

45 CSR 2 applies to fuel burning units, defined as equipment burning fuel “for the primary purpose of producing heat or power by indirect heat transfer”. The generator engine does not qualify as a fuel burning unit.

### **3.2.2. 45 CSR 16: Standards of Performance for New Stationary Sources**

45 CSR 16-1 incorporates the federal Clean Air Act (CAA) standards of performance for new stationary sources set forth in 40 CFR Part 60 by reference. As such, by complying with all applicable requirements of 40 CFR Part 60 at the station, Equitrans will be complying with 45 CSR 16

**ATTACHMENT A**

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**Current Business Certificate**

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

ISSUED TO:  
**EQUITRANS LIMITED PARTNERSHIP  
DBA EQT MIDSTREAM  
1710 PENNSYLVANIA AVE  
CHARLESTON, WV 25302-3934**

**BUSINESS REGISTRATION ACCOUNT NUMBER: 1023-5643**

This certificate is issued on: 06/22/2011

*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**

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**Process Description**

## ATTACHMENT B - PROCESS DESCRIPTION

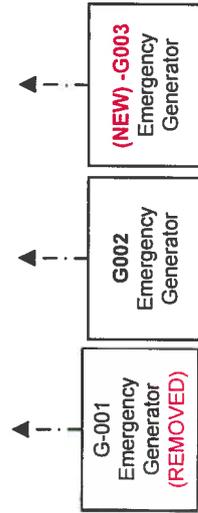
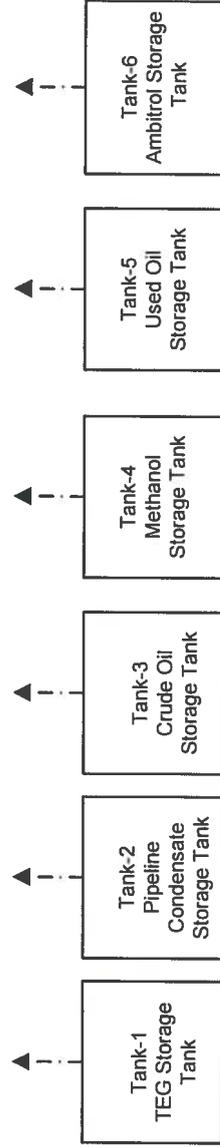
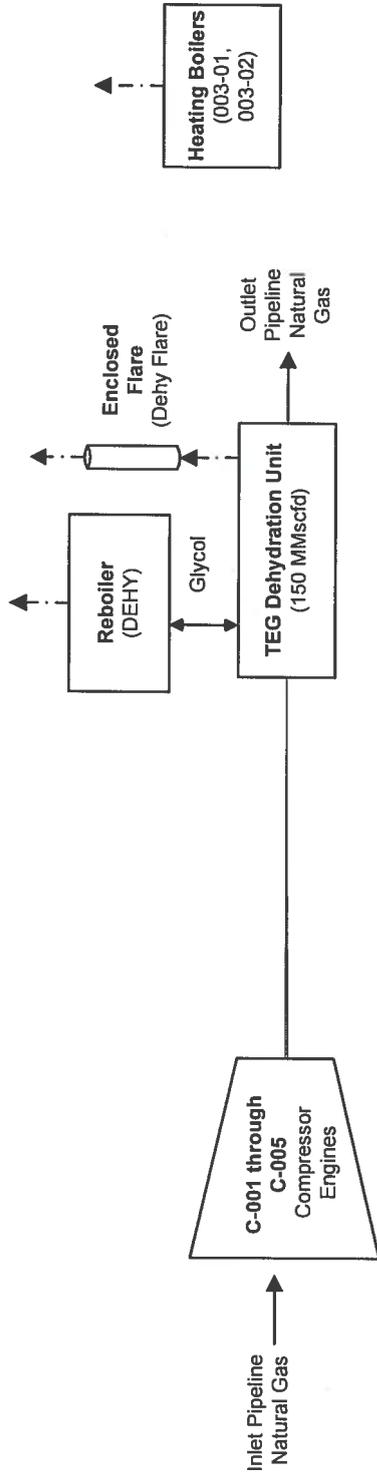
Equitrans is submitting the application to install a new natural gas-fired emergency generator at the Copley Compressor Station to replace an existing natural gas fired generator (G-001).

A process flow diagram is included as Attachment D.

## ATTACHMENT D

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### Process Flow Diagram



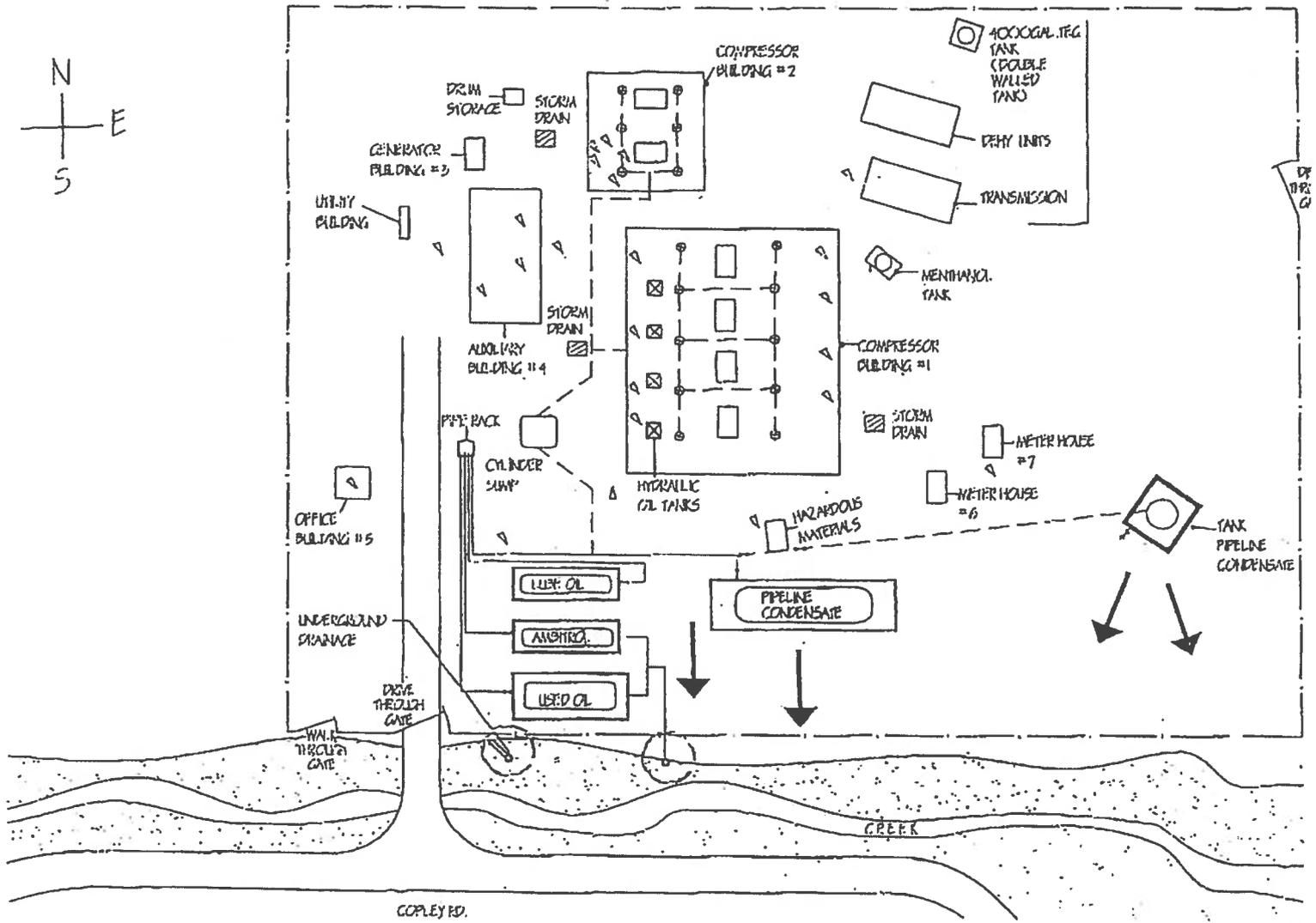
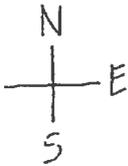
Flow Legend

- Gas/Water/Condensate Flow
- - - - - Stack Emissions

**ATTACHMENT E**

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**Plot Plan**



**ATTACHMENT F**

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**Area Map**

## ATTACHMENT F - AREA MAP



**Figure 1 - Map of Copley Run Station**

UTM Northing (KM): 4314.773  
UTM Easting (KM): 541.390  
Elevation: 1,178 ft

**Equipment Data Sheets and Registration Section Applicability Form**



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.dep.wv.gov/daq](http://www.dep.wv.gov/daq)

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

- CONSTRUCTION     MODIFICATION     RELOCATION     CLASS I ADMINISTRATIVE UPDATE  
 CLASS II ADMINISTRATIVE UPDATE

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

- |   |  |
|---|--|
| <input type="checkbox"/> <b>G10-D</b> – Coal Preparation and Handling                                   | <input type="checkbox"/> <b>G40-C</b> – Nonmetallic Minerals Processing                  |
| <input type="checkbox"/> <b>G20-B</b> – Hot Mix Asphalt   | <input type="checkbox"/> <b>G50-B</b> – Concrete Batch                                   |
| <input type="checkbox"/> <b>G30-D</b> – Natural Gas Compressor Stations                                 | <input checked="" type="checkbox"/> <b>G60-C</b> – Class II Emergency Generator          |
| <input type="checkbox"/> <b>G33-A</b> – Spark Ignition Internal Combustion Engines                      | <input type="checkbox"/> <b>G65-C</b> – Class I Emergency Generator                      |
| <input type="checkbox"/> <b>G35-A</b> – Natural Gas Compressor Stations (Flare/Glycol Dehydration Unit) | <input type="checkbox"/> <b>G70-A</b> – 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): Equitrans LP		2. Federal Employer ID No. (FEIN): 25-0724685	
3. Applicant's mailing address:  Route 4 Box 640 Weston, WV 26452		4. Applicant's physical address: 604 Copley Rd Weston, WV 26452	
5. If applicant is a subsidiary corporation, please provide the name of parent corporation: EQT Corporation			
6. <b>WV BUSINESS REGISTRATION.</b> Is the applicant a resident of the State of West Virginia? <input checked="" type="checkbox"/> <b>YES</b> <input type="checkbox"/> <b>NO</b>			
<ul style="list-style-type: none"> <li>- IF <b>YES</b>, provide a copy of the Certificate of Incorporation/ Organization / Limited Partnership (one page) including any name change amendments or other Business Registration Certificate as <b>Attachment A</b>.</li> <li>- IF <b>NO</b>, provide a copy of the Certificate of Authority / Authority of LLC / Registration (one page) including any name change amendments or other Business Certificate as <b>Attachment A</b>.</li> </ul>			

**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 Station	8a. Standard Industrial Classification Classification (SIC) code: 4922	AND	8b. North American Industry System (NAICS) code: 486210
9. DAQ Plant ID No. (for existing facilities only): 041-00009	10. List all current 45CSR13 and other General Permit numbers associated with this process (for existing facilities only):  _____ R30-0410009-2012 _____  _____ R13-2397 _____		

**A: PRIMARY OPERATING SITE INFORMATION**

11A. Facility name of primary operating site:  Copley Run Compressor Station  _____  _____	12A. Address of primary operating site:  Mailing: Route 4 Box 640 Weston, WV 26452  Physical: 604 Copley Rd Weston, WV 26452	
13A. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? <span style="float:right"><input checked="" type="checkbox"/> YES <input type="checkbox"/> NO</span> - IF YES, please explain: Property is leased  _____  - IF NO, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.		
14A. - For <b>Modifications or Administrative Updates</b> at an existing facility, please provide directions to the present location of the facility from the nearest state road; - For Construction or Relocation permits, please provide directions to the proposed new site location from the nearest state road. Include a <b>MAP as Attachment F.</b>  From Charleston, WV take Interstate 79 North to Exit 91. Follow Rt 19 north to Copley Rd. Turn left on Copley Rd and the compressor station will be on the right.		
15A. Nearest city or town:  Weston	16A. County:  Lewis	17A. UTM Coordinates:  Northing (KM): 4,314.773 Easting (KM): 541.390 Zone: 17
18A. Briefly describe the proposed new operation or change (s) to the facility:  Equitrans is proposing to replace the existing natural gas fired emergency generator with a natural gas fired emergency generator.		19A. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits):  Latitude: <u>38.98096°</u> Longitude: <u>-80.522139°</u>

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

11B. Name of 1 <sup>st</sup> alternate operating site:  _N/A_  _____  _____	12B. Address of 1 <sup>st</sup> alternate operating site:  Mailing: _____ Physical: _____  _____  _____	
13B. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? <span style="float:right"><input type="checkbox"/> YES <input type="checkbox"/> NO</span> - IF YES, please explain: _____  _____  - IF NO, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.		
14B. - For <b>Modifications or Administrative Updates</b> at an existing facility, please provide directions to the present location of the facility from the nearest state road; - For Construction or Relocation permits, please provide directions to the proposed new site location from the nearest state road. Include a <b>MAP as Attachment F.</b>  _____  _____  _____		

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: 2<sup>ND</sup> ALTERNATE OPERATING SITE INFORMATION (only available for G20, G40, & G50 General Permits):**

11C. Name of 2 <sup>nd</sup> alternate operating site: _N/A_	12C. Address of 2 <sup>nd</sup> alternate operating site: Mailing: _____ Physical: _____
---	---

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

– IF YES, please explain: \_\_\_\_\_

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

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

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

\_\_\_\_\_

\_\_\_\_\_

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

20. Provide the date of anticipated installation or change: ____/____/2015____  <input type="checkbox"/> If this is an <b>After-The-Fact</b> permit application, provide the date upon which the proposed change did happen: : ____/____/____	21. Date of anticipated Start-up if registration is granted: ____/____/2015____
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22. Provide maximum projected **Operating Schedule** of activity/activities outlined in this application if other than 8760 hours/year. (Note: anything other than 24/7/52 may result in a restriction to the facility's operation).

Hours per day 24 Days per week 7 Weeks per year 52 Percentage of operation 100

### SECTION III. ATTACHMENTS AND SUPPORTING DOCUMENTS

23. Include a check payable to WVDEP – Division of Air Quality with the appropriate **application fee** (per 45CSR22 and 45CSR13).

24. Include a **Table of Contents** as the first page of your application package.

All of the required forms and additional information can be found under the Permitting Section (General Permits) of DAQ's website, or requested by phone.

25. Please check all attachments included with this permit application. Please refer to the appropriate reference document for an explanation of the attachments listed below.

- ATTACHMENT A : CURRENT BUSINESS CERTIFICATE
- ATTACHMENT B: PROCESS DESCRIPTION
- ATTACHMENT C: DESCRIPTION OF FUGITIVE EMISSIONS
- ATTACHMENT D: PROCESS FLOW DIAGRAM
- ATTACHMENT E: PLOT PLAN
- ATTACHMENT F: AREA MAP
- ATTACHMENT G: EQUIPMENT DATA SHEETS AND REGISTRATION SECTION APPLICABILITY FORM
- ATTACHMENT H: AIR POLLUTION CONTROL DEVICE SHEETS
- ATTACHMENT I: EMISSIONS CALCULATIONS
- ATTACHMENT J: CLASS I LEGAL ADVERTISEMENT
- ATTACHMENT K: ELECTRONIC SUBMITTAL
- ATTACHMENT L: GENERAL PERMIT REGISTRATION APPLICATION FEE
- ATTACHMENT M: SITING CRITERIA WAIVER (*Not Applicable*)
- ATTACHMENT N: MATERIAL SAFETY DATA SHEETS (MSDS) (*Not Applicable*)
- ATTACHMENT O: EMISSIONS SUMMARY SHEETS
- OTHER SUPPORTING DOCUMENTATION NOT DESCRIBED ABOVE (Equipment Drawings, Aggregation Discussion, etc.) (*Not Applicable*)

Please mail an original and two copies of the complete General Permit Registration Application with the signature(s) to the DAQ Permitting Section, at the address shown on the front page of this application. Please DO NOT fax permit applications. For questions regarding applications or West Virginia Air Pollution Rules and Regulations, please refer to the website shown on the front page of the application or call the phone number also provided on the front page of the application.

SECTION IV. CERTIFICATION OF INFORMATION

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

FOR A CORPORATION (domestic or foreign)

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

FOR A PARTNERSHIP

I certify that I am a General Partner

FOR A LIMITED LIABILITY COMPANY

I certify that I am a General Partner or General Manager

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) Diana Charletta 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

11/18/15

Date

Name & Title

(please print or type)

Diana Charletta, Sr. Vice President- Midstream Operations

Signature

(please use blue ink)

Authorized Representative (if applicable)

Date

Applicant's Name

Mark Sowa - Sr Environmental Engineer

Phone & Fax

412-395-3654

Phone

412-395-7027

Fax

Email

msowa@eqt.com

# G60-C REGISTRATION APPLICATION FORMS

## General Permit G60-C Registration Section Applicability Form

General Permit G60-C was developed to allow qualified registrants to seek registration for emergency generator(s).

General Permit G60-C allows the registrant to choose which sections of the permit that they wish to seek registration under. Therefore, please mark which sections that you are applying for registration under. Please keep in mind, that if this registration is approved, the issued registration will state which sections will apply to your affected facility.

Section 5	Reciprocating Internal Combustion Engines (R.I.C.E.)*	<input checked="" type="checkbox"/>
Section 6	Tanks	<input type="checkbox"/>
Section 7	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40CFR60 Subpart IIII)	<input type="checkbox"/>
Section 8	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40CFR60 Subpart JJJJ)	<input checked="" type="checkbox"/>

\* Affected facilities that are subject to Section 5 may also be subject to Sections 7 or 8. Therefore, if the applicant is seeking registration under both sections, please select both.

**EMERGENCY GENERATOR ENGINE DATA SHEET**

Source Identification Number <sup>1</sup>		G-003		G-001			
Engine Manufacturer and Model		Kohler 150REZGC		International Harvester; V549			
Manufacturer's Rated bhp/rpm		259/1800		865			
Source Status <sup>2</sup>		NS		RS			
Date Installed/Modified/Removed <sup>3</sup>		2015		2015			
Engine Manufactured/Reconstruction Date <sup>4</sup>		2014		1987			
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart IIII? (Yes or No) <sup>5</sup>		No		No			
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart JJJJ? (Yes or No) <sup>6</sup>		Yes		No			
Engine, Fuel and Combustion Data	Engine Type <sup>7</sup>	4SRB		4SRB			
	APCD Type <sup>8</sup>	NSCR		N/A			
	Fuel Type <sup>9</sup>	PQ		PQ			
	H <sub>2</sub> S (gr/100 scf)	0		0			
	Operating bhp/rpm	259					
	BSFC (Btu/bhp-hr)	8,194					
	Fuel throughput (ft <sup>3</sup> /hr)	1965					
	Fuel throughput (MMft <sup>3</sup> /yr)	1.0					
	Operation (hrs/yr)	500		500			
Reference <sup>10</sup>	Potential Emissions <sup>11</sup>	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
MD	NO <sub>x</sub>	4.24	1.06	4.99	1.25		
MD	CO	8.49	2.12	8.18	2.05		
MD	VOC	2.12	0.53	0.07	0.02		
AP-42	SO <sub>2</sub>	<0.01	<0.01	<0.01	<0.01		
AP-42	PM <sub>10</sub>	0.04	0.11	0.04	0.11		

1. Enter the appropriate Source Identification Number for each emergency generator. 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 spark 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*.

**EMERGENCY GENERATOR EMISSION SUMMARY SHEET FOR CRITERIA POLLUTANTS**

Emergency Generator Location: Copley Run Compressor Station		Registration Number (Agency Use) <u>G60-C</u>									
		Potential Emissions (lbs/hr)					Potential Emissions (tons/yr)				
Source ID No.	NO <sub>x</sub>	CO	VOC	SO <sub>2</sub>	PM <sub>10</sub>	NO <sub>x</sub>	CO	VOC	SO <sub>2</sub>	PM <sub>10</sub>	
GEN-003	4.24	8.49	2.12	<0.01	0.04	1.06	2.12	0.53	<0.01	0.01	
<b>Total</b>	<b>4.24</b>	<b>8.49</b>	<b>2.12</b>	<b>&lt;0.01</b>	<b>0.04</b>	<b>1.06</b>	<b>2.12</b>	<b>0.53</b>	<b>&lt;0.01</b>	<b>0.01</b>	

**EMERGENCY GENERATOR EMISSION SUMMARY SHEET FOR HAZARDOUS/TOXIC POLLUTANTS**

Emergency Generator Location: Copley Run Compressor Station		Registration Number (Agency Use) <u>G60-C</u>										
		Potential Emissions (lbs/hr)					Potential Emissions (tons/yr)					
Source ID No.	Benzene	Ethyl-benzene	Toluene	Xylenes	n-Hexane	Formaldehyde	Benzene	Ethyl-benzene	Toluene	Xylenes	n-Hexane	Formaldehyde
GEN-003	3.35E-3	5.26E-5	1.18E-3	4.14E-4	---	4.35E-2	8.38E-4	1.32E-5	2.96E-4	1.03E-4	---	1.09E-2
<b>Total</b>	<b>3.35E-3</b>	<b>5.26E-5</b>	<b>1.18E-3</b>	<b>4.14E-4</b>	<b>---</b>	<b>4.35E-2</b>	<b>8.38E-4</b>	<b>1.32E-5</b>	<b>2.96E-4</b>	<b>1.03E-4</b>	<b>---</b>	<b>1.09E-2</b>

**General Permit Levels  
Construction, Modification, Relocation, Administrative Update**

Class II General Permits – G10-C (Coal Preparation and Handling), G20-B (Hot Mix Asphalt), G30-D (Natural Gas Compressor Stations), G35-A (Natural Gas Compressor Stations with Flares/Glycol Dehydration Units), G40-B (Nonmetallic Minerals Processing), G50-B (Concrete Batch Plant), G60-C (Emergency Generators)

Class I General Permit - G65-C (Emergency Generators)

General Permit	Public Notice	Review Period as 45CSR13	Application Fee	Criteria	Application Type
Class II General Permit (Construction)	30 days (applicant)	90 days	\$500 + applicable NSPS fees	6 lb/hr and 10 tpy of any regulated air pollutant OR 144 lb/day of any regulated air pollutant, OR 2 lb/hr of any hazardous air pollutant OR 5 tpy of aggregated HAP OR 45CSR27 TAP (10% increase if above BAT triggers or increase to BAT triggers) or subject to applicable standard or rule, but subject to specific eligibility requirements	Registration Application
Class II General Permit (Modification)	30 days (applicant)	90 days	\$500 + applicable NSPS fees	Same as Class II General Permit (Construction) but subject to specific eligibility requirements	Registration Application
Administrative Update (Class I)	None	60 days	None	Decrease in emissions or permanent removal of equipment OR more stringent requirements or change in MRR that is equivalent or superior	Registration Application or Written Request
Administrative Update (Class II)	30 days (applicant)	60 days	\$300 + applicable NSPS fees	No change in emissions or an increase less than Class II Modification levels	Registration Application
Relocation	30 days (applicant)	45 days	\$500 + applicable NSPS fees	No emissions increase or change in facility design or equipment	Registration Application
Class I General Permit	None	45 days	\$250	Same as Class II General Permit (Construction) but subject to specific eligibility requirements	Registration Application

Model: **150REZGC**

# KOHLER Power Systems

208-600 V

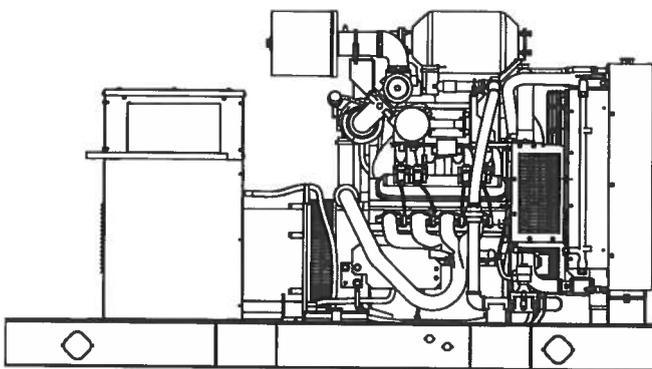
Gas



**EPA-Certified for Stationary  
Emergency Applications**

## Ratings Range

Standby:	kW kVA	60 Hz
		106-150 106-188



## Standard Features

- Kohler Co. provides one-source responsibility for the generating system and accessories.
- The generator set and its components are prototype-tested, factory-built, and production-tested.
- The 60 Hz generator set offers a UL 2200 listing.
- At 60 Hz, the generator set accepts rated load in one step.
- The 60 Hz generator set meets NFPA 110, Level 1, when equipped with the necessary accessories and installed per NFPA standards.
- A one-year limited warranty covers all systems and components. Two- and five-year extended warranties are also available.
- Alternator features:
  - The unique Fast-Response™ X excitation system delivers excellent voltage response and short-circuit capability using a rare-earth, permanent magnet (PM)-excited alternator.
  - The brushless, rotating-field alternator has broadrange reconnectability.
- Other features:
  - Kohler designed controllers for guaranteed system integration and remote communication. See Controllers on page 3.
  - The electronic, isochronous governor incorporates an integrated drive-by-wire throttle body actuator delivering precise frequency regulation.

## Generator Set Ratings

Alternator	Voltage	Ph	Hz	Natural Gas 130°C Rise Standby Rating		LP Gas 130°C Rise Standby Rating	
				kW/kVA	Amps	kW/kVA	Amps
4R13X	120/208	3	60	137/171	475	137/171	475
	127/220	3	60	143/179	469	137/171	449
	120/240	3	60	137/171	412	137/171	412
	120/240	1	60	107/107	446	107/107	446
	139/240	3	60	150/188	454	137/171	412
	220/380	3	60	124/155	235	124/155	234
4S12X	277/480	3	60	150/188	226	137/171	206
	120/208	3	60	150/188	520	137/171	475
	127/220	3	60	150/188	492	137/171	449
	120/240	3	60	150/188	451	137/171	412
	120/240	1	60	106/106	442	106/106	442
	139/240	3	60	150/188	451	137/171	412
4S13X	220/380	3	60	140/175	266	137/171	260
	277/480	3	60	150/188	226	137/171	206
	347/600	3	60	150/188	180	137/171	164
	120/208	3	60	150/188	520	139/174	482
	127/220	3	60	150/188	492	139/174	456
	120/240	3	60	150/188	451	139/174	418
4T13X	120/240	1	60	113/113	471	113/113	471
	139/240	3	60	150/188	451	139/174	418
	220/380	3	60	150/188	285	139/174	264
	277/480	3	60	150/188	226	139/174	209
	347/600	3	60	150/188	180	139/174	167
	120/240	1	60	144/144	600	134/134	557

**RATINGS:** All three-phase units are rated at 0.8 power factor. All single-phase units are rated at 1.0 power factor. **Standby Ratings:** The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. **Prime Power Ratings:** At varying load, the number of generator set operating hours is unlimited. A 10% overload capacity is available for one hour in twelve. Ratings are in accordance with ISO-8528-1 and ISO-3046-1. For limited running time and continuous ratings, consult the factory. Obtain technical information bulletin (TIB-101) for ratings guidelines, complete ratings definitions, and site condition derates. The generator set manufacturer reserves the right to change the design or specifications without notice and without any obligation or liability whatsoever. For dual fuel engines, use the LP gas ratings for both the primary and secondary fuels.

## Alternator Specifications

Specifications	Alternator
Manufacturer	Kohler
Type	4-Pole, Rotating-Field
Exciter type	Brushless, Rare-Earth Permanent Magnet
Leads: quantity, type	
4RX, 4SX	12, Reconnectable
4TX	4, 110-120/220-240
Voltage regulator	Solid State, Volts/Hz
Insulation:	NEMA MG1
Material	Class H
Temperature rise	130°C, Standby
Bearing: quantity, type	1, Sealed
Coupling	Flexible Disc
Amortisseur windings	Full
Voltage regulation, no-load to full-load	Controller Dependent
One-step load acceptance	100% of Rating
Unbalanced load capability	100% of Rated Standby Current
Peak motor starting kVA:	(35% dip for voltages below)
480 V      4R13X (12 lead)	540 (60 Hz)
480 V      4S12X (12 lead)	480 (60 Hz)
480 V      4S13X (12 lead)	570 (60 Hz)
240 V      4T13X (4 lead)	440 (60 Hz)

- NEMA MG1, IEEE, and ANSI standards compliance for temperature rise and motor starting.
- Sustained short-circuit current of up to 300% of the rated current for up to 10 seconds.
- Sustained short-circuit current enabling downstream circuit breakers to trip without collapsing the alternator field.
- Self-ventilated and dripproof construction.
- Vacuum-impregnated windings with fungus-resistant epoxy varnish for dependability and long life.
- Superior voltage waveform from a two-thirds pitch stator and skewed rotor.

## Application Data

### Engine

Engine Specifications	
Manufacturer	PSI
Engine: model, type	Industrial, 8.8 L, 4-Cycle, Turbocharged and Charge Cooled V-8
Cylinder arrangement	V-8
Displacement, L (cu. in.)	8.8 (537)
Bore and stroke, mm (in.)	110 x 114 (4.35 x 4.5)
Compression ratio	10.1:1
Piston speed, m/min. (ft./min.)	411 (1350)
Main bearings: quantity, type	5, Bi-Metal Steel and Aluminum
Rated rpm	1800
Max. power at rated rpm (NG), kW (HP)	193 (259)
Max. power at rated rpm (LPG), kW (HP)	169 (227)
Cylinder head material	Cast Iron
Piston type and material	Flat Top, Hypereutectic Cast Alum.
Crankshaft material	Forged Steel, Induction Hardened, Tangential Fillet
Valve (exhaust) material	Int.-A193 Exh. Inconel
Governor type	Electronic
Frequency regulation, no-load to full-load	Isochronous
Frequency regulation, steady state	±0.5%
Frequency	Fixed
Air cleaner type, all models	Dry

### Exhaust

Exhaust System	
Exhaust manifold type	Dry
Exhaust flow at rated kW, m <sup>3</sup> /min. (cfm)	27.5 (971)
Exhaust temperature at rated kW, dry exhaust, °C (°F)	649 (1200)
Maximum allowable back pressure, kPa (in. Hg)	10.2 (3.0)
Exhaust outlet size at engine hookup, mm (in.)	Flanged Outlet at Catalyst see ADV drawing

### Engine Electrical

Engine Electrical System	
Ignition system	Individual Coil Near Plug Ignition
Battery charging alternator:	
Ground (negative/positive)	Negative
Volts (DC)	12
Ampere rating	70
Starter motor rated voltage (DC)	12
Battery, recommended cold cranking amps (CCA):	
Qty., rating for -18°C (0°F)	1, 630
Battery voltage (DC)	12

### Fuel

Fuel System		
Fuel type	Natural Gas, LP Gas, or Dual Fuel	
Fuel supply line inlet	1.5 NPTF	
Natural gas fuel supply pressure, kPa (in. H <sub>2</sub> O)	1.74-2.74 (7-11)	
LPG vapor withdrawal fuel supply pressure, kPa (in. H <sub>2</sub> O)	1.24-2.74 (5-11)	
Dual fuel engine, LPG vapor withdrawal fuel supply pressure, kPa (in. H <sub>2</sub> O)	1.24 (5)	
Fuel Composition Limits *	Nat. Gas	LP Gas
Methane, % by volume	90 min.	1.2 max.
Ethane, % by volume	4.0 max.	10 max.
Propane, % by volume	1.0 max.	96 max.
Propene, % by volume	0.1 max.	3 max.
C <sub>4</sub> and higher, % by volume	0.3 max.	3 max.
Sulfur, ppm mass	25 max.	
Lower heating value, MJ/m <sup>3</sup> (Btu/ft <sup>3</sup> ), min.	33.2 (890)	78.8 (2116)

\* Fuels with other compositions may be acceptable. If your fuel is outside the listed specifications, contact your local distributor for further analysis and advice.

## Application Data

### Lubrication

Lubricating System	
Type	Full Pressure
Oil pan capacity, L (qt.)	8.0 (8.5)
Oil pan capacity with filter, L (qt.)	8.5 (9.0)
Oil filter: quantity, type	1, Cartridge

### Cooling

Radiator System	
Ambient temperature, °C (°F) *	50 (122)
Engine jacket water capacity, L (gal.)	13.4 (3.54)
Radiator system capacity, including engine, L (gal.)	25.5 (5.61)
Engine jacket water flow, Lpm (gpm)	125 (33)
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	88.2 (5021)
Heat rejected to charge cooling air at rated kW, dry exhaust, kW (Btu/min.)	11.3 (642)
Heat rejected to engine oil at rated kW, dry exhaust, kW (Btu/min.)	1.4 (81)
Water pump type	Centrifugal
Fan diameter, including blades, mm (in.)	711 (28.0)
Fan, kWm (HP)	18.7 (25)
Max. restriction of cooling air, intake and discharge side of radiator, kPa (in. H <sub>2</sub> O)	0.125 (0.5)

\* Enclosure with enclosed silencer reduces ambient temperature capability by 5°C (9°F).

### Operation Requirements

Air Requirements	
Radiator-cooled cooling air, m <sup>3</sup> /min. (scfm) †	340 (12000)
Combustion air, m <sup>3</sup> /min. (cfm)	8.9 (314)
Heat rejected to ambient air:	
Engine, kW (Btu/min.)	24.9 (1476)
Alternator, kW (Btu/min.)	15.7 (893)

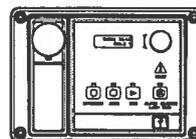
† Air density = 1.20 kg/m<sup>3</sup> (0.075 lbm/ft<sup>3</sup>)

Fuel Consumption ‡	
<b>Natural Gas, m<sup>3</sup>/hr. (cfh) at % load</b>	<b>Standby Ratings</b>
100%	55.7 (1965)
75%	43.3 (1529)
50%	31.2 (1102)
25%	19.5 (688)
0%	8.1 (286)
<b>LP Gas, m<sup>3</sup>/hr. (cfh) at % load</b>	<b>Standby Ratings</b>
100%	20.2 (713)
75%	15.5 (547)
50%	11.3 (399)
25%	7.2 (254)
0%	4.6 (164)

‡ Nominal fuel rating: Natural gas, 37 MJ/m<sup>3</sup> (1000 Btu/ft.<sup>3</sup>)  
LP vapor, 93 MJ/m<sup>3</sup> (2500 Btu/ft.<sup>3</sup>)

LP vapor conversion factors:  
8.58 ft.<sup>3</sup> = 1 lb.  
0.535 m<sup>3</sup> = 1 kg.  
36.39 ft.<sup>3</sup> = 1 gal.

### Controllers

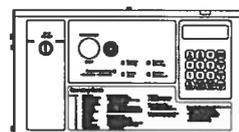


#### Decision-Maker<sup>®</sup> 3000 Controller

Provides advanced control, system monitoring, and system diagnostics for optimum performance and compatibility.

- Digital display and menu control provide easy local data access
- Measurements are selectable in metric or English units
- Remote communication thru a PC via network or serial configuration
- Controller supports Modbus<sup>®</sup> protocol
- Integrated hybrid voltage regulator with ±0.5% regulation
- Built-in alternator thermal overload protection
- NFPA 110 Level 1 capability

Refer to G6-100 for additional controller features and accessories.

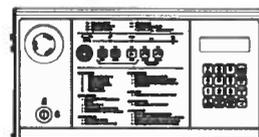


#### Decision-Maker<sup>®</sup> 550 Controller

Provides advanced control, system monitoring, and system diagnostics with remote monitoring capabilities.

- Digital display and keypad provide easy local data access
- Measurements are selectable in metric or English units
- Remote communication thru a PC via network or modem configuration
- Controller supports Modbus<sup>®</sup> protocol
- Integrated voltage regulator with ±0.25% regulation
- Built-in alternator thermal overload protection
- NFPA 110 Level 1 capability

Refer to G6-46 for additional controller features and accessories.



#### Decision-Maker<sup>®</sup> 6000 Paralleling Controller

Provides advanced control, system monitoring, and system diagnostics with remote monitoring capabilities for paralleling multiple generator sets.

- Paralleling capability with first-on logic, synchronizer, kW and kVAR load sharing, and protective relays
- Digital display and keypad provide easy local data access
- Measurements are selectable in metric or English units
- Remote communication thru a PC via network or modem configuration
- Controller supports Modbus<sup>®</sup> protocol
- Integrated voltage regulator with ±0.25% regulation
- Built-in alternator thermal overload protection
- NFPA 110 Level 1 capability

Refer to G6-107 for additional controller features and accessories.

## Standard Features

- Alternator Protection
- Battery Rack and Cables
- Customer Connection  
(Standard with Decision-Maker® 6000 controller only)
- Electronic, Isochronous Governor
- Gas Fuel System (includes fuel mixer, electronic secondary gas regulator, gas solenoid valve, and flexible fuel line between the engine and the skid-mounted fuel system components)
- Integral Vibration Isolation
- Local Emergency Stop Switch
- Oil Drain Extension
- Operation and Installation Literature
- Three-Way Exhaust Catalyst

## Available Options

### Approvals and Listings

- CSA Approval
- IBC Seismic Certification
- UL 2200 Listing

### Enclosed Unit

- Sound Enclosure (with enclosed critical silencer)
- Weather Enclosure (with enclosed critical silencer)

### Open Unit

- Exhaust Silencer, Critical (kit: PA-324470)
- Flexible Exhaust Connector, Stainless Steel

### Fuel System

- Dual Fuel NG/LPG (automatic changeover)
- Flexible Fuel Line  
(required when the generator set skid is spring mounted)
- Gas Filter
- LP Liquid Withdrawal (vaporizer)
- Secondary Gas Solenoid Valve

### Controller

- Common Fault Relay
- Communication Products and PC Software
- Customer Connection  
(Decision-Maker® 550 and 6000 controllers only)
- Dry Contact (isolated alarm)  
(Decision-Maker® 550 and 6000 controllers only)
- Input/Output Module (Decision-Maker® 3000 controller only)
- Remote Annunciator Panel
- Remote Audiovisual Alarm Panel  
(Decision-Maker® 550 and 6000 controllers only)
- Remote Emergency Stop
- Run Relay

### Cooling System

- Block Heater, 1800 W, 110-120 V
- Block Heater, 2000 W, 190-240 V  
[recommended for ambient temperatures below 10°C (50°F)]
- Radiator Duct Flange

### Electrical System

- Alternator Strip Heater
- Battery
- Battery Charger, Equalize/Float Type
- Battery Heater
- Line Circuit Breaker (NEMA1 enclosure)
- Line Circuit Breaker with Shunt Trip (NEMA1 enclosure)

### Miscellaneous

- Air Cleaner Restrictor Indicator
- Certified Test Report
- Crankcase Ventilation (CCV) Heater  
[recommended for ambient temperatures below 0°C (32°F)]
- Engine Fluids Added
- Rated Power Factor Testing
- Rodent Guards

### Literature

- General Maintenance
- NFPA 110
- Overhaul
- Production

### Warranty

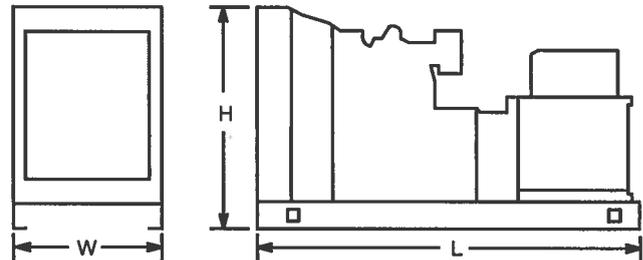
- 2-Year Basic
- 5-Year Basic
- 5-Year Comprehensive

### Other Options

- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_
- \_\_\_\_\_

## Dimensions and Weights

Overall Size, L x W x H, mm (in.): 2800 x 1120 x 1538  
 (110.2 x 44.1 x 60.6)  
 Weight (radiator model), wet, kg (lb.): 1440 (3175)



NOTE: This drawing is provided for reference only and should not be used for planning installation. Contact your local distributor for more detailed information.

**DISTRIBUTED BY:**



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY  
2015 MODEL YEAR  
CERTIFICATE OF CONFORMITY  
WITH THE CLEAN AIR ACT

OFFICE OF TRANSPORTATION  
AND AIR QUALITY  
ANN ARBOR, MICHIGAN 48105

Certificate Issued To: **Power Solutions International, Inc.**  
(U.S. Manufacturer or Importer)

Certificate Number: **FPSIB8.80EMT-011**

Effective Date:  
10/30/2014  
Expiration Date:  
12/31/2015

  
Byron J. Bunker, Division Director  
Compliance Division

Issue Date:  
10/30/2014  
Revision Date:  
N/A

Manufacturer: Power Solutions International, Inc.

Engine Family: FPSIB8.80EMT

Certification Type: Stationary (Part 60)

Fuel: Natural Gas (CNG/LNG)  
LPG/Propane

Emission Standards: NOx (g/HP-hr) : 2

CO (g/HP-hr) : 4

VOC (g/HP-hr) : 1CO (g/kW-hr) : 4.4

HC + NOx (g/kW-hr) : 2.7

NMHC + NOx (g/kW-hr) : 2.7

Emergency Use Only : Y

Pursuant to Section 213 of the Clean Air Act (42 U.S.C. section 7547) and 40 CFR Part 60, 1065, 1068, and 60 (stationary only and combined stationary and mobile) and subject to the terms and conditions prescribed in those provisions, this certificate of conformity is hereby issued with respect to the test engines which have been found to conform to applicable requirements and which represent the following nonroad engines, by engine family, more fully described in the documentation required by 40 CFR Part 60 and produced in the stated model year.

This certificate of conformity covers only those new nonroad spark-ignition engines which conform in all material respects to the design specifications that applied to those engines described in the documentation required by 40 CFR Part 60 and which are produced during the model year stated on this certificate of the said manufacturer, as defined in 40 CFR Part 60. This certificate of conformity does not cover nonroad engines imported prior to the effective date of the certificate.

It is a term of this certificate that the manufacturer shall consent to all inspections described in 40 CFR 1068.20 and authorized in a warrant or court order. Failure to comply with the requirements of such a warrant or court order may lead to revocation or suspension of this certificate for reasons specified in 40 CFR Part 60. It is also a term of this certificate that this certificate may be revoked or suspended or rendered void *ab initio* for other reasons specified in 40 CFR Part 60.

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

ATTACHMENT I

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**Emission Calculation**

**Equitrans - Copley Run Station  
Facility-Wide Emissions Summary**

Process/Facility	Potential Emissions (lb/hr)					
	NOx	CO	VOC	SO <sub>2</sub>	PM <sup>1</sup>	HAPs
Compressor Engine #1 (C-001)	52.38	6.38	1.98	0.01	0.80	1.32
Compressor Engine #2 (C-002)	5.95	5.95	1.49	0.01	0.48	0.79
Compressor Engine #3 (C-003)	5.95	5.95	1.49	0.01	0.48	0.79
Compressor Engine #4 (C-004)	41.90	5.10	1.59	0.01	0.64	1.05
Compressor Engine #5 (C-005)	10.00	5.95	1.49	0.01	0.48	0.79
#1 Dehy Reboiler (004-01)	0.06	0.05	0.00	0.00	0.00	0.00
#1 TEG Dehydrator & Flash Tank Routed to Flare (004-01)	0.06	0.05	1.39	0.00	0.00	0.39
#2 Dehy Reboiler (004-02)	0.15	0.13	0.01	0.00	0.01	0.00
#2 TEG Dehydrator & Flash Tank Recirculated to Reboiler (004-02)	-	-	0.68	-	-	0.00
#2 Dehy Indirect Heater (004-02)	0.11	0.09	0.01	0.00	0.01	0.00
Generator #1 (G-001)	4.24	8.49	2.12	0.00	0.04	0.06
Generator #2 (G-002)	4.99	8.18	0.07	0.00	0.04	0.06
Heating Boiler (003-01)	0.06	0.05	0.00	0.00	0.00	0.00
Hot Water Heater (003-02)	0.00	0.00	0.00	0.00	0.00	0.00
<b>Site Wide Emissions (lb/hr)</b>	<b>125.88</b>	<b>46.39</b>	<b>12.31</b>	<b>0.04</b>	<b>2.99</b>	<b>5.26</b>

<sup>1</sup> PM = PM<sub>10</sub> = PM<sub>2.5</sub>

Process/Facility	Potential Emissions (tpy)					
	NOx	CO	VOC	SO <sub>2</sub>	PM <sup>1</sup>	HAPs
Compressor Engine #1 (C-001)	229.43	27.94	8.69	0.04	3.50	5.76
Compressor Engine #2 (C-002)	26.07	26.07	6.52	0.03	2.10	3.46
Compressor Engine #3 (C-003)	26.07	26.07	6.52	0.03	2.10	3.46
Compressor Engine #4 (C-004)	183.54	22.35	6.95	0.03	2.80	4.61
Compressor Engine #5 (C-005)	38.55	22.94	5.74	0.02	1.85	3.04
#1 Dehy Reboiler (004-01)	0.26	0.22	0.01	0.00	0.02	0.00
#1 TEG Dehydrator & Flash Tank Routed to Flare (004-01)	0.25	0.21	6.08	0.00	0.02	0.59
#2 Dehy Reboiler (004-02)	0.68	0.57	0.04	0.00	0.05	0.01
#2 TEG Dehydrator & Flash Tank Recirculated to Reboiler (004-02)	-	-	2.97	-	-	0.00
#2 Dehy Indirect Heater (004-02)	0.49	0.41	0.03	0.00	0.04	0.01
Generator #3 (G-003)	1.06	2.12	0.53	0.00	0.01	0.02
Generator #2 (G-002)	21.87	35.85	0.29	0.01	0.19	0.28
Heating Boiler (003-01)	0.27	0.23	0.02	0.00	0.02	0.01
Hot Water Heater (003-02)	0.01	0.01	0.00	0.00	0.00	0.00
<b>Site Wide Emissions (tpy)</b>	<b>528.56</b>	<b>164.99</b>	<b>44.36</b>	<b>0.17</b>	<b>12.68</b>	<b>21.25</b>

<sup>1</sup> PM = PM<sub>10</sub> = PM<sub>2.5</sub>

**Equitrans - Copley Run Station  
Facility-Wide Emissions Summary**

Process/Facility	HAPs - Potential Emissions (lb/hr)					
	Benzene	Ethylbenzene	Toluene	Xylenes	n-Hexane	Formaldehyde
Compressor Engine #1 (C-001)	3.21E-02	1.78E-03	1.59E-02	4.43E-03	7.35E-03	9.12E-01
Compressor Engine #2 (C-002)	1.92E-02	1.07E-03	9.55E-03	2.66E-03	4.41E-03	5.47E-01
Compressor Engine #3 (C-003)	1.92E-02	1.07E-03	9.55E-03	2.66E-03	4.41E-03	5.47E-01
Compressor Engine #4 (C-004)	2.56E-02	1.43E-03	1.27E-02	3.54E-03	5.88E-03	7.30E-01
Compressor Engine #5 (C-005)	1.92E-02	1.07E-03	9.55E-03	2.66E-03	4.41E-03	5.47E-01
#1 Dehy Reboiler (004-01)	1.26E-06	-	2.05E-06	-	1.08E-03	4.51E-05
#1 TEG Dehydrator & Flash Tank Routed to Flare (004-01)	3.22E-02	2.09E-02	2.67E-02	2.59E-02	1.53E-02	-
#2 Dehy Reboiler (004-02)	3.25E-06	-	5.26E-06	-	2.78E-03	1.16E-04
#2 TEG Dehydrator & Flash Tank Recirculated to Reboiler (004-02)	2.20E-04	2.20E-04	2.20E-04	2.20E-04	2.20E-04	-
#2 Dehy Indirect Heater (004-02)	2.33E-06	-	3.78E-06	-	2.00E-03	8.33E-05
Generator #3 (G-003)	3.35E-03	5.26E-05	1.18E-03	4.14E-04	-	4.35E-02
Generator #2 (G-002)	3.48E-03	5.46E-05	1.23E-03	4.29E-04	-	4.51E-02
Heating Boiler (003-01)	1.31E-06	-	2.13E-06	-	1.13E-03	4.69E-05
Hot Water Heater (003-02)	5.83E-08	-	9.44E-08	-	5.00E-05	2.08E-06
<b>Site Wide Emissions (lb/hr)</b>	<b>0.15</b>	<b>0.03</b>	<b>0.09</b>	<b>0.04</b>	<b>0.05</b>	<b>3.37</b>

Process/Facility	HAPs - Potential Emissions (tpy)					
	Benzene	Ethylbenzene	Toluene	Xylenes	n-Hexane	Formaldehyde
Compressor Engine #1 (C-001)	0.140	0.008	0.070	0.019	0.032	3.995
Compressor Engine #2 (C-002)	0.084	0.005	0.042	0.012	0.019	2.397
Compressor Engine #3 (C-003)	0.084	0.005	0.042	0.012	0.019	2.397
Compressor Engine #4 (C-004)	0.112	0.006	0.056	0.016	0.026	3.196
Compressor Engine #5 (C-005)	0.074	0.004	0.037	0.010	0.017	2.109
#1 Dehy Reboiler (004-01)	0.000	-	0.000	-	0.005	0.000
#1 TEG Dehydrator & Flash Tank Routed to Flare (004-01)	0.141	0.092	0.117	0.113	0.114	-
#2 Dehy Reboiler (004-02)	0.000	-	0.000	-	0.012	0.001
#2 TEG Dehydrator & Flash Tank Recirculated to Reboiler (004-02)	0.000	0.000	0.000	0.000	0.000	-
#2 Dehy Indirect Heater (004-02)	0.000	-	0.000	-	0.009	0.000
Generator #3 (G-003)	0.001	0.000	0.000	0.000	-	0.011
Generator #2 (G-002)	0.015	0.000	0.005	0.002	-	0.198
Heating Boiler (003-01)	0.000	-	0.000	-	0.005	0.000
Hot Water Heater (003-02)	0.000	-	0.000	-	0.000	0.000
<b>Site Wide Emissions (tpy)</b>	<b>0.65</b>	<b>0.12</b>	<b>0.37</b>	<b>0.18</b>	<b>0.26</b>	<b>14.30</b>

**Equitrans - Copley Run Station  
Facility-Wide Emissions Summary**

Process/Facility	GHG - Potential Emissions (lb/hr) <sup>2</sup>			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Compressor Engine #1 (C-001)	1931	0.036	0.0036	1933
Compressor Engine #2 (C-002)	1159	0.022	0.0022	1160
Compressor Engine #3 (C-003)	1159	0.022	0.0022	1160
Compressor Engine #4 (C-004)	1545	0.029	0.0029	1547
Compressor Engine #5 (C-005)	1159	0.022	0.0022	1160
#1 Dehy Reboiler (004-01)	76	0.000	0.0001	76
#1 TEG Dehydrator & Flash Tank Routed to Flare (004-01)	68	4.692	0.0012	185
#2 Dehy Reboiler (004-02)	195	0.000	0.0004	195
#2 TEG Dehydrator & Flash Tank Recirculated to Reboiler (004-02)	0	0.496	0.0000	12
#2 Dehy Indirect Heater (004-02)	140	0.000	0.0003	140
Generator #3 (G-003)	248	0.005	0.0005	249
Generator #2 (G-002)	257	0.005	0.0005	257
Heating Boiler (003-01)	79	0.001	0.0001	79
Hot Water Heater (003-02)	4	0.000	0.0000	4
<b>Site Wide Emissions (lb/hr)</b>	<b>8,020</b>	<b>5.33</b>	<b>0.02</b>	<b>8,158</b>

Process/Facility	GHG - Potential Emissions (tpy) <sup>2</sup>			
	CO <sub>2</sub>	CH <sub>4</sub>	N <sub>2</sub> O	CO <sub>2</sub> e
Compressor Engine #1 (C-001)	8460	0.160	0.0160	8469
Compressor Engine #2 (C-002)	5076	0.096	0.0096	5081
Compressor Engine #3 (C-003)	5076	0.096	0.0096	5081
Compressor Engine #4 (C-004)	6768	0.128	0.0128	6775
Compressor Engine #5 (C-005)	4467	0.084	0.0084	4471
#1 Dehy Reboiler (004-01)	333	0.000	0.0006	333
#1 TEG Dehydrator & Flash Tank Routed to Flare (004-01)	297	20.553	0.0054	812
#2 Dehy Reboiler (004-02)	855	0.000	0.0016	856
#2 TEG Dehydrator & Flash Tank Recirculated to Reboiler (004-02)	0	2.173	0.0000	54
#2 Dehy Indirect Heater (004-02)	614	0.000	0.0012	615
Generator #3 (G-003)	62	0.001	0.0001	62
Generator #2 (G-002)	1126	0.021	0.0021	1127
Heating Boiler (003-01)	346	0.007	0.0007	346
Hot Water Heater (003-02)	15	0.000	0.0000	15
<b>Site Wide Emissions (tpy)</b>	<b>33,495</b>	<b>23.32</b>	<b>0.07</b>	<b>34,098</b>

<sup>2</sup> Carbon equivalent emissions (CO<sub>2</sub>e) are based on the following Global Warming Potentials (GWP) from 40 CFR Part 98, Table A-1:

Carbon Dioxide (CO <sub>2</sub> ):	1
Methane (CH <sub>4</sub> ):	25
Nitrous Oxide (N <sub>2</sub> O):	298

**Generator #3  
(G-003) - New**

<b>Source Designation:</b>	
Manufacturer:	Kohler
Model No.:	150REZG
Year Installed:	2015
Type of Engine:	Electric Generator - 4SRB
Fuel Used:	Natural Gas
Higher Heating Value (HHV) (Btu/scf):	1,080
Rated Horsepower (bhp):	259
Heat Input (MMBtu/hr)	2.12
Specific Fuel Consumption (Btu/bhp-hr)	8,194
Maximum Fuel Consumption at 100% Load (MMscf/hr):	0.00197
Maximum Fuel Consumption at 100% Load (MMscf/yr):	1.0

**Operational Details:**

Potential Annual Hours of Operation (hr/yr):	500
Potential Fuel Consumption (MMBtu/yr):	1,061

**Criteria and Manufacturer Specific Pollutant Emission Factors:**

<b>Pollutant</b>	<b>Emission Factors</b>	<b>Units</b>
NO <sub>x</sub> <sup>a</sup>	2.00E+00	g/hp-hr
CO <sup>a</sup>	4.00E+00	g/hp-hr
SO <sub>2</sub> <sup>a</sup>	5.88E-04	lb/MMBtu
Total Particulate Matter (TSP) <sup>a</sup>	1.94E-02	lb/MMBtu
PM (Filterable) <sup>a</sup>	9.50E-03	lb/MMBtu
PM <sub>10</sub> (Filterable + Condensable) <sup>f</sup>	1.94E-02	lb/MMBtu
PM <sub>2.5</sub> (Filterable + Condensable) <sup>f</sup>	1.94E-02	lb/MMBtu
VOC <sup>a</sup>	1.00E+00	g/hp-hr
CO <sub>2</sub> <sup>b</sup>	5.31E+01	kg/MMBtu
CH <sub>4</sub> <sup>b</sup>	1.00E-03	kg/MMBtu
N <sub>2</sub> O <sup>b</sup>	1.00E-04	kg/MMBtu

**Generator #3  
(G-003) - New**

**Criteria and Manufacturer Specific Pollutant Emission Rates:**

Pollutant	Potential Emissions	
	(lb/hr) <sup>c,d,e</sup>	(tons/yr) <sup>f</sup>
NO <sub>x</sub>	4.24E+00	1.06E+00
CO	8.49E+00	2.12E+00
SO <sub>2</sub>	1.25E-03	3.12E-04
Total Particulate Matter (TSP)	4.12E-02	1.03E-02
PM (Filterable)	2.02E-02	5.04E-03
PM <sub>10</sub> (Filterable + Condensable)	4.12E-02	1.03E-02
PM <sub>2.5</sub> (Filterable + Condensable)	4.12E-02	1.03E-02
VOC	2.12E+00	5.31E-01
CO <sub>2</sub>	2.48E+02	6.21E+01
CH <sub>4</sub>	4.68E-03	1.17E-03
N <sub>2</sub> O	4.68E-04	1.17E-04

**Hazardous Air Pollutant (HAP) Potential Emissions:**

Pollutant	Emission Factor (lb/MMBtu) <sup>a</sup>	Potential Emissions (lb/hr) <sup>d</sup>	Potential Emissions (tons/yr) <sup>f</sup>
<b>HAPs:</b>			
Acetaldehyde	2.79E-03	5.92E-03	1.48E-03
Acrolein	2.63E-03	5.58E-03	1.40E-03
Benzene	1.58E-03	3.35E-03	8.38E-04
1,3-Butadiene	6.63E-04	1.41E-03	3.52E-04
Ethylbenzene	2.48E-05	5.26E-05	1.32E-05
Formaldehyde	2.05E-02	4.35E-02	1.09E-02
Toluene	5.58E-04	1.18E-03	2.96E-04
Xylene	1.95E-04	4.14E-04	1.03E-04
<b>Polycyclic Organic Matter:</b>			
Naphthalene	9.71E-05	2.06E-04	5.15E-05
PAH	1.41E-04	2.99E-04	7.48E-05
<b>Total HAP</b>		<b>6.19E-02</b>	<b>1.55E-02</b>

<sup>a</sup> Emission factors from AP-42 Section 3.2, "Natural Gas Fired Reciprocating Engines," Tables 3.2-3, July 2000.

<sup>b</sup> Greenhouse gas emission factors are from 40 CFR Part 98 for natural gas combustion

<sup>c</sup> Emission Rate (lb/hr) = Rated Horsepower (bhp) x Emission Factor (g/bhp-hr) x 2.2046 (lb/kg) / 1000 (g/kg)

<sup>d</sup> Emission Rate (lb/hr) = Rated Output (kW) x Emission Factor (lb/MWh) / 1000 (kW/MW).

<sup>e</sup> Emission Rate (lb/hr) = Rated Capacity (MMBtu/hr) x Emission Factor (kg/MMBtu) x 2.2046 (lb/kg)

<sup>f</sup> Annual Emissions (tons/yr)<sub>Potential</sub> = (lb/hr)<sub>Emissions</sub> x (Maximum Allowable Operating Hours, 8,760 hr/yr) x (1 ton/2000 lb).

**Generator #1**  
**(G-001) To be Removed**

<b>Source Designation:</b>	
Manufacturer:	International Harvester
Model No.:	150REZG
Year Installed:	1987
Type of Engine:	Electric Generator - 4SRB
Fuel Used:	Natural Gas
Higher Heating Value (HHV) (Btu/scf):	1,080
Rated Horsepower (bhp):	865
Heat Input (MMBtu/hr)	2.12
Specific Fuel Consumption (Btu/bhp-hr)	2,453
Maximum Fuel Consumption at 100% Load (MMscf/hr):	0.00197
Maximum Fuel Consumption at 100% Load (MMscf/yr):	1.0

**Operational Details:**

Potential Annual Hours of Operation (hr/yr):	500
Potential Fuel Consumption (MMBtu/yr):	1,061

**Criteria and Manufacturer Specific Pollutant Emission Factors:**

<b>Pollutant</b>	<b>Emission Factors</b>	<b>Units</b>
NO <sub>x</sub> <sup>a</sup>	2.27E+00	lb/MMBtu
CO <sup>a</sup>	3.72E+00	lb/MMBtu
SO <sub>2</sub> <sup>a</sup>	5.88E-04	lb/MMBtu
Total Particulate Matter (TSP) <sup>a</sup>	1.94E-02	lb/MMBtu
PM (Filterable) <sup>a</sup>	9.50E-03	lb/MMBtu
PM <sub>10</sub> (Filterable + Condensable) <sup>a</sup>	1.94E-02	lb/MMBtu
PM <sub>2.5</sub> (Filterable + Condensable) <sup>a</sup>	1.94E-02	lb/MMBtu
VOC <sup>a</sup>	2.96E-02	lb/MMBtu
CO <sub>2</sub> <sup>b</sup>	5.30E+01	kg/MMBtu
CH <sub>4</sub> <sup>b</sup>	1.00E-03	kg/MMBtu
N <sub>2</sub> O <sup>b</sup>	1.00E-04	kg/MMBtu

**Generator #1**  
**(G-001) To be Removed**

**Criteria and Manufacturer Specific Pollutant Emission Rates:**

Pollutant	Potential Emissions	
	(lb/hr) <sup>c,d,e</sup>	(tons/yr) <sup>f</sup>
NO <sub>x</sub>	4.82E+00	1.20E+00
CO	7.89E+00	1.97E+00
SO <sub>2</sub>	1.25E-03	3.12E-04
Total Particulate Matter (TSP)	4.12E-02	1.03E-02
PM (Filterable)	2.02E-02	5.04E-03
PM <sub>10</sub> (Filterable + Condensable)	4.12E-02	1.03E-02
PM <sub>2.5</sub> (Filterable + Condensable)	4.12E-02	1.03E-02
VOC	6.28E-02	1.57E-02
CO <sub>2</sub>	2.48E+02	6.20E+01
CH <sub>4</sub>	4.68E-03	1.17E-03
N <sub>2</sub> O	4.68E-04	1.17E-04

**Hazardous Air Pollutant (HAP) Potential Emissions:**

Pollutant	Emission Factor (lb/MMBtu) <sup>a</sup>	Potential Emissions (lb/hr) <sup>d</sup>	Potential Emissions (tons/yr) <sup>f</sup>
<b>HAPs:</b>			
Acetaldehyde	2.79E-03	5.92E-03	1.48E-03
Acrolein	2.63E-03	5.58E-03	1.40E-03
Benzene	1.58E-03	3.35E-03	8.38E-04
1,3-Butadiene	6.63E-04	1.41E-03	3.52E-04
Ethylbenzene	2.48E-05	5.26E-05	1.32E-05
Formaldehyde	2.05E-02	4.35E-02	1.09E-02
Toluene	5.58E-04	1.18E-03	2.96E-04
Xylene	1.95E-04	4.14E-04	1.03E-04
<b>Polycyclic Organic Matter:</b>			
Naphthalene	9.71E-05	2.06E-04	5.15E-05
PAH	1.41E-04	2.99E-04	7.48E-05
<b>Total HAP</b>		<b>6.19E-02</b>	<b>1.55E-02</b>

<sup>a</sup> Emission factors from AP-42 Section 3.2, "Natural Gas Fired Reciprocating Engines," Tables 3.2-3, July 2000.

<sup>b</sup> Greenhouse gas emission factors are from 40 CFR Part 98 for natural gas combustion

<sup>c</sup> Emission Rate (lb/hr) = Rated Horsepower (bhp) x Emission Factor (g/bhp-hr) x 2.2046 (lb/kg) / 1000 (g/kg)

<sup>d</sup> Emission Rate (lb/hr) = Rated Output (kW) x Emission Factor (lb/MWh) / 1000 (kW/MW)

<sup>e</sup> Emission Rate (lb/hr) = Rated Capacity (MMBtu/hr) x Emission Factor (kg/MMBtu) x 2.2046 (lb/kg)

<sup>f</sup> Annual Emissions (tons/yr)<sub>Potential</sub> = (lb/hr)<sub>Emissions</sub> x (Maximum Allowable Operating Hours, 8,760 hr/yr) x (1 ton/2000 lb)

**ATTACHMENT J**

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**Class I Legal Ad**

## **AIR QUALITY PERMIT NOTICE Notice of Application**

Notice is given that Equitrans, LP has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Class II General Permit (G60-C) for an existing natural gas transmission station (Copley Run Compressor Station) located on Copley Road (at 38.98096, -80.522139), Weston, in Lewis County, West Virginia.

The applicant estimates the potential increase to discharge the following Regulated Air Pollutants as a result of the change will be:

Particulate Matter (PM) = 0.01 tpy  
Sulfur Dioxide (SO<sub>2</sub>) = 0.00 tpy  
Volatile Organic Compounds (VOC) = 0.53 tpy  
Carbon Monoxide (CO) = 2.12 tpy  
Nitrogen Oxides (NO<sub>x</sub>) = 1.06 tpy  
Hazardous Air Pollutants (HAPs) = 0.02 tpy  
Greenhouse Gases (CO<sub>2</sub>e) = 62 tpy

Equitrans is proposing to replace an existing emergency generator with a new unit. 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 XX day of November, 2015.

By: Equitrans, LP  
Diana Charletta, Sr. Vice President – Midstream Operations  
625 Liberty Avenue Suite 1700  
Pittsburgh, PA 15222

**ATTACHMENT L**

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**General Permit Registration Application Fee**