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Mark A. Sowa
Senior Environmental Coordinator

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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 – Curtisville Compressor Station
Facility ID No: 049-00052
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 Curtisville Compressor Station (Curtisville) located near Smithfield in Marion County, West Virginia. Curtisville is a natural gas transmission facility that currently operates under Title V Permit #R30-04900052-2013 (Title V Permit).

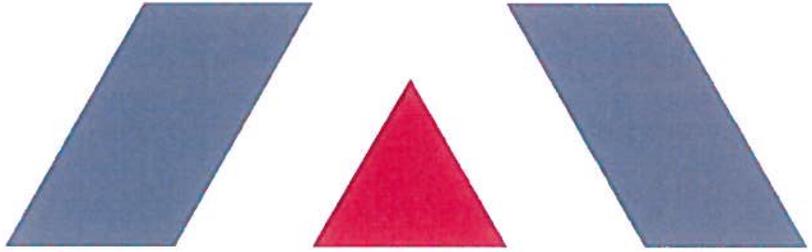
We are seeking a Class II General Permit #G60-C for a new natural gas-fired emergency Generator to replace the existing natural gas-fired emergency generator in the current Title V Permit. Enclosed please find a signed original copy of the Class II G60-C application and CDs with electronic copies of 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 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 G60-C APPLCIATION
EQUITRANS, LP
Curtisville Compressor Station

TRINITY CONSULTANTS

4500 Brooktree Drive

Suite 103

Wexford, PA 15090

(724) 935-2611

November 2015

Project 153901.0147

Trinity 
Consultants

Environmental solutions delivered uncommonly well

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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 Marion County, West Virginia (Curtisville Compressor Station). Specifically, this application seeks to install a new natural gas fired electric generator to replace the existing generator (G-001). The Curtisville Station is currently operating under West Virginia Department of Environmental Protection (WVDEP) Division of Air Quality Title V operating permit R30-04900052-2013.

1.1. FACILITY AND PROJECT DESCRIPTION

The Curtisville Compressor Station (Curtisville) 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 Curtisville station currently consists of the following equipment:

- One (1) 1100-hp natural gas reciprocating engine/integral compressor
- Two (2) natural gas reciprocating driven generators (one rated at 70 hp, and 125 hp respectively)
- One (1) triethylene glycol (TEG) dehydration unit equipped with an indirect heater/reboiler and flare
- One (1) natural gas heating boiler
- Four (5) miscellaneous storage tanks of various sizes

Equitrans is proposing to install a 25 kilowatt (KW) Kohler emergency generator (G003) to replace the existing emergency generator (G-001). The proposed generator will be powered by a natural gas fired four-stroke 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

The characteristics of air emissions from the emission units at the Curtisville 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), carbon dioxide (CO₂), volatile organic compounds (VOC), and nitrogen oxides (NO_x), 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.¹ 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) methane (CH₄) and nitrous oxide (N₂O) are calculated in accordance with Subpart C (General Stationary Fuel Combustion Sources) of the GHG Mandatory Reporting Rule (MRR), contained in 40 CFR 98.

¹ 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 Curtisville 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 Curtisville Station is located in an area classified as attainment for all pollutants. Therefore, NNSR is not applicable. The Curtisville Compressor Station is a major source with respect to the NSR program as its potential emissions on NO_x are below 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.² The Curtisville station is currently classified as an area source for the Title V program and operates under Title V operating permit No. R30-04900052-2013. 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 Curtisville Compressor Station will remain an area source for Title V purposes.

² 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 Curtisville 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 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 Curtisville 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 Curtisville facility is an area source of HAP as emissions are less than applicable 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 Curtisville 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 area 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 IIII 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 Curtisville Station is a new area source RICE and will comply with Subpart ZZZZ by complying with 40 CFR 60, Subpart JJJJ as described in the previous section.

3.2. STATE REGULATORY APPLICABILITY

The wellpad 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 wellpad, Equitrans will be complying with 45 CSR 16

ATTACHMENT A

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

Process Description

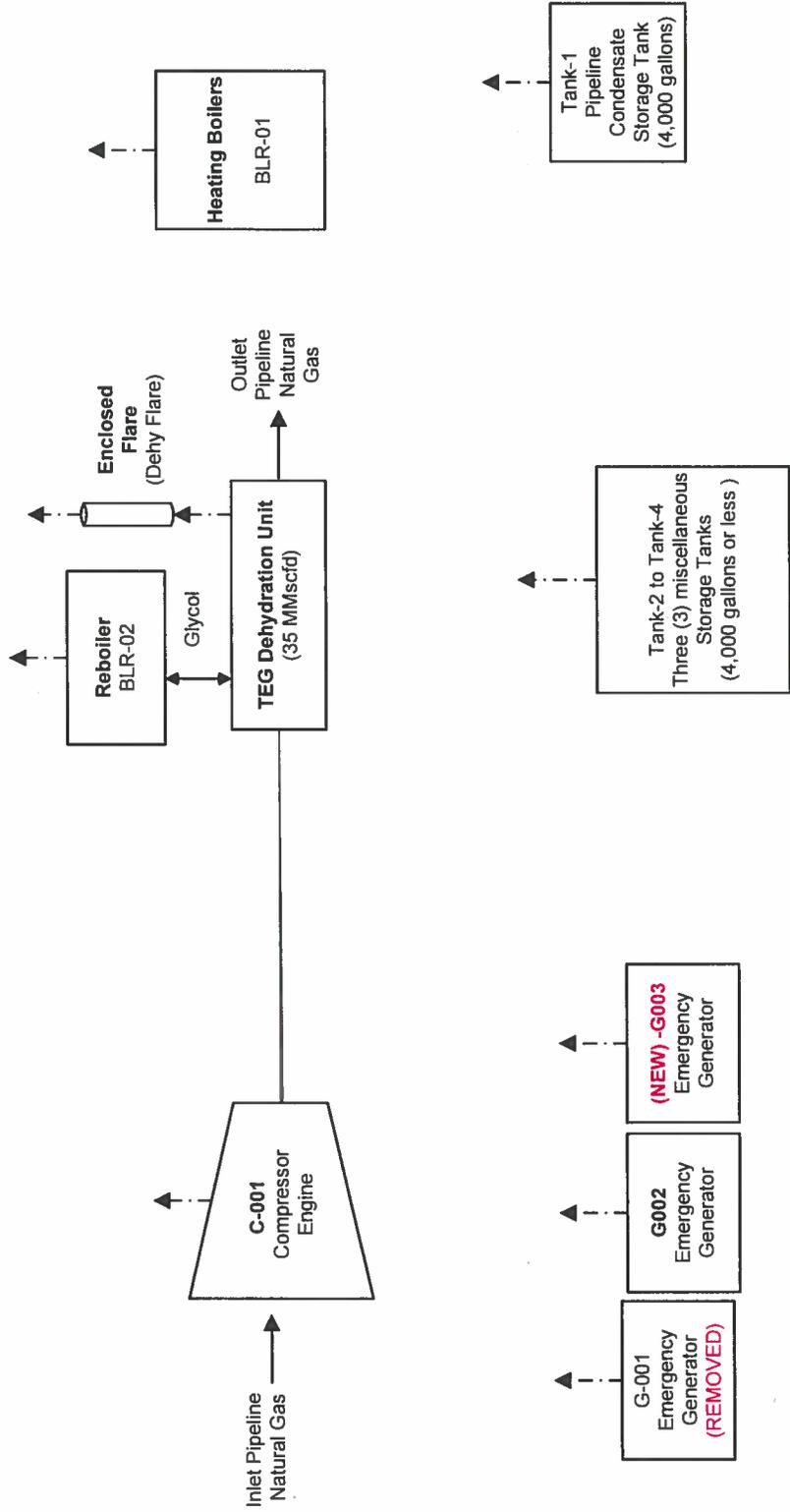
ATTACHMENT B - PROCESS DESCRIPTION

Equitrans is submitting this application to install a new natural gas-fired emergency generator at the Curtisville Compressor Station which will replace an existing natural gas fired generator.

A process flow diagram is included as Attachment D.

ATTACHMENT D

Process Flow Diagram



Flow Legend

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

EQT *Where energy meets innovation.*
Equitrans, LLP

Process Flow Diagram
 Curtisville Run Station

Trinity
 Consultants

November 2015

ATTACHMENT E

Plot Plan

ATTACHMENT F

Area Map

ATTACHMENT F - AREA MAP



Figure 1 - Map of Curtisville Station

UTM Northing (KM): 4,375.025
UTM Easting (KM): 548.149
Elevation: 1,076 ft

Equipment Data Sheets and Registration Section Applicability Form



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

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

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

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

- | | |
|---|--|
| <input type="checkbox"/> G10-D – Coal Preparation and Handling | <input type="checkbox"/> G40-C – Nonmetallic Minerals Processing |
| <input type="checkbox"/> G20-B – Hot Mix Asphalt | <input type="checkbox"/> G50-B – Concrete Batch |
| <input type="checkbox"/> G30-D – Natural Gas Compressor Stations | <input checked="" type="checkbox"/> G60-C – Class II Emergency Generator |
| <input type="checkbox"/> G33-A – Spark Ignition Internal Combustion Engines | <input type="checkbox"/> G65-C – Class I Emergency Generator |
| <input type="checkbox"/> G35-A – Natural Gas Compressor Stations (Flare/Glycol Dehydration Unit) | <input type="checkbox"/> 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): Equitrans LP		2. Federal Employer ID No. (FEIN): 25-0724685	
3. Applicant's mailing address: Route 1, Box 26 Smithfield, WV 25437		4. Applicant's physical address: Off Laurel Run- Left Road, Mannington District, Marion County, West Virginia	
5. If applicant is a subsidiary corporation, please provide the name of parent corporation: EQT Corporation			
6. WV BUSINESS REGISTRATION. Is the applicant a resident of the State of West Virginia? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO			
<ul style="list-style-type: none"> - IF YES, provide a copy of the Certificate of Incorporation/ Organization / Limited Partnership (one page) including any name change amendments or other Business Registration Certificate as Attachment A. - IF NO, provide a copy of the Certificate of Authority / Authority of LLC / Registration (one page) including any name change amendments or other Business Certificate as Attachment A. 			

SECTION II. FACILITY INFORMATION

7. Type of plant or facility (stationary source) to be constructed, modified, relocated or administratively updated (e.g., coal preparation plant, primary crusher, etc.): Natural gas Compressor Station	8a. Standard Industrial Classification (SIC) code: 4922	AND	8b. North American Industry System (NAICS) code: 486210
9. DAQ Plant ID No. (for existing facilities only): 049-00052	10. List all current 45CSR13 and other General Permit numbers associated with this process (for existing facilities only): ___R30-04900052-2013___ _____ _____		

A: PRIMARY OPERATING SITE INFORMATION

11A. Facility name of primary operating site: Curtisville Compressor Station #50 <hr/>	12A. Address of primary operating site: Mailing: Route 1, Box 26 Smithfield, WV 25437 Physical: Off Laurel Run- Left Road, Mannington District, Marion County, West Virginia	
13A. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO - IF YES, please explain: Property is leased and held under production rights <hr/> - IF NO, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.		
14A. - For Modifications or Administrative Updates at an existing facility, please provide directions to the present location of the facility from the nearest state road; - For Construction or Relocation permits, please provide directions to the proposed new site location from the nearest state road. Include a MAP as Attachment F . Interstate 79 North to the Downtown Fairmont Exit (Number 137). Bear to the right on off ramp and merge into left lane prior to stop light. Make left at stop light and stay on Route 310 for 3 stop lights. Make right turn onto bridge at 3rd light. Go up the hill at stop light after crossing bridge. Go thru 2nd stop light. Make a left at next stop light. Bear to the right hand lane for two stop lights and make a right onto Route 250 North. Stay on Route 250N to Mannington. In Mannington after passing Rite Aid (on right), make left hand turn onto Market street. At the Y at the end of Market Street, bear right onto Buffalo Road and continue on this road past Mannington Fairgrounds into the community of Logansport. After leaving Logansport make a left hand turn onto a new two lane bridge (1st left after Logansport) to Owen-Davey Creek Road. The first right turn leads to the station		
15A. Nearest city or town: Mannington	16A. County: Marion	17A. UTM Coordinates: Northing (KM): 4,375.025 Easting (KM): 548.149 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>38.523524°</u> Longitude: <u>-80.439804°</u>

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

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

<p>14B. — For Modifications or Administrative Updates at an existing facility, please provide directions to the present location of the facility from the nearest state road;</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>_____</p> <p>_____</p>		
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: _N/A_	12C. Address of 2 nd alternate operating site: Mailing: _____ Physical: _____	
<p>13C. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? <input type="checkbox"/> YES <input type="checkbox"/> NO</p> <p>— IF YES, please explain: _____</p> <p>_____</p> <p>— IF NO, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE.</p>		
<p>14C. — For Modifications or Administrative Updates at an existing facility, please provide directions to the 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>_____</p> <p>_____</p>		
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>____/____/2015____</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>____/____/____</p>	<p>21. Date of anticipated Start-up if registration is granted:</p> <p>____/____/2015____</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 <u>24</u> Days per week <u>7</u> Weeks per year <u>52</u> Percentage of operation <u>100</u></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"> <input checked="" type="checkbox"/> ATTACHMENT A : CURRENT BUSINESS CERTIFICATE <input checked="" type="checkbox"/> ATTACHMENT B: PROCESS DESCRIPTION <input type="checkbox"/> ATTACHMENT C: DESCRIPTION OF FUGITIVE EMISSIONS <input checked="" type="checkbox"/> ATTACHMENT D: PROCESS FLOW DIAGRAM <input checked="" type="checkbox"/> ATTACHMENT E: PLOT PLAN <input checked="" type="checkbox"/> ATTACHMENT F: AREA MAP <input checked="" type="checkbox"/> ATTACHMENT G: EQUIPMENT DATA SHEETS AND REGISTRATION SECTION APPLICABILITY FORM <input type="checkbox"/> ATTACHMENT H: AIR POLLUTION CONTROL DEVICE SHEETS <input checked="" type="checkbox"/> ATTACHMENT I: EMISSIONS CALCULATIONS <input checked="" type="checkbox"/> ATTACHMENT J: CLASS I LEGAL ADVERTISEMENT <input checked="" type="checkbox"/> ATTACHMENT K: ELECTRONIC SUBMITTAL <input checked="" type="checkbox"/> ATTACHMENT L: GENERAL PERMIT REGISTRATION APPLICATION FEE <input type="checkbox"/> ATTACHMENT M: SITING CRITERIA WAIVER (<i>Not Applicable</i>) <input type="checkbox"/> ATTACHMENT N: MATERIAL SAFETY DATA SHEETS (MSDS) (<i>Not Applicable</i>) <input type="checkbox"/> ATTACHMENT O: EMISSIONS SUMMARY SHEETS <input type="checkbox"/> OTHER SUPPORTING DOCUMENTATION NOT DESCRIBED ABOVE (Equipment Drawings, Aggregation Discussion, etc.) (<i>Not Applicable</i>) <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) 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

Diana Charletta

(please use blue ink)

Responsible Official

11/18/15

Date

Name & Title

Diana Charletta, Sr. Vice President- Midstream Operations

(please print or type)

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 ¹		G-003		G-001			
Engine Manufacturer and Model		Kohler 25REZG		Kohler 30R62914154			
Manufacturer's Rated bhp/rpm		44		70			
Source Status ²		NS		RS			
Date Installed/Modified/Removed ³		2015		2015			
Engine Manufactured/Reconstruction Date ⁴		2014		1973			
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart IIII? (Yes or No) ⁵		No		No			
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart JJJJ? (Yes or No) ⁶		Yes		No			
Engine, Fuel and Combustion Data	Engine Type ⁷	4SRB		4SRB			
	APCD Type ⁸	NSCR		N/A			
	Fuel Type ⁹	PQ		2FO			
	H ₂ S (gr/100 scf)	0		N/A			
	Operating bhp/rpm	44		70			
	BSFC (Btu/bhp-hr)	8734					
	Fuel throughput (ft ³ /hr)	366		170			
	Fuel throughput (MMft ³ /yr)	3.2		1.5			
	Operation (hrs/yr)	500		8760			
Reference ¹⁰	Potential Emissions ¹¹	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
MD/AP-42	NO _x	0.97	0.24	0.40	1.77		
MD/AP-42	CO	37.76	9.44	0.66	2.90		
MD/AP-42	VOC	0.97	0.24	0.01	0.02		
AP-42	SO ₂	<0.01	<0.01	<0.01	<0.01		
AP-42	PM ₁₀	0.01	<0.01	<0.01	0.02		

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

EMERGENCY GENERATOR EMISSION SUMMARY SHEET FOR CRITERIA POLLUTANTS

Emergency Generator Location: Curtisville Compressor Station		Registration Number <small>(Agency Use)</small> <u>G60-C</u>													
Source ID No.	Potential Emissions (lbs/hr)										Potential Emissions (tons/yr)				
	NO _x	CO	VOC	SO ₂	PM ₁₀	NO _x	CO	VOC	SO ₂	PM ₁₀	NO _x	CO	VOC	SO ₂	PM ₁₀
GEN-003	0.97	37.76	0.97	<0.01	0.01	0.24	9.44	0.24	<0.01	0.01	0.24	9.44	0.24	<0.01	<0.01
Total	0.97	37.76	0.97	<0.01	0.01	0.24	9.44	0.24	<0.01	0.01	0.24	9.44	0.24	<0.01	<0.01

EMERGENCY GENERATOR EMISSION SUMMARY SHEET FOR HAZARDOUS/TOXIC POLLUTANTS

Emergency Generator Location: Curtisville Compressor Station		Registration Number <small>(Agency Use)</small> <u>G60-C</u>																
Source ID No.	Potential Emissions (lbs/hr)										Potential Emissions (tons/yr)							
	Benzene	Ethyl-benzene	Toluene	Xylenes	n-Hexane	Formaldehyde	Benzene	Ethyl-benzene	Toluene	Xylenes	n-Hexane	Formaldehyde	Benzene	Ethyl-benzene	Toluene	Xylenes	n-Hexane	Formaldehyde
GEN-003	6.07E-4	9.53E-6	2.14E-4	7.49E-5	---	7.88E-3	1.52E-4	2.38E-6	5.36E-5	1.87E-5	---	1.97E-3	1.52E-4	2.38E-6	5.36E-5	1.87E-5	---	1.97E-3
Total	6.07E-4	9.53E-6	2.14E-4	7.49E-5	---	7.88E-3	1.52E-4	2.38E-6	5.36E-5	1.87E-5	---	1.97E-3	1.52E-4	2.38E-6	5.36E-5	1.87E-5	---	1.97E-3

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

ATTACHMENT I

Emission Calculation

**EQT - Curtisville Station
Facility-Wide Emissions Summary**

Process/Facility	Potential Emissions (lb/hr)					
	NO _x	CO	VOC	SO ₂	PM ¹	HAPs
Compressor Engine #1 (C-001)	6.06E+01	3.15E+00	1.94E+00	5.37E-03	4.42E-01	7.27E-01
Glycol Dehydrator (004-01)	-	-	7.73E-02	-	-	2.26E-02
Generator #3 (G-003)	9.75E-01	3.78E+01	9.75E-01	2.26E-04	7.46E-03	1.12E-02
Generator #2 (G-002)	1.55E+00	1.51E+01	6.67E-02	1.89E-04	6.22E-03	9.36E-03
Heating Boiler (003-01)	3.33E-02	2.80E-02	1.83E-03	2.00E-04	2.53E-03	6.29E-04
Hot Water Heater (003-02)	1.19E-01	1.00E-01	6.55E-03	7.14E-04	9.05E-03	2.25E-03
Site Wide Emissions (lb/hr)	63.30	56.12	3.07	0.01	0.47	0.77

¹ PM = PM₁₀ = PM_{2.5}

Process/Facility	Potential Emissions (tpy)					
	NO _x	CO	VOC	SO ₂	PM ¹	HAPs
Compressor Engine #1 (C-001)	265.5482	13.8085	8.4975	0.0235	1.9359	3.1846
Glycol Dehydrator (004-01)	-	-	0.3387	-	-	0.0988
Generator #3 (G-003)	0.2437	9.4397	0.2437	0.0001	0.0019	0.0028
Generator #2 (G-002)	6.7770	66.0665	0.2920	0.0008	0.0273	0.0410
Heating Boiler (003-01)	0.1460	0.1226	0.0080	0.0009	0.0111	0.0028
Hot Water Heater (003-02)	0.5214	0.4380	0.0287	0.0031	0.0396	0.0098
Site Wide Emissions (tpy)	273.24	89.88	9.41	0.03	2.02	3.34

¹ PM = PM₁₀ = PM_{2.5}

Process/Facility	HAPs - Potential Emissions (lb/hr)					
	Benzene	Ethylbenzene	Toluene	Xylenes	n-Hexane	Formaldehyde
Compressor Engine #1 (C-001)	1.77E-02	9.86E-04	8.79E-03	2.45E-03	4.06E-03	5.04E-01
Glycol Dehydrator (004-01)	2.20E-03	6.27E-03	3.85E-03	8.03E-03	1.54E-03	-
Generator #3 (G-003)	6.07E-04	9.53E-06	2.14E-04	7.49E-05	--	7.88E-03
Generator #2 (G-002)	5.07E-04	7.95E-06	1.79E-04	6.25E-05	--	6.57E-03
Heating Boiler (003-01)	7.00E-07	-	1.13E-06	-	6.00E-04	2.50E-05
Hot Water Heater (003-02)	2.50E-06	-	4.05E-06	-	2.14E-03	8.93E-05
Site Wide Emissions (lb/hr)	0.02	0.01	0.01	0.01	0.01	0.52

Process/Facility	HAPs - Potential Emissions (tpy)					
	Benzene	Ethylbenzene	Toluene	Xylenes	n-Hexane	Formaldehyde
Compressor Engine #1 (C-001)	0.0776	0.0043	0.0385	0.0107	0.0178	2.2074
Glycol Dehydrator (004-01)	0.0096	0.0275	0.0169	0.0352	0.0067	-
Generator #3 (G-003)	1.52E-04	2.38E-06	5.36E-05	1.87E-05	--	1.97E-03
Generator #2 (G-002)	2.22E-03	3.48E-05	7.84E-04	2.74E-04	--	2.88E-02
Heating Boiler (003-01)	0.0000	-	0.0000	-	0.0026	0.0001
Hot Water Heater (003-02)	0.0000	-	0.0000	-	0.0094	0.0004
Site Wide Emissions (tpy)	0.09	0.03	0.06	0.05	0.04	2.24

**EQT - Curtisville Station
Facility-Wide Emissions Summary**

Process/Facility	GHG - Potential Emissions (lb/hr) ²			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Compressor Engine #1 (C-001)	1067	0.020	0.0020	1068
Glycol Dehydrator (004-01)	-	0.594	-	15
Generator #3 (G-003)	45	0.001	0.0001	45
Generator #2 (G-002)	38	0.001	0.0001	38
Heating Boiler (003-01)	42	0.001	0.0001	42
Hot Water Heater (003-02)	150	0.003	0.0003	150
Site Wide Emissions (lb/hr)	1,342	0.62	0.00	1,358

Process/Facility	GHG - Potential Emissions (lb/hr) ²			
	CO ₂	CH ₄	N ₂ O	CO ₂ e
Compressor Engine #1 (C-001)	4674	0.088	0.0088	4679
Glycol Dehydrator (004-01)	-	2.603	-	65
Generator #3 (G-003)	11	0.000	0.0000	11
Generator #2 (G-002)	164	0.003	0.0003	164
Heating Boiler (003-01)	184	0.003	0.0003	185
Hot Water Heater (003-02)	658	0.012	0.0012	659
Site Wide Emissions (tpy)	5,693	2.71	0.01	5,763

² Carbon equivalent emissions (CO₂e) are based on the following Global Warming Potentials (GWP) from 40 CFR Part 98, Table A-1:

Carbon Dioxide (CO ₂)	1
Methane (CH ₄)	25
Nitrous Oxide (N ₂ O)	298

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

Source Designation:	
Manufacturer:	Kohler
Model No.:	25REZG
Year Installed:	2015
Type of Engine:	4SRB
Fuel Used:	Natural Gas
Higher Heating Value (HHV) (Btu/scf):	1,050
Rated Power (kW):	33
Rated Horsepower (bhp):	44
Heat Input (MMBtu/hr)	0.38
Specific Fuel Consumption (Btu/bhp-hr)	8,734
Maximum Fuel Consumption at 100% Load (MMscf/hr):	0.0004
Maximum Fuel Consumption at 100% Load (MMscf/yr):	0.2

Operational Details:

Potential Annual Hours of Operation (hr/yr):	500
Potential Fuel Consumption (MMBtu/yr):	192

Criteria and Manufacturer Specific Pollutant Emission Factors:

Pollutant	Emission Factors	Units
NO _x ^a	1.34E+01	g/kW-hr
CO ^a	5.19E+02	g/kW-hr
SO ₂ ^a	5.88E-04	lb/MMBtu
Total Particulate Matter (TSP) ^a	1.94E-02	lb/MMBtu
PM (Filterable) ^a	9.50E-03	lb/MMBtu
PM ₁₀ (Filterable + Condensable) ^a	1.94E-02	lb/MMBtu
PM _{2.5} (Filterable + Condensable) ^a	1.94E-02	lb/MMBtu
VOC ^a	1.34E+01	g/kW-hr
CO ₂ ^b	5.31E+01	kg/MMBtu
CH ₄ ^b	1.00E-03	kg/MMBtu
N ₂ O ^b	1.00E-04	kg/MMBtu

Criteria and Manufacturer Specific Pollutant Emission Rates:

Pollutant	Potential Emissions	
	(lb/hr) ^{c,d,e}	(tons/yr) ^f
NO _x	0.97	0.24
CO	37.76	9.44
SO ₂	0.00	0.00
Total Particulate Matter (TSP)	0.01	0.00
PM (Filterable)	0.00	0.00
PM ₁₀ (Filterable + Condensable)	0.01	0.00
PM _{2.5} (Filterable + Condensable)	0.01	0.00
VOC	0.97	0.24
CO ₂	44.95	11.24
CH ₄	0.00	0.00
N ₂ O	8.47E-05	2.12E-05

Hazardous Air Pollutant (HAP) Potential Emissions:

Pollutant	Emission Factor (lb/MMBtu) ^a	Potential Emissions (lb/hr) ^d	Potential Emissions (tons/yr) ^f
HAPs:			
Acetaldehyde	2.79E-03	1.07E-03	2.68E-04
Acrolein	2.63E-03	1.01E-03	2.53E-04
Benzene	1.58E-03	6.07E-04	1.52E-04
1,3-Butadiene	6.63E-04	2.55E-04	6.37E-05
Ethylbenzene	2.48E-05	9.53E-06	2.38E-06
Formaldehyde	2.05E-02	7.88E-03	1.97E-03
Toluene	5.58E-04	2.14E-04	5.36E-05
Xylene	1.95E-04	7.49E-05	1.87E-05
Polycyclic Organic Matter:			
Naphthalene	9.71E-05	3.73E-05	9.33E-06
PAH	1.41E-04	5.42E-05	1.35E-05
Total HAP		1.12E-02	2.80E-03

^a NO_x, CO, and VOC emission factors are based on Manufacturer's guarantee (assumes all HC is VOC). All other emission factors from AP-42 Section 3.2, "Natural Gas-fired Reciprocating Engines", Tables 3.2-3 April 2000.

^b Greenhouse gas emission factors are from 40 CFR Part 98 for natural gas combustion

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

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

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

^f Annual Emissions (tons/yr)_{Potential} = (lb/hr)_{Emissions} x (Maximum Allowable Operating Hours, 8,760 hr/yr) x (1 ton/2000 lb).

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

Source Designation:	
Manufacturer:	Kohler
Model No.:	30R62 914154A42
Year Installed:	1973
Type of Engine:	4SRB
Fuel Used:	Natural Gas
Higher Heating Value (HHV) (Btu/scf):	1,050
Rated Horsepower (bhp):	70
Heat Input (MMBtu/hr)	0.18
Specific Fuel Consumption (Btu/bhp-hr)	Unknown
Maximum Fuel Consumption at 100% Load (MMscf/hr):	0.00017
Maximum Fuel Consumption at 100% Load (MMscf/yr):	1.5

Operational Details:

Potential Annual Hours of Operation (hr/yr):	8,760
Potential Fuel Consumption (MMBtu/yr):	1,561

Criteria and Manufacturer Specific Pollutant Emission Factors:

Pollutant	Emission Factors	Units
NO _x ^a	2.27E+00	lb/MMBtu
CO ^a	3.72E+00	lb/MMBtu
SO ₂ ^a	5.88E-04	lb/MMBtu
Total Particulate Matter (TSP) ^a	1.94E-02	lb/MMBtu
PM (Filterable) ^a	9.50E-03	lb/MMBtu
PM ₁₀ (Filterable + Condensable) ^a	1.94E-02	lb/MMBtu
PM _{2.5} (Filterable + Condensable) ^a	1.94E-02	lb/MMBtu
VOC ^a	2.96E-02	lb/MMBtu
CO ₂ ^b	5.31E+01	kg/MMBtu
CH ₄ ^b	1.00E-03	kg/MMBtu
N ₂ O ^b	1.00E-04	kg/MMBtu

Criteria and Manufacturer Specific Pollutant Emission Rates:

Pollutant	Potential Emissions	
	(lb/hr) ^{c,d,e}	(tons/yr) ^f
NO _x	4.04E-01	1.77E+00
CO	6.63E-01	2.90E+00
SO ₂	1.05E-04	4.59E-04
Total Particulate Matter (TSP)	3.46E-03	1.51E-02
PM (Filterable)	1.69E-03	7.41E-03
PM ₁₀ (Filterable + Condensable)	3.46E-03	1.51E-02
PM _{2.5} (Filterable + Condensable)	3.46E-03	1.51E-02
VOC	5.27E-03	2.31E-02
CO ₂	2.08E+01	9.13E+01
CH ₄	3.93E-04	1.72E-03
N ₂ O	3.93E-05	1.72E-04

Hazardous Air Pollutant (HAP) Potential Emissions:

Pollutant	Emission Factor (lb/MMBtu) ^a	Potential Emissions (lb/hr) ^d	Potential Emissions (tons/yr) ^f
HAPs:			
Acetaldehyde	2.79E-03	4.97E-04	2.18E-03
Acrolein	2.63E-03	4.69E-04	2.05E-03
Benzene	1.58E-03	2.81E-04	1.23E-03
1,3-Butadiene	6.63E-04	1.18E-04	5.17E-04
Ethylbenzene	2.48E-05	4.42E-06	1.94E-05
Formaldehyde	2.05E-02	3.65E-03	1.60E-02
Toluene	5.58E-04	9.94E-05	4.35E-04
Xylene	1.95E-04	3.47E-05	1.52E-04
Polycyclic Organic Matter:			
Naphthalene	9.71E-05	1.73E-05	7.58E-05
PAH	1.41E-04	2.51E-05	1.10E-04
Total HAP		5.20E-03	2.28E-02

^a Emission factors from AP-42 Section 3.2, "Natural Gas-fired Reciprocating Engines", Tables 3.2-3, April 2000.

^b Greenhouse gas emission factors are from 40 CFR Part 98 for natural gas combustion

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

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

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

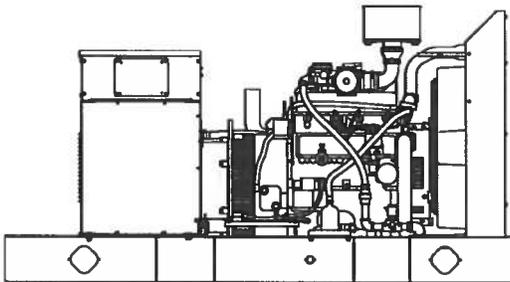
^f Annual Emissions (tons/yr)_{Potential} = (lb/hr)_{Emissions} x (Maximum Allowable Operating Hours, 8,760 hr/yr) x (1 ton/2000 lb)



**EPA-Certified for Stationary
Emergency Applications**

Ratings Range

Standby:	kW kVA	60 Hz	50 Hz
		24-25 24-31	18-20 19-25



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.
- 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™ II excitation system delivers excellent voltage response and short-circuit capability using a 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
4P4	120/208	3	60	25/31	87	25/31	87
	127/220	3	60	25/31	82	25/31	82
	120/240	3	60	25/31	75	25/31	75
	120/240	1	60	24/24	100	24/24	100
	139/240	3	60	25/31	75	25/31	75
	220/380	3	60	25/31	47	25/31	47
	277/480	3	60	25/31	38	25/31	38
	347/600	3	60	25/31	30	25/31	30
	110/190	3	50	20/25	76	20/25	76
	115/200	3	50	20/25	72	20/25	72
	120/208	3	50	18/23	62	18/23	62
	110/220	1	50	19/19	86	19/19	86
	110/220	3	50	20/25	66	20/25	66
	220/380	3	50	20/25	38	20/25	38
	230/400	3	50	20/25	36	20/25	36
	240/416	3	50	18/23	31	18/23	31
4Q4	120/240	1	60	25/25	104	25/25	104
	110/220	1	50	20/20	91	20/20	91

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-3048-1. 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 natural gas ratings for both the primary and secondary fuels.

Alternator Specifications

Specifications	Alternator
Manufacturer	Kohler
Type	4-Pole, Rotating-Field
Exciter type	Brushless, Permanent-Magnet
Leads: quantity, type	
4P4	12, Reconnectable
4Q4	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, 380 V 4P4 (12 lead)	121 (60 Hz), 88 (50 Hz)
240 V, 220 V 4Q4 (4 lead)	62 (60 Hz), 62 (50 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.
- Fast-Response™ II brushless alternator with brushless exciter for excellent load response.

Application Data

Engine

Engine Specifications	60 Hz	50 Hz
Manufacturer	General Motors	
Engine: model, type	Industrial Powertrain 3.0 L, 4-Cycle Natural Aspiration	
Cylinder arrangement	4 Inline	
Displacement, L (cu. in.)	3.0 (181)	
Bore and stroke, mm (in.)	101.6 x 91.4 (4.00 x 3.60)	
Compression ratio	8.2:1	
Piston speed, m/min. (ft./min.)	329 (1080)	274 (900)
Main bearings: quantity, type	2 Bolt	
Rated rpm	1800	1500
Max. power at rated rpm, kW (HP)	33 (44)	27.5 (37)
Engine power at standby rating, kW (HP)	33 (44)	27.5 (37)
Cylinder head material	Cast Iron	
Piston type and material	High Silicon Aluminum	
Crankshaft material	Nodular Iron	
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	60 Hz	50 Hz
Exhaust manifold type	Dry	
Exhaust flow at rated kW, m ³ /min. (cfm)	7.1 (250)	5.9 (208)
Exhaust temperature at rated kW, dry exhaust, °C (°F)	688 (1270)	
Maximum allowable back pressure, kPa (in. Hg)	10.2 (3.0)	
Exhaust outlet size at engine hookup, mm (in.)	64 (2.5) OD	

Engine Electrical

Engine Electrical System	60 Hz	50 Hz
Ignition system	Electronic, Distributor	
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	60 Hz	50 Hz
Fuel type	Natural Gas, LP Gas, or Dual Fuel	
Fuel supply line inlet	1 NPTF	
Natural gas fuel supply pressure, kPa (in. H ₂ O)	1.74-2.74 (7-11)	
LPG vapor withdrawal fuel supply pressure, kPa (in. H ₂ O)	1.24-2.74 (5-11)	
Dual fuel engine, LPG vapor withdrawal fuel supply pressure, kPa (in. H ₂ O)	1.24 (5)	

Fuel Composition Limits *	Nat. Gas	LP Gas
Methane, % by volume	90 min.	—
Ethane, % by volume	4.0 max.	—
Propane, % by volume	1.0 max.	85 min.
Propene, % by volume	0.1 max.	5.0 max.
C ₄ and higher, % by volume	0.3 max.	2.5 max.
Sulfur, ppm mass	25 max.	
Lower heating value, MJ/m ³ (Btu/ft ³), min.	33.2 (890)	84.2 (2260)

* 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	60 Hz	50 Hz
Type	Full Pressure	
Oil pan capacity, L (qt.)	3.8 (4.0)	
Oil pan capacity with filter, L (qt.)	4.1 (4.3)	
Oil filter: quantity, type	1, Cartridge	

Cooling

Radiator System	60 Hz	50 Hz
Ambient temperature, °C (°F) *	50 (122)	
Engine jacket water capacity, L (gal.)	6.8 (1.8)	
Radiator system capacity, including engine, L (gal.)	14.9 (3.9)	
Engine jacket water flow, Lpm (gpm)	42 (11)	35 (9)
Heat rejected to cooling water at rated kW, dry exhaust, kW (Btu/min.)	34.1 (1940)	28.4 (1617)
Water pump type	Centrifugal	
Fan diameter, including blades, mm (in.)	533 (21)	
Fan, kWm (HP)	1.5 (2.0)	1.0 (1.2)
Max. restriction of cooling air, intake and discharge side of radiator, kPa (in. H ₂ O)	0.125 (0.5)	

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

Operation Requirements

Air Requirements	60 Hz	50 Hz
Radiator-cooled cooling air, m ³ /min. (scfm) †	142 (5000)	113 (4000)
Combustion air, m ³ /min. (cfm)	2.1 (74)	1.75 (62)
Heat rejected to ambient air:		
Engine, kW (Btu/min.)	9.2 (522)	15.4 (860)
Alternator, kW (Btu/min.)	4.5 (259)	3.75 (216)

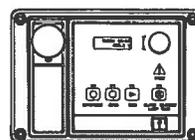
† Air density = 1.20 kg/m³ (0.075 lbm/ft³)

Fuel Consumption ‡	60 Hz	50 Hz
Natural Gas, m³/hr. (cfh) at % load	Standby Ratings	
100%	10.5 (366)	8.8 (305)
75%	8.5 (297)	7.1 (248)
50%	5.5 (194)	4.6 (162)
25%	3.3 (115)	2.8 (96)
LP Gas, m³/hr. (cfh) at % load	Standby Ratings	
100%	4.5 (156)	3.8 (130)
75%	3.6 (127)	3.0 (106)
50%	2.4 (83)	2.0 (69)
25%	1.4 (50)	1.2 (42)

‡ Nominal fuel rating: Natural gas, 37 MJ/m³ (1000 Btu/ft.³)
LP vapor, 93 MJ/m³ (2500 Btu/ft.³)

LP vapor conversion factors:
8.58 ft.³ = 1 lb.
0.535 m³ = 1 kg.
36.39 ft.³ = 1 gal.

Controllers

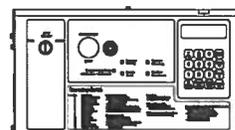


Decision-Maker® 3000 Controller

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® 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® 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® 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.

Standard Features

- Alternator Protection
- Battery Rack and Cables
- 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

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-352663)
- 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 (Decision-Maker® 550 controller only)
- Customer Connection (Decision-Maker® 550 controller only)
- Dry Contact (isolated alarm) (Decision-Maker® 550 controller only)
- Input/Output Module (Decision-Maker® 3000 controller only)
- Remote Annunciator Panel
- Remote Audiovisual Alarm Panel (Decision-Maker® 550 controller only)
- Remote Emergency Stop
- Run Relay

Cooling System

- Block Heater, 1000 W, 110-120 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
- Engine Fluids (oil and coolant) Added
- Rated Power Factor Testing
- Rodent Guards

Literature

- General Maintenance
- NFPA 110
- Overhaul
- Production

Warranty

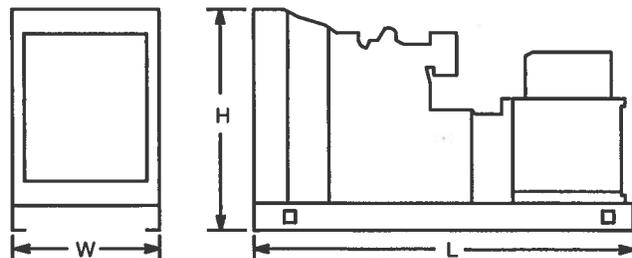
- 2-Year Basic
- 5-Year Basic
- 5-Year Comprehensive

Other Options

- _____
- _____
- _____
- _____
- _____
- _____
- _____

Dimensions and Weights

Overall Size, L x W x H, mm (in.):	
Wide Skid	2200 x 1040 x 1172 (86.6 x 40.9 x 46.1)
Narrow Skid	2200 x 864 x 1172 (86.6 x 34.0 x 46.1)
Weight (radiator model), wet, kg (lb.):	639 (1409)



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:



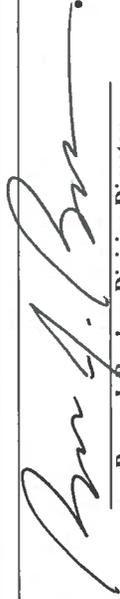
UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
2015 MODEL YEAR
CERTIFICATE OF CONFORMITY
WITH THE CLEAN AIR ACT

OFFICE OF TRANSPORTATION
AND AIR QUALITY
ANN ARBOR, MICHIGAN 48105

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

Certificate Number: FPSIB2.972ED-002

Effective Date: 10/06/2014
Expiration Date: 12/31/2015


Byron J. Bunker, Division Director
Compliance Division

Issue Date: 10/06/2014
Revision Date: N/A

Manufacturer: Power Solutions International, Inc.

Engine Family: FPSIB2.972ED

Certification Type: Stationary (Part 60)

Fuel : LPG/Propane

Natural Gas (CNG/LNG)

Emission Standards : NMHC + NOx (g/kW-hr) : 13.4

CO (g/kW-hr) : 519

HC + NOx (g/kW-hr) : 13.4

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 J

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 (Curtisville Compressor Station) located on Laurel Run Left Road (at 38.523524 -80.439804), Mannington, in Marion 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 (SO₂) = <0.01 tpy
Volatile Organic Compounds (VOC) = 0.24 tpy
Carbon Monoxide (CO) = 9.44 tpy
Nitrogen Oxides (NO_x) = 0.24 tpy
Hazardous Air Pollutants (HAPs) = <0.01 tpy
Greenhouse Gases (CO₂e) = 11 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 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 XX day of November, 2015.

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

General Permit Registration Application Fee