



July 30, 2015

BY: U.S. CERTIFIED MAIL, RETURN RECEIPT REQUESTED

7014 3490 0000 0448 4228

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

RE: Dominion Transmission, Inc. – General Permit Application (G60-C)
Grantsville G&P

Dear Mr. Durham:

Enclosed are one complete original and two (2) cd copies of a G60-C General Permit application for the proposed installation of a new natural gas emergency generator at Dominion Transmission, Inc.'s Grantsville G&P in Calhoun County, WV.

The emergency generator is a certified engine under 40 CFR 60 Subpart JJJJ; therefore, stack testing is not required. However, the emergency generator triggers permitting as potential to emit calculations are above exemption thresholds as stated in West Virginia's R13 Regulations (§45-13-2).

If you require any additional information, please contact Rebekah Remick at (804) 273-3536 or via email at Rebekah.J.Remick@dom.com.

Sincerely,


Amanda B. Tornabene
Director, Gas Environmental Services

**DOMINION TRANSMISSION, INC.
GRANTSVILLE G&P**

TABLE OF CONTENTS

Application for General Permit Registration to Construct, Modify, Relocate or Administratively Update a Stationary Source of Air Pollutants

ATTACHMENTS

| | |
|---------------|---|
| Attachment A. | Business Certificate |
| Attachment B. | Process Description |
| Attachment D. | Process Flow Diagram |
| Attachment F. | Area Map |
| Attachment G. | Equipment Data Sheets and Registration Section Applicability Form |
| Attachment I. | Emissions Calculations |
| Attachment J. | Class I Legal Advertisement |
| Attachment L. | General Permit Registration Application Fee |

**Note – There are no Attachments C, E, H, K, M, N, and O for this permit application



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

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

- 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): Dominion Transmission, Inc. | | 2. Federal Employer ID No. (FEIN): 550629203 | |
| 3. Applicant's mailing address: 445 West Main Street Clarksburg, WV 26301 | | 4. Applicant's physical address: 108 North Side Road Grantsville, WV 26147 | |
| 5. If applicant is a subsidiary corporation, please provide the name of parent corporation: N/A | | | |
| 6. WV BUSINESS REGISTRATION. Is the applicant a resident of the State of West Virginia? <input checked="" type="checkbox"/> YES <input type="checkbox"/> NO – 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.): Installation of a natural gas emergency generator | | 8a. Standard Industrial Classification (SIC) Code: 8741 | |
| | | 8b. North American Industry Classification System (NAICS) Code: 551114 | |
| 9. DAQ Plant ID No. (for existing facilities only): N/A | | 10. List all current 45CSR13 and other General Permit numbers associated with this process (for existing facilities only): N/A | |

A: PRIMARY OPERATING SITE INFORMATION

| | | | | | | | | |
|--|--|---|-----------------|------------------|-----------------------------|----------------------------|-----------------------------|------------------------------|
| 11A. Facility name of primary operating site: <p align="center">Grantsville G&P</p> | 12A. Address of primary operating site: <table border="0"> <tr> <td><u>Mailing:</u></td> <td><u>Physical:</u></td> </tr> <tr> <td>445 West Main Street</td> <td>108 North Side Road</td> </tr> <tr> <td>Clarksburg, WV 26301</td> <td>Grantsville, WV 26147</td> </tr> </table> | | <u>Mailing:</u> | <u>Physical:</u> | 445 West Main Street | 108 North Side Road | Clarksburg, WV 26301 | Grantsville, WV 26147 |
| <u>Mailing:</u> | <u>Physical:</u> | | | | | | | |
| 445 West Main Street | 108 North Side Road | | | | | | | |
| Clarksburg, WV 26301 | Grantsville, WV 26147 | | | | | | | |
| 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: Own – 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. <p>Go south on I-79 to exit 79 Burnsville. Go east on Route 5 for 36 miles to Route 16. Go south on Route 16 for 0.2 miles to the intersection of Route 16 and North Side Road. Take North Side Road for 0.2 miles; office building is on your left.</p> | | | | | | | | |
| 15A. Nearest city or town: <p align="center">Grantsville</p> | 16A. County: <p align="center">Calhoun</p> | 17A. UTM Coordinates: Northing (KM): 4308020.9 Easting (KM): 491703.1 Zone: 17 | | | | | | |
| 18A. Briefly describe the proposed new operation or change (s) to the facility: <p>Dominion Transmission, Inc. is proposing to install a 82.1 hp (48 kW) natural gas emergency generator.</p> | | 19A. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits): Latitude: 38.92106 Longitude: -81.09571 | | | | | | |

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

| | | |
|---|--|--|
| 11B. Name of 1 st alternate operating site: <p align="center">N/A</p> | 12B. Address of 1 st alternate operating site: Mailing: N/A Physical: N/A | |
| 13B. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? N/A – IF YES, please explain: – IF NO, YOU ARE NOT ELIGIBLE FOR A PERMIT FOR THIS SOURCE. | | |
| 14B. – For Modifications or Administrative Updates at an existing facility, please provide directions to the 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. <p align="center">N/A</p> | | |
| 15B. Nearest city or town: <p align="center">N/A</p> | 16B. County: <p align="center">N/A</p> | 17B. UTM Coordinates: Northing (KM): N/A Easting (KM): N/A Zone: N/A |

| | |
|---|--|
| 18B. Briefly describe the proposed new operation or change (s) to the facility: N/A | 19B. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits): Latitude: N/A Longitude: N/A |
|---|--|

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: N/A Physical: N/A |
|--|--|

13C. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? **N/A**

- IF **YES**, please explain: **N/A**
- 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**.

N/A

| | | |
|--|--------------------------------|--|
| 15C. Nearest city or town: N/A | 16C. County: N/A | 17C. UTM Coordinates: Northing (KM): N/A Easting (KM): N/A Zone: N/A |
|--|--------------------------------|--|

| | |
|---|--|
| 18C. Briefly describe the proposed new operation or change (s) to the facility: N/A | 19C. Latitude & Longitude Coordinates (NAD83, Decimal Degrees to 5 digits): Latitude: N/A Longitude: N/A |
|---|--|

| | |
|---|---|
| 20. Provide the date of anticipated installation or change: 10/1/15 <input type="checkbox"/> If this is an After-The-Fact permit application, provide the date upon which the proposed change did happen: : | 21. Date of anticipated Start-up if registration is granted: Day or two after install |
|---|---|

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 **3** Percentage of operation **5.7% (500 hrs/8760 hrs)**

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
- ATTACHMENT N: MATERIAL SAFETY DATA SHEETS (MSDS)
- ATTACHMENT O: EMISSIONS SUMMARY SHEETS
- OTHER SUPPORTING DOCUMENTATION NOT DESCRIBED ABOVE (Equipment Drawings, Aggregation Discussion, etc.)

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)

X 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

O I certify that I am a General Partner

FOR A LIMITED LIABILITY COMPANY

O I certify that I am a General Partner or General Manager

FOR AN ASSOCIATION

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

FOR A JOINT VENTURE

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

FOR A SOLE PROPRIETORSHIP

O I certify that I am the Owner and Proprietor

I hereby certify that (please print or type) Brian Sheppard 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 [Signature] 07-27-15
Responsible Official Date

Name & Title Brian Sheppard, Vice President, Pipeline Operations
Name & Title

Signature
Authorized Representative (if applicable) Date

Applicant's Name Dominion Transmission, Inc.

Phone & Fax 304-627-3733 304-627-3323
Phone Fax

Email Brian.C.Sheppard@dom.com

Attachment A

Current Business Certificate

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

ISSUED TO:
**DOMINION TRANSMISSION INC
445 W MAIN ST
CLARKSBURG, WV 26301-2843**

BUSINESS REGISTRATION ACCOUNT NUMBER: 1038-3470

This certificate is issued on: 06/8/2011

*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

PROCESS DESCRIPTION

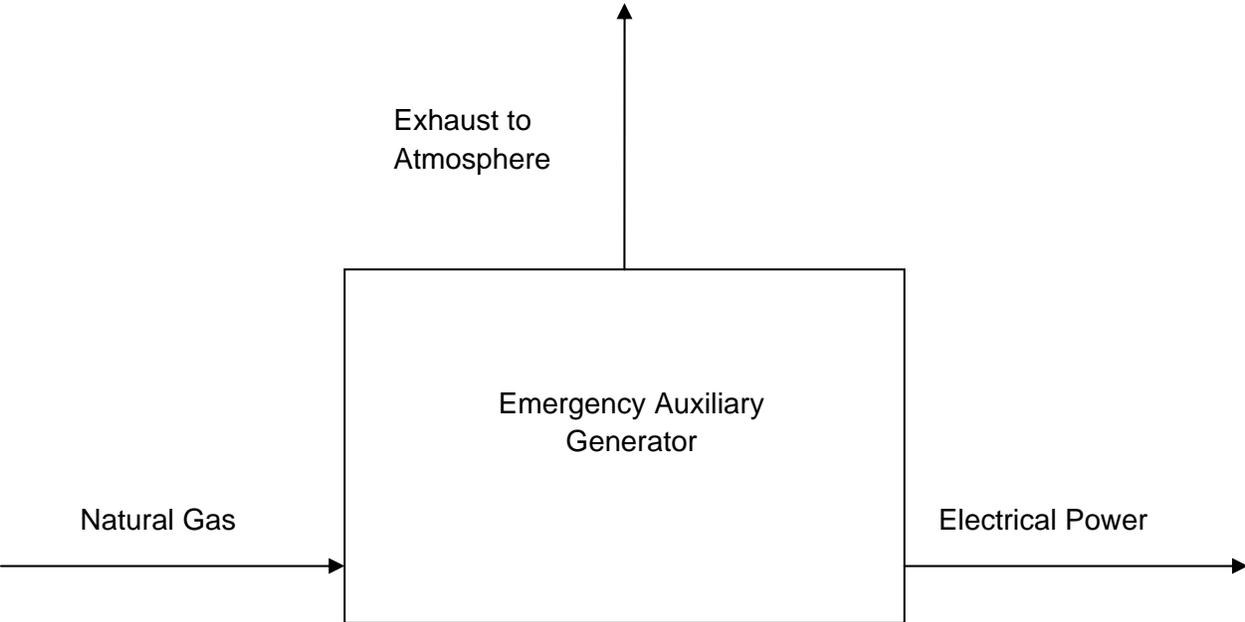
Grantsville G&P is a field office building for Dominion Transmission, Inc. The site also has two (2) underground storage tanks for fueling vehicles. This general permit application is for a new natural gas emergency generator to supply power to the office in the event of a power loss.

Attachment D

Process Flow Diagram

Process Flow Diagram for the Emergency Auxiliary Generator

Grantsville G&P

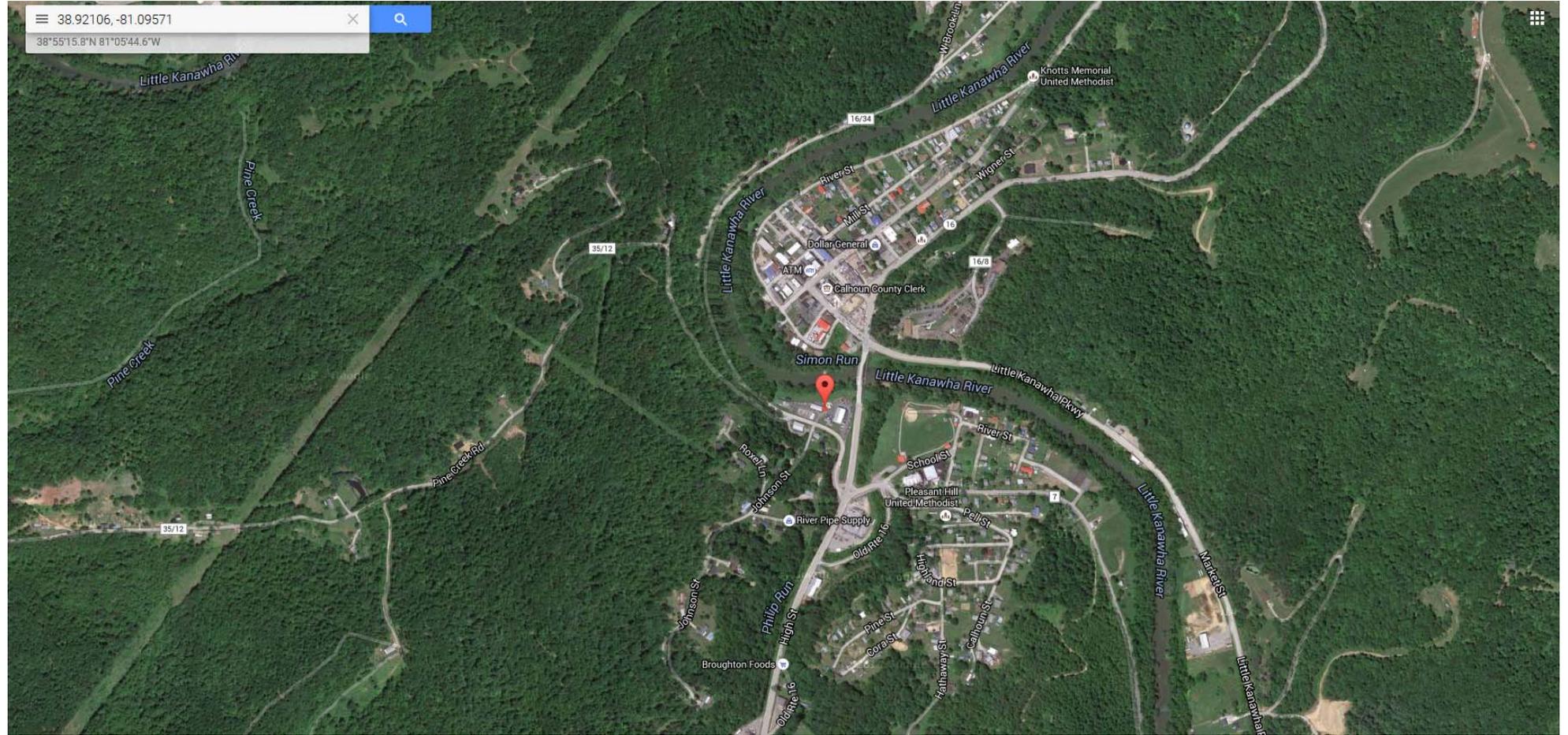


Attachment F

Area Map

38.92106, -81.09571

38°55'15.8"N 81°05'44.6"W



Attachment G

Equipment Data Sheets and Registration Section
Applicability Form

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 checked="" 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 | | EG-1 | | | | | |
| Engine Manufacturer and Model | | Generac QT048 | | | | | |
| Manufacturer's Rated bhp/rpm | | 82.1 hp (48 kW) | | | | | |
| Source Status ² | | NS | | | | | |
| Date Installed/Modified/Removed ³ | | 2015 | | | | | |
| Engine Manufactured/Reconstruction Date ⁴ | | 2014 | | | | | |
| Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart IIII? (Yes or No) ⁵ | | No | | | | | |
| Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart JJJJ? (Yes or No) ⁶ | | Yes | | | | | |
| Engine, Fuel and Combustion Data | Engine Type ⁷ | | RB4S | | | | |
| | APCD Type ⁸ | | A/F | | | | |
| | Fuel Type ⁹ | | PQ | | | | |
| | H ₂ S (gr/100 scf) | | 20 (tariff) | | | | |
| | Operating bhp/rpm | | 82.1 hp (at 1800 rpm) | | | | |
| | BSFC (Btu/bhp-hr) | | 9392 (worst case) | | | | |
| | Fuel throughput (ft ³ /hr) | | 756 (worst case) | | | | |
| | Fuel throughput (MMft ³ /yr) | | 378,000 | | | | |
| Operation (hrs/yr) | | 500 | | | | | |
| Reference ¹⁰ | Potential Emissions ¹¹ | lbs/hr | tons/yr | lbs/hr | tons/yr | lbs/hr | tons/yr |
| MD | NO _x | 0.46 | 0.11 | | | | |
| MD | CO | 17.25 | 4.31 | | | | |
| MD | VOC | 0.29 | 0.07 | | | | |
| AP | SO ₂ | 4.53E-04 | 1.13E-04 | | | | |
| AP | PM ₁₀ | 7.33E-03 | 1.83E-03 | | | | |
| AP | Formaldehyde | 1.58E-02 | 3.95E-03 | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

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*.

STORAGE TANK DATA SHEET

| Source ID # ¹ | Status ² | Content ³ | Volume ⁴ | Dia ⁵ | Throughput ⁶ | Orientation ⁷ | Liquid Height ⁸ |
|---|---------------------|----------------------|---------------------|------------------|-------------------------|--------------------------|----------------------------|
| TK01 | EXIST | Gasoline | 10,000 | | 36,000 | HORZ | |
| TK02 | EXIST | On-road Diesel | 4,000 | | 4,800 | HORZ | |
| | | | | | | | |
| *Note: These tanks are underground storage tanks for fueling vehicles only. | | | | | | | |
| | | | | | | | |
| | | | | | | | |
| | | | | | | | |

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

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

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

| EMERGENCY GENERATOR EMISSION SUMMARY SHEET FOR CRITERIA POLLUTANTS | | | | | | | | | | |
|---|-------------------------------------|--------------|-------------|-----------------------|------------------------|---|-------------|-------------|-----------------------|------------------------|
| Emergency Generator Location: <u>Grantsville G&P</u> | | | | | | Registration Number <small>(Agency Use)</small> <u>G60-C</u> | | | | |
| | Potential Emissions (lbs/hr) | | | | | Potential Emissions (tons/yr) | | | | |
| Source ID No. | NO_x | CO | VOC | SO₂ | PM₁₀ | NO_x | CO | VOC | SO₂ | PM₁₀ |
| EG-1 | 0.46 | 17.25 | 0.29 | 4.53E-04 | 7.33E-03 | 0.11 | 4.31 | 0.07 | 1.13E-04 | 1.83E-03 |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| | | | | | | | | | | |
| Total | 0.46 | 17.25 | 0.29 | 4.53E-04 | 7.33E-03 | 0.11 | 4.31 | 0.07 | 1.13E-04 | 1.83E-03 |

EMERGENCY GENERATOR EMISSION SUMMARY SHEET FOR HAZARDOUS/TOXIC POLLUTANTS

Emergency Generator Location: Grantsville G&P

Registration Number (Agency Use) G60-C

| 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 |
| EG-1 | 1.22E-03 | 1.91E-05 | 4.30E-04 | 1.50E-04 | N/A | 1.58E-02 | 3.05E-04 | 4.78E-06 | 1.08E-04 | 3.76E-05 | N/A | 3.95E-03 |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| | | | | | | | | | | | | |
| Total | 1.22E-03 | 1.91E-05 | 4.30E-04 | 1.50E-04 | N/A | 1.58E-02 | 3.05E-04 | 4.78E-06 | 1.08E-04 | 3.76E-05 | N/A | 3.95E-03 |

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 per 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 |

GENERAC®

QUIETSOURCE® SERIES Standby Generators Liquid-Cooled Gas Engine

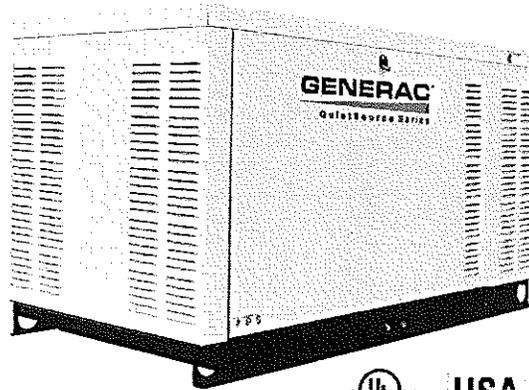
Quietsource® Series

INCLUDES:

- Two Line LCD Tri-Lingual Digital Nexus™ Controller
- Isochronous Electronic Governor
- Sound Attenuated Enclosure
- Closed Coolant Recovery System
- Smart Battery Charger
- UV/Ozone Resistant Hoses
- ±1% Voltage Regulation
- Natural Gas or LP Operation
- 2 Year Limited Warranty
- UL 2200 Listed

Standby Power Rating

- Model QT022 (Aluminum - Gray) - 22 kW 60Hz
- Model QT027 (Aluminum - Gray) - 27 kW 60Hz
- Model QT036 (Aluminum - Gray) - 36 kW 60Hz
- Model QT048 (Aluminum - Gray) - 48 kW 60Hz



QUIET-TEST™

Meets EPA Emission Regulations
22 & 27kW are CA/MA emissions compliant
48kW meets CA/MA emissions requirements with optional catalyst
36kW not for sale in CA/MA

FEATURES

- **INNOVATIVE DESIGN & PROTOTYPE TESTING** are key components of GENERAC'S success in "IMPROVING POWER BY DESIGN." But it doesn't stop there. Total commitment to component testing, reliability testing, environmental testing, destruction and life testing, plus testing to applicable CSA, NEMA, EGSA, and other standards, allows you to choose GENERAC POWER SYSTEMS with the confidence that these systems will provide superior performance.
- **SOLID-STATE, FREQUENCY COMPENSATED VOLTAGE REGULATION.** This state-of-the-art power maximizing regulation system is standard on all Generac models. It provides optimized FAST RESPONSE to changing load conditions and MAXIMUM MOTOR STARTING CAPABILITY by electronically torque-matching the surge loads to the engine. Digital voltage regulation at ±1%.
- **TEST CRITERIA:**
 - ✓ PROTOTYPE TESTED
 - ✓ SYSTEM TORSIONAL TESTED
 - ✓ NEMA MG1-22 EVALUATION
 - ✓ MOTOR STARTING ABILITY
- **SINGLE SOURCE SERVICE RESPONSE** from Generac's extensive dealer network provides parts and service know-how for the entire unit, from the engine to the smallest electronic component.
- **GENERAC TRANSFER SWITCHES.** Long life and reliability are synonymous with GENERAC POWER SYSTEMS. One reason for this confidence is that the GENERAC product line includes its own transfer systems and controls for total system compatibility.

GENERAC®



22 • 27 • 36 • 48 kW

application & engineering data

GENERATOR SPECIFICATIONS

| | |
|-------------------------------------|----------------------------------|
| Type | Synchronous |
| Rotor Insulation Class | H (22 & 27 kW) or F (36 & 48 kW) |
| Stator Insulation Class | H |
| Telephone Interference Factor (TIF) | <50 |
| Alternator Output Leads 1-Phase | 4 wire |
| Alternator Output Leads 3-Phase | 6 wire |
| Bearings | Sealed Ball |
| Coupling | Flexible Disc |
| Excitation System | Direct |

VOLTAGE REGULATION

| | |
|------------|--------------|
| Type | Electronic |
| Sensing | Single Phase |
| Regulation | ± 1% |

GOVERNOR SPECIFICATIONS

| | |
|-------------------------|-------------|
| Type | Electronic |
| Frequency Regulation | Isochronous |
| Steady State Regulation | ± 0.25% |

ELECTRICAL SYSTEM

| | |
|---------------------------|--|
| Battery Charge Alternator | 12 Volt 30 Amp |
| Static Battery Charger | 2 Amp |
| Recommended Battery | Group 26 (22, 27 & 36 kW) or Group 24F (48 kW), 525CCA |
| System Voltage | 12 Volts |

GENERATOR FEATURES

| |
|--|
| <p>Revolving field heavy duty generator Directly connected to the engine Operating temperature rise 120 °C above a 40 °C ambient Class H insulation is rated at 150 °C rise at 25 °C ambient Class F insulation is rated at 145 °C rise at 25 °C ambient All models fully prototyped tested</p> |
|--|

ENCLOSURE FEATURES

| | |
|---------------------------------------|--|
| Aluminum weather protective enclosure | Ensures protection against mother nature. Electrostatically applied textured epoxy paint for added durability. |
| Enclosed critical grade muffler | Quiet, critical grade muffler is mounted inside the unit to prevent injuries. |
| Small, compact, attractive | Makes for an easy, eye appealing installation. |
| SAE | Sound attenuated enclosure ensures quiet operation. |

ENGINE SPECIFICATIONS: 22, 27 & 36kW

| | |
|-----------------------|--|
| Make | Generac |
| Model | In-line |
| Cylinders | 4 |
| Displacement (Liters) | 2.4 |
| Bore (in/mm) | 3.41/86.5 |
| Stroke (in/mm) | 3.94/100 |
| Compression Ratio | 9.5:1 |
| Intake Air System | Naturally Aspirated (22 & 27 kW) or Turbocharged/Aftercooled (36 kW) |
| Lifter Type | Hydraulic |

ENGINE SPECIFICATIONS: 48kW

| | |
|-----------------------|---------------------|
| Make | Generac |
| Model | V-Type |
| Cylinders | 8 |
| Displacement (Liters) | 5.4 |
| Bore (in/mm) | 3.55/90.2 |
| Stroke (in/mm) | 4.17/105.9 |
| Compression Ratio | 9:1 |
| Intake Air System | Naturally Aspirated |
| Lifter Type | Hydraulic |

ENGINE LUBRICATION SYSTEM

| | |
|------------------------------------|---|
| Oil Pump Type | Gear |
| Oil Filter Type | Full flow spin-on cartridge |
| Crankcase Capacity (quarts/liters) | 4/3.8 (22, 27 & 36 kW) or 6/5.7 (48 kW) |

ENGINE COOLING SYSTEM

| | |
|----------------------|---|
| Type | Closed |
| Water Pump | Belt driven |
| Fan Speed (rpm) | 1980 - 22 & 27 kW 1500 - 36 kW 1954 - 48 kW |
| Fan Diameter (in/mm) | 18.1/459.7 (22 & 27 kW) or 22/558.8 (36 & 48 kW) |
| Fan Mode | Pusher (22 & 27 kW) or Puller (36 & 48 kW) |

FUEL SYSTEM

| | |
|--------------------------|----------------------------|
| Fuel Type | Natural gas, propane vapor |
| Carburetor | Down Draft |
| Secondary Fuel Regulator | Standard |
| Fuel Shut Off Solenoid | Standard |
| Operating Fuel Pressure | 5" - 14" H ₂ O |

(All ratings in accordance with BS5514, ISO3046, ISO8528, SAE J1349 and DIN6271)

22 • 27 • 36 • 48 kW

operating data

GENERATOR OUTPUT VOLTAGE/kW - 60Hz

| | | kW LPG | Amp LPG | kW Nat. Gas | Amp Nat. Gas | CB Size (Both) |
|-------|-----------------------|--------|---------|-------------|--------------|----------------|
| QT022 | 120/240 V, 1Ø, 1.0 pf | 22 | 92 | 22 | 92 | 100 |
| | 120/208 V, 3Ø, 0.8 pf | 22 | 76 | 22 | 76 | 80 |
| | 120/240 V, 3Ø, 0.8 pf | 22 | 66 | 22 | 66 | 80 |
| QT027 | 120/240 V, 1Ø, 1.0 pf | 27 | 113 | 25 | 104 | 125 |
| | 120/208 V, 3Ø, 0.8 pf | 27 | 94 | 25 | 87 | 100 |
| | 120/240 V, 3Ø, 0.8 pf | 27 | 81 | 25 | 75 | 90 |
| QT036 | 120/240 V, 1Ø, 1.0 pf | 36 | 150 | 35 | 146 | 175 |
| | 120/208 V, 3Ø, 0.8 pf | 36 | 125 | 35 | 121 | 150 |
| | 120/240 V, 3Ø, 0.8 pf | 36 | 108 | 35 | 105 | 125 |
| | 277/480 V, 3Ø, 0.8 pf | 36 | 54 | 35 | 53 | 60 |
| QT048 | 120/240 V, 1Ø, 1.0 pf | 48 | 200 | 48 | 200 | 200 |
| | 120/208 V, 3Ø, 0.8 pf | 48 | 166.5 | 48 | 166 | 175 |
| | 120/240 V, 3Ø, 0.8 pf | 48 | 144 | 48 | 144 | 150 |
| | 277/480 V, 3Ø, 0.8 pf | 48 | 72 | 48 | 72 | 80 |

SURGE CAPACITY IN AMPS

| | | Voltage Dip @ < .4 pf | |
|-------|---------------|-----------------------|-----|
| | | 15% | 30% |
| QT022 | 120/240 V, 1Ø | 89 | 216 |
| | 120/208 V, 3Ø | 74 | 180 |
| | 120/240 V, 3Ø | 64 | 156 |
| QT027 | 120/240 V, 1Ø | 109 | 265 |
| | 120/208 V, 3Ø | 91 | 221 |
| | 120/240 V, 3Ø | 79 | 192 |
| QT036 | 120/240 V, 1Ø | 54 | 149 |
| | 120/208 V, 3Ø | 87 | 210 |
| | 120/240 V, 3Ø | 75 | 182 |
| | 277/480 V, 3Ø | 36 | 87 |
| QT048 | 120/240 V, 1Ø | 69 | 189 |
| | 120/208 V, 3Ø | 111 | 269 |
| | 120/240 V, 3Ø | 96 | 233 |
| | 277/480 V, 3Ø | 43 | 104 |

ENGINE FUEL CONSUMPTION

| | | Natural Gas | | Propane | |
|-------|--------------------|-----------------------|----------------------|----------|--------|
| | | (ft ³ /hr) | (m ³ /hr) | (gal/hr) | (l/hr) |
| QT022 | Exercise cycle | 42 | 1.2 | 0.44 | 1.7 |
| | 25% of rated load | 100 | 2.8 | 1.1 | 4.2 |
| | 50% of rated load | 190 | 5.4 | 2.1 | 7.8 |
| | 75% of rated load | 255 | 7.2 | 2.8 | 10.5 |
| | 100% of rated load | 316 | 9 | 3.4 | 13 |
| QT027 | Exercise cycle | 42 | 1.2 | 0.44 | 1.7 |
| | 25% of rated load | 108 | 3.1 | 1.2 | 4.5 |
| | 50% of rated load | 197 | 5.6 | 2.1 | 8.1 |
| | 75% of rated load | 287 | 8.2 | 3.1 | 11.8 |
| | 100% of rated load | 359 | 10.2 | 3.9 | 14.8 |
| QT036 | Exercise cycle | 48 | 1.4 | 0.5 | 2 |
| | 25% of rated load | 156 | 4.4 | 1.7 | 6.4 |
| | 50% of rated load | 282 | 8 | 3.1 | 11.6 |
| | 75% of rated load | 392 | 11.1 | 4.3 | 16.2 |
| | 100% of rated load | 503 | 14.3 | 5.5 | 20.8 |
| QT048 | Exercise cycle | 95 | 2.7 | 1 | 3.9 |
| | 25% of rated load | 204 | 5.8 | 2.16 | 8.5 |
| | 50% of rated load | 392 | 11.1 | 4.14 | 15.7 |
| | 75% of rated load | 547 | 15.5 | 5.8 | 22.8 |
| | 100% of rated load | 756 | 21.5 | 7.96 | 31.3 |

Note: Fuel pipe must be sized for full load.

For Btu content, multiply ft³/hr x 2520 (LP) or ft³/hr x 1000 (NG)

For megajoule content, multiple m³/hr x 93.89 (LP) or m³/hr x 37.26 (NG)

Refer to 'Emissions Data Sheets' for maximum fuel flow for EPA and SCAQMD permitting purposes.

STANDBY RATING: Standby ratings apply to installations served by a reliable utility source. The standby rating is applicable to varying loads for the duration of a power outage. There is no overload capability for this rating. Ratings are in accordance with ISO-3046-1. Design and specifications are subject to change without notice.

22 • 27 • 36 • 48 kW

operating data

ENGINE COOLING

| | 22 kW | 27 kW | 36 kW | 48 kW |
|---|--------------|---------------|-------------|---------------|
| Air flow (inlet air including alternator and combustion air in cfm/cmm) | 2400/68 | 2400/68 | 2200/62.3 | 4350/123.2 |
| System coolant capacity (gal/liters) | 3/11.4 | 3/11.4 | 2.5/9.5 | 3/11.4 |
| Heat rejection to coolant (BTU per hr/MJ per hr) | 99,000/104.5 | 105,000/110.8 | 145,000/153 | 186,000/196.2 |
| Maximum operation air temperature on radiator (°C/°F) | 60/150 | | | |
| Maximum ambient temperature (°C/°F) | 50/140 | | | |

COMBUSTION REQUIREMENTS

| | | | | |
|-------------------------------|--------|--------|-------|---------|
| Flow at rated power (cfm/cmm) | 68/1.9 | 68/1.9 | 106/3 | 163/4.6 |
|-------------------------------|--------|--------|-------|---------|

SOUND EMISSIONS

| | | | | |
|---|----|----|----|----|
| Sound output in dB(A) at 23 ft (7 m) with generator in exercise mode* | 61 | 61 | 58 | 63 |
| Sound output in dB(A) at 23 ft (7 m) with generator operating at normal load* | 70 | 70 | 64 | 68 |

* Sound levels are taken from the front of the generator. Sound levels taken from other sides of the generator may be higher depending on installation parameters.

EXHAUST

| | | | | |
|---|---------|----------|----------|----------|
| Exhaust flow at rated output (cfm/cmm) | 165/4.7 | 180/5.1 | 300/8.5 | 414/11.7 |
| Exhaust temperature at muffler outlet (°C/°F) | 482/900 | 538/1000 | 579/1075 | 552/1025 |

ENGINE PARAMETERS

| | |
|-----------------------|------|
| Rated Synchronous RPM | 1800 |
|-----------------------|------|

POWER ADJUSTMENT FOR AMBIENT CONDITIONS

| | |
|--|--|
| Temperature Deration | 3% for every 10 °C above 25 °C or 1.65% for every 10 °F above 77 °F |
| Altitude Deration (22, 27 & 48 kW) | 1% for every 100 m above 183 m or 3% for every 1000 ft above 600 ft |
| Altitude Deration (36 kW) | 1% for every 100 m above 915 m or 3% for every 1000 ft above 3000 ft |

CONTROLLER FEATURES

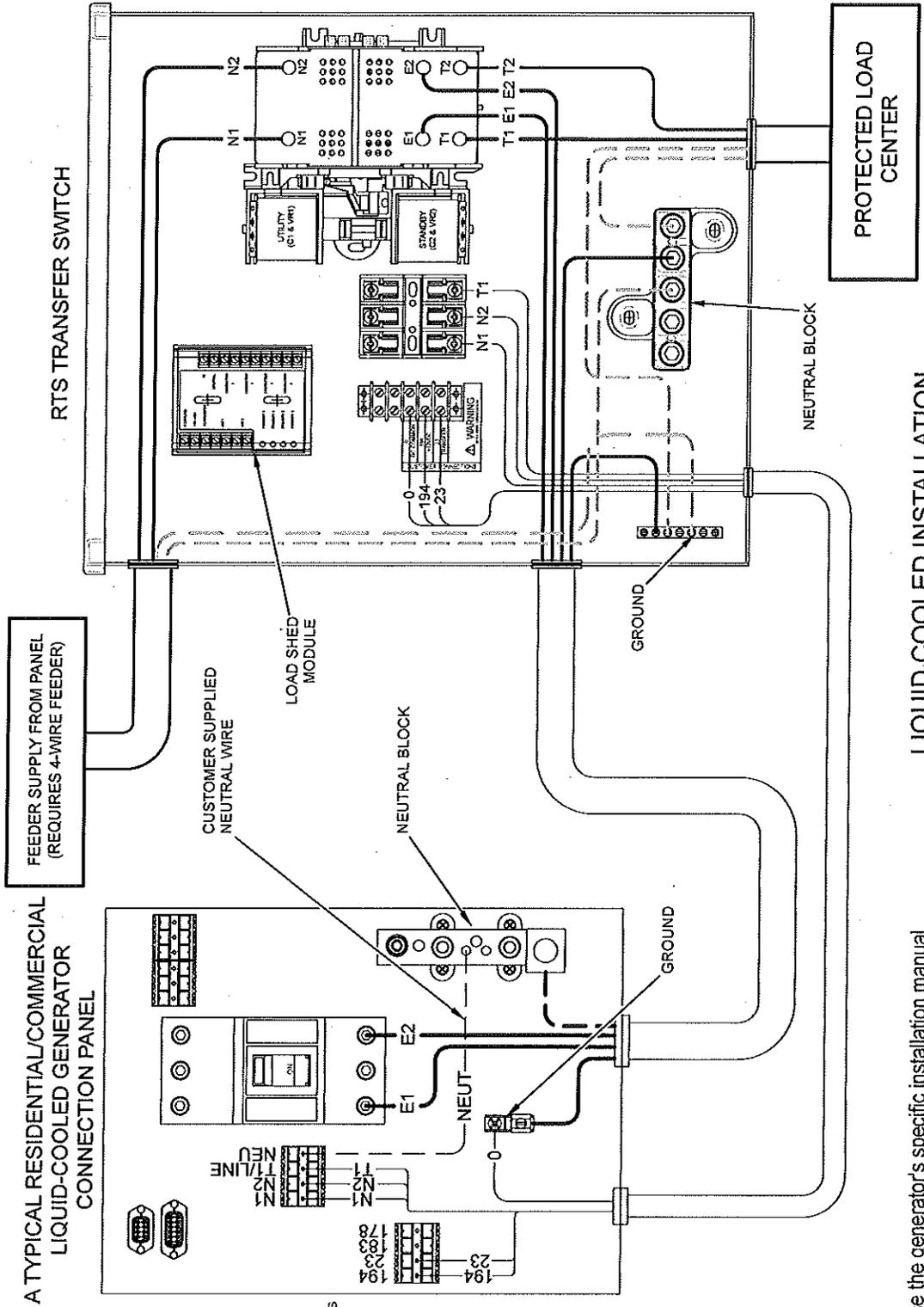
| | |
|---|--|
| 2-Line Plain Text LCD Display | Simple user interface for ease of operation. |
| Mode Switch: Auto | Automatic Start on Utility failure. 7 day exerciser |
| Off | Stops unit. Power is removed. Control and charger still operate. |
| Manual | Start with starter control, unit stays on. If utility fails, transfer to load takes place. |
| Programmable start delay between 10-30 seconds | Standard |
| Engine Start Sequence | Cyclic cranking: 16 sec on, 7 rest (90 sec maximum duration) |
| Engine Warm-up | 5 sec |
| Engine Cool-Down | 1 min |
| Starter Lock-out | Starter cannot re-engage until 5 sec after engine has stopped. |
| Smart Battery Charger | Standard |
| Automatic Voltage Regulation with Over and Under Voltage Protection | Standard |
| Automatic Low Oil Pressure Shutdown | Standard |
| Overspeed Shutdown | Standard, 72 Hz |
| High Temperature Shutdown | Standard |
| Overcrank Protection | Standard |
| Safety Fused | Standard |
| Failure to Transfer Protection | Standard |
| Low Battery Protection | Standard |
| 50 Event Run Log | Standard |
| Future Set Capable Exerciser | Standard |
| Incorrect Wiring Protection | Standard |
| Internal Fault Protection | Standard |
| Common External Fault Capability | Standard |
| Governor Failure Protection | Standard |

| Model # | Product | Description |
|---|---------------------------------------|--|
| 005630-0 - 22, 27 & 36 kW 005632-0 - 48 kW | Cold Weather Kit | If the temperature regularly falls below 32 °F (0 °C), install a cold weather kit to maintain optimal battery temperature. Kit consists of battery warmer with thermostat built into the wrap. |
| 005616-0 - 22, 27 & 36 kW 006204-0 - 48 kW | Extreme Cold Weather Kit | Recommended where the temperature regularly falls below 32 °F (0 °C) for extended periods of time. For liquid cooled units only. |
| 005621-0 | Auxiliary Transfer Switch Contact Kit | The auxiliary transfer switch contact kit allows the transfer switch to lock out a single large electrical load you may not need. |
| 005651-0 | Base Plug Kit | Add base plugs to the base of the generator to keep out debris. |
| 005704-0 | Paint Kit | If the generator enclosure is scratched or damaged, it is important to touch-up the paint to protect from future corrosion. The paint kit includes the necessary paint to properly maintain or touch-up a generator enclosure. |
| 005656-0 - 22 & 27 kW 005984-0 - 36 kW 006205-0 - 48 kW | Scheduled Maintenance Kit | The Liquid-Cooled Scheduled Maintenance Kits offer all the hardware necessary to perform complete maintenance on Generac liquid-cooled generators. |
| 005928-0 | Wireless Remote | Completely wireless and battery powered, Generac's wireless remote monitor provides you with instant status information without ever leaving the house. |
| 005951-0 | Advanced Wireless Remote | Remotely control generator functions with the advanced model's LCD display. In addition to remote testing of the generator, set the exercise cycle and maintenance interval reminders. |
| 006199-0 | PMM Starter Kit | The PMM Starter Kit consists of a 24 VAC, field installed transformer that enables the use of the 24 VAC Power Management Modules (PMMs) and one PMM. The standard controller (without starter kit) can control two HVAC loads with no additional hardware. Not compatible with pre-wired switches. |
| 006186-0 | Power Management Module (50 Amps) | Power Management Modules are used in conjunction with the Smart Switch to increase its power management capabilities. It gives the Smart Switch additional power management flexibility not found in any other transfer switch. Not compatible with pre-wired switches. Note: PMM Starter Kit required. |
| 006463-0 | Mobile Link™ | Generac's Mobile Link allows you to check the status of your generator from anywhere that you have access to an Internet connection from a PC or with any smart device. You will even be notified when a change in the generator's status occurs via e-mail or text message. Note: Harness Adapter Kit required. |
| 006478-0 | Harness Adapter Kit | The Harness Adapter Kit is required to make liquid-cooled units compatible with Mobile Link™. |

22 • 27 • 36 • 48 kW

GENERAC

interconnections



NOTE: MATCH WIRE NUMBERS TO TERMINAL NUMBERS

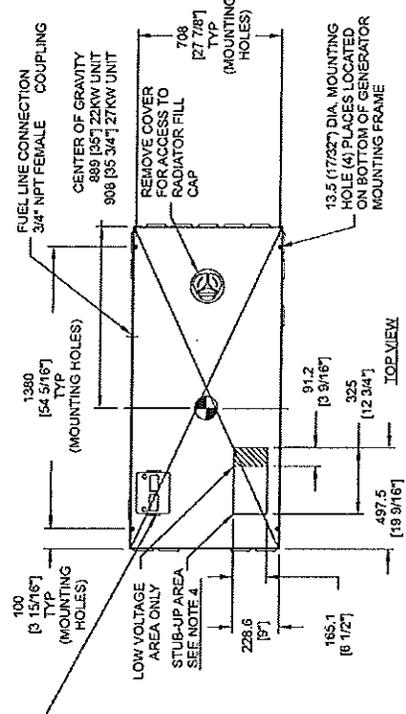
LIQUID-COOLED INSTALLATION

Note: Use the generator's specific installation manual and wiring diagrams to verify generator wiring connections, as they may differ slightly from illustration.

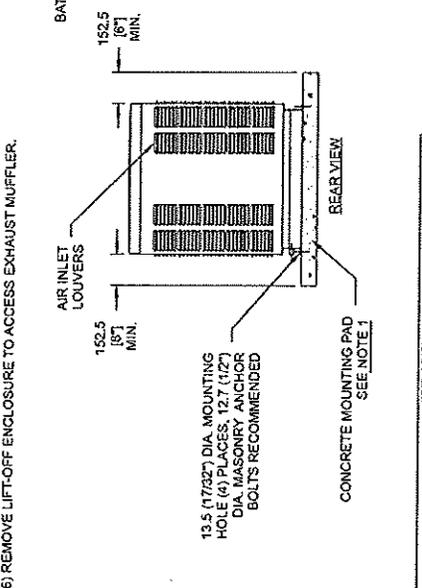
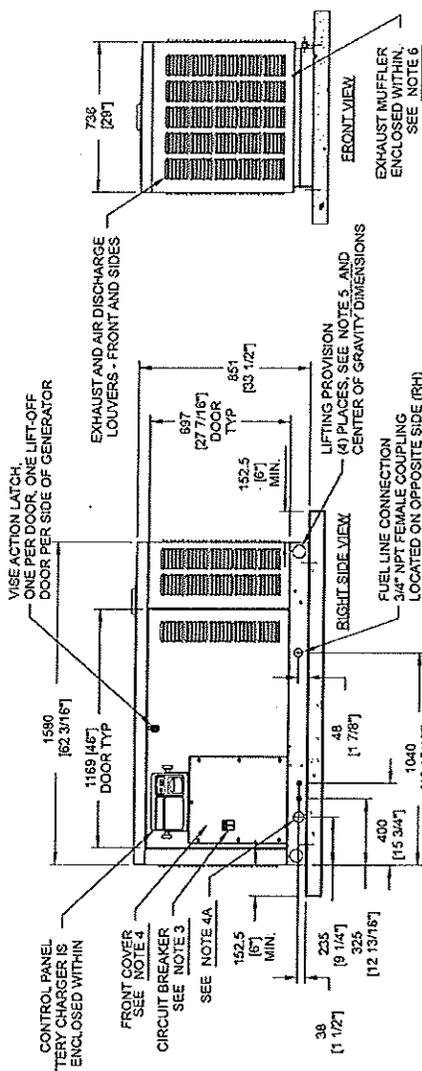
SERVICE ITEM ACCESSIBILITY CHART

| SERVICE ITEM | ACCESS |
|---------------------|-----------------|
| OIL FILL CAP | THRU RIGHT DOOR |
| OIL DIP STICK | THRU RIGHT DOOR |
| OIL FILTER | THRU LEFT DOOR |
| OIL DRAIN HOSE | THRU LEFT DOOR |
| RADIATOR DRAIN HOSE | THRU LEFT DOOR |
| AIR CLEANER ELEMENT | THRU LEFT DOOR |
| SPARK PLUGS | SEE NOTE 6 |
| MUFFLERS | THRU RIGHT DOOR |
| FAN BELT | THRU LEFT DOOR |
| BATTERY | THRU LEFT DOOR |

REFERENCE OWNERS MANUAL FOR PERIODIC REPLACEMENT PART LISTINGS



- NOTES:**
- 1) MINIMUM RECOMMENDED CONCRETE PAD SIZE: 1041 (41.07) WIDE X 1892 (74.127) LONG. REFERENCE INSTALLATION GUIDE SUPPLIED WITH UNIT FOR CONCRETE PAD GUIDELINES.
 - 2) ALLOW SUFFICIENT ROOM ON ALL SIDES OF THE GENERATOR FOR MAINTENANCE AND SERVICING. THIS UNIT MUST BE INSTALLED IN ACCORDANCE WITH CURRENT APPLICABLE NFPA 37 AND NFPA 70 STANDARDS AS WELL AS ANY OTHER FEDERAL, STATE AND LOCAL CODES FOR MINIMUM DISTANCES FROM OTHER STRUCTURES.
 - 3) CIRCUIT BREAKER INFORMATION: SEE SPECIFICATION SHEET WITHIN OWNERS MANUAL.
 - 4) INSIDE STUB-UP AREA FOR AC LOAD LEAD CONDUIT CONNECTION, NEUTRAL CONNECTION, BATTERY CHARGER 120 VOLT AC (0.5 AMP MAX.) CONNECTION, ACCESS TO TRANSFER SWITCH CONTROL WIRES, AND TRANSFER SWITCH CONNECTION (IF SO EQUIPPED). REMOVE FRONT COVER FOR ACCESS.
 - 4A) ONE 1-1/2" NEMA ELECTRICAL KNOCKOUT AND TWO 1/2" NEMA ELECTRICAL KNOCKOUTS PROVIDED FOR OUTSIDE AC LOAD CONDUIT CONNECTION, NEUTRAL CONNECTION, BATTERY CHARGER 120 VOLT AC (0.5 AMP MAX.) CONNECTION, ACCESS TO TRANSFER SWITCH CONTROL WIRES, AND TRANSFER SWITCH CONNECTION (IF SO EQUIPPED). REMOVE FRONT COVER FOR ACCESS.
 - 5) REFERENCE OWNERS MANUAL FOR LIFTING WARNINGS.
 - 6) REMOVE LIFT-OFF ENCLOSURE TO ACCESS EXHAUST MUFFLER.

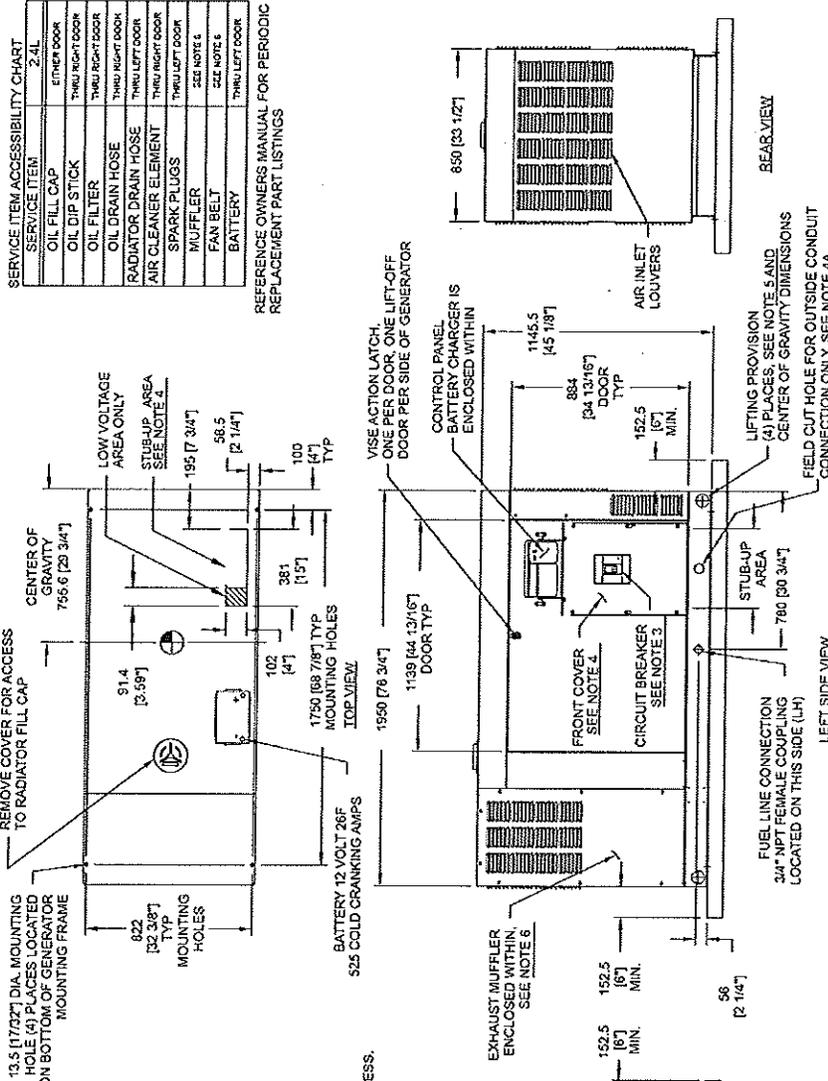


| ENGINE/UNIT | FRAC. SIZE | WEIGHT (GROSS ONLY) | WEIGHT (SHIPPING CONFIGURED) | WEIGHT (NET) | SHIPPING VOLUME (CUBIC FEET) |
|-------------|------------|---------------------|------------------------------|--------------|------------------------------|
| 24L2200P | 3/4 | 301 (1043) | 351 (1243) | 301 (1043) | 4.13 (130) |
| 24L2700P | 3/4 | 402 (1391) | 452 (1581) | 402 (1391) | 5.24 (157) |

36 kW

GENERAC

installation layout



SERVICE ITEM ACCESSIBILITY CHART

| SERVICE ITEM | 2-4L |
|---------------------|-----------------|
| OIL FILL CAP | ETHER DOOR |
| OIL DIP STICK | THRU RIGHT DOOR |
| OIL FILTER | THRU RIGHT DOOR |
| OIL DRAIN HOSE | THRU RIGHT DOOR |
| RADIATOR DRAIN HOSE | THRU RIGHT DOOR |
| AIR CLEANER ELEMENT | THRU RIGHT DOOR |
| SPARK PLUGS | THRU LEFT DOOR |
| MUFFLER | SEE NOTE 6 |
| FAN BELT | SEE NOTE 6 |
| BATTERY | THRU LEFT DOOR |

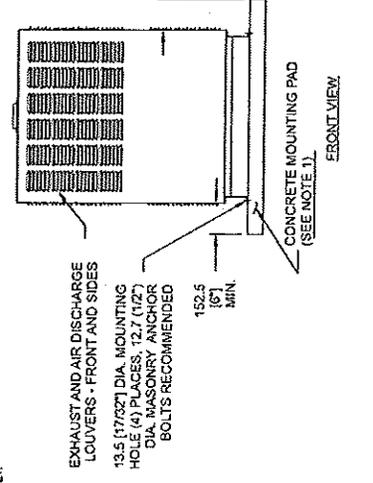
REFERENCE OWNERS MANUAL FOR PERIODIC REPLACEMENT PART LISTINGS

- 1) MINIMUM RECOMMENDED CONCRETE PAD SIZE: 1155 (45 1/2") WIDE X 2255 (88 7/8") LONG. REFERENCE INSTALLATION GUIDE SUPPLIED WITH UNIT FOR CONCRETE PAD GUIDELINES.
- 2) ALLOW SUFFICIENT ROOM ON ALL SIDES OF THE GENERATOR FOR MAINTENANCE AND SERVICE. THIS UNIT MUST BE INSTALLED IN ACCORDANCE WITH CURRENT APPLICABLE NATIONAL AND LOCAL ELECTRICAL CODES AS WELL AS ANY OTHER FEDERAL, STATE AND LOCAL CODES FOR MINIMUM DISTANCES FROM OTHER STRUCTURES.
- 3) CIRCUIT BREAKER INFORMATION: SEE SPECIFICATION SHEET WITHIN OWNERS MANUAL.
- 4) INSIDE STUB-UP AREA FOR AC LOAD LEAD CONDUIT CONNECTION, NEUTRAL CONNECTION, BATTERY CHARGER 120 VOLT AC (1.5 AMP MAX.) CONNECTION, AND ACCESS TO TRANSFER SWITCH CONTROL WIRES. REMOVE FRONT COVER FOR ACCESS.
- 4A) FIELD CUT HOLE IS ONLY REQUIRED FOR MOUNTING OF GENERATOR ON AN EXISTING PAD.
- 5) REFERENCE OWNERS MANUAL FOR LIFTING WARNINGS.
- 6) REMOVE EITHER LEFT OR RIGHT HAND SIDE PANEL TO ACCESS EXHAUST MUFFLER AND FAN BELT.

| MAXIMUM WEIGHT (LBS) WITH FUEL | MAXIMUM WEIGHT (LBS) WITHOUT FUEL | WEIGHT (LBS) W/OUT FUEL | WEIGHT (LBS) W/OUT FUEL SHIPPING | NET WEIGHT (LBS) W/OUT FUEL |
|--------------------------------|-----------------------------------|-------------------------|----------------------------------|-----------------------------|
| ALUMINUM | 577 (257) | 44 (19) | 533 (238) | 44 (19) |

NOTES:

- 1) MINIMUM RECOMMENDED CONCRETE PAD SIZE: 1155 (45 1/2") WIDE X 2255 (88 7/8") LONG. REFERENCE INSTALLATION GUIDE SUPPLIED WITH UNIT FOR CONCRETE PAD GUIDELINES.
- 2) ALLOW SUFFICIENT ROOM ON ALL SIDES OF THE GENERATOR FOR MAINTENANCE AND SERVICE. THIS UNIT MUST BE INSTALLED IN ACCORDANCE WITH CURRENT APPLICABLE NATIONAL AND LOCAL ELECTRICAL CODES AS WELL AS ANY OTHER FEDERAL, STATE AND LOCAL CODES FOR MINIMUM DISTANCES FROM OTHER STRUCTURES.
- 3) CIRCUIT BREAKER INFORMATION: SEE SPECIFICATION SHEET WITHIN OWNERS MANUAL.
- 4) INSIDE STUB-UP AREA FOR AC LOAD LEAD CONDUIT CONNECTION, NEUTRAL CONNECTION, BATTERY CHARGER 120 VOLT AC (1.5 AMP MAX.) CONNECTION, AND ACCESS TO TRANSFER SWITCH CONTROL WIRES. REMOVE FRONT COVER FOR ACCESS.
- 4A) FIELD CUT HOLE IS ONLY REQUIRED FOR MOUNTING OF GENERATOR ON AN EXISTING PAD.
- 5) REFERENCE OWNERS MANUAL FOR LIFTING WARNINGS.
- 6) REMOVE EITHER LEFT OR RIGHT HAND SIDE PANEL TO ACCESS EXHAUST MUFFLER AND FAN BELT.



STATEMENT OF EXHAUST EMISSIONS

2015 SPARK-IGNITED, NON-SCAQMD

| | Model | Engine | EPA Engine Family | Fuel | CAT Req'd | Comb Cat or Separate Cat | EPA Cert # | Grams/bhp-hr. | | | Rated RPM | BHP | Fuel Flow (lb/hr) |
|---|----------------|--------------|-------------------|---------|-----------|--------------------------|------------------|---------------|-------|--------|-----------|--------|-------------------|
| | | | | | | | | THC | NOx | CO | | | |
| Small Spark Ignited Engines - SSIE (SORE) | QTA25 | 2.4 | FGNXB02.42NN | NG | No | NR | FGNXB02.42NN-005 | 2.14 | 2.37 | 93.95 | 1800 | 38.39 | 16.52 |
| | QTA25 | 2.4 | FGNXB02.42NL | LPG | No | NR | FGNXB02.42NL-006 | 1.43 | 4.38 | 86.18 | 1800 | 43.29 | 17.59 |
| | SG035 | 5.4 | FGNXB05.42NN | NG | No | NR | FGNXB05.42NN-009 | 1.60 | 2.52 | 95.32 | 1800 | 82.10 | 36.91 |
| | SG035 | 5.4 | FGNXB05.42NL | LPG | No | NR | FGNXB05.42NL-010 | 1.24 | 3.45 | 112.01 | 1800 | 82.30 | 34.60 |
| | SG040 | 5.4 | FGNXB05.42NN | NG | No | NR | FGNXB05.42NN-009 | 1.60 | 2.52 | 95.32 | 1800 | 82.10 | 36.91 |
| | SG040 | 5.4 | FGNXB05.42NL | LPG | No | NR | FGNXB05.42NL-010 | 1.24 | 3.45 | 112.01 | 1800 | 82.30 | 34.60 |
| | SG045 | 5.4 | FGNXB05.42NN | NG | No | NR | FGNXB05.42NN-009 | 1.60 | 2.52 | 95.32 | 1800 | 82.10 | 36.91 |
| | SG045 | 5.4 | FGNXB05.42NL | LPG | No | NR | FGNXB05.42NL-010 | 1.24 | 3.45 | 112.01 | 1800 | 82.30 | 34.60 |
| | SG050 | 5.4 | FGNXB05.42NN | NG | No | NR | FGNXB05.42NN-009 | 1.60 | 2.52 | 95.32 | 1800 | 82.10 | 36.91 |
| | SG050 | 5.4 | FGNXB05.42NL | LPG | No | NR | FGNXB05.42NL-010 | 1.24 | 3.45 | 112.01 | 1800 | 82.30 | 34.60 |
| | SG050 | 6.8 | FGNXB06.82NN | NG | No | NR | FGNXB06.82NN-011 | 1.46 | 6.57 | 30.88 | 1800 | 84.90 | 37.17 |
| | SG050 | 6.8 | FGNXB06.82NL | LPG | No | NR | FGNXB06.82NL-012 | 1.86 | 2.67 | 172.30 | 1800 | 84.66 | 46.55 |
| | SG060 | 6.8 | FGNXB06.82NN | NG | No | NR | FGNXB06.82NN-011 | 1.47 | 2.94 | 75.88 | 1800 | 96.67 | 38.76 |
| | SG060 | 6.8 | FGNXB06.82NL | LPG | No | NR | FGNXB06.82NL-012 | 1.26 | 4.23 | 99.05 | 1800 | 96.60 | 41.20 |
| | SG070 | 6.8 | FGNXB06.82NN | NG | No | NR | FGNXB06.82NN-011 | 1.46 | 3.55 | 68.40 | 1800 | 109.72 | 42.37 |
| | SG070 | 6.8 | FGNXB06.82NL | LPG | No | NR | FGNXB06.82NL-012 | 1.26 | 3.28 | 111.49 | 1800 | 118.41 | 51.86 |
| | SG080 | 8.0 | FGNXB08.02NN | NG | No | NR | FGNXB08.02NN-013 | 1.16 | 2.86 | 49.60 | 1800 | 127.61 | 44.02 |
| | SG080 (DF) | 8.0 | FGNXB08.02NN | NG/LPV | No | NR | FGNXB08.02NN-013 | 0.85 | 4.24 | 27.29 | 1800 | 128.06 | 42.50 |
| | SG080 (DF) | 8.0 | FGNXB08.02NN | NG/LPL | No | NR | FGNXB08.02NN-013 | 1.23 | 4.09 | 37.06 | 1800 | 127.90 | 42.60 |
| | SG080 | 8.0 | FGNXB08.02NL | LPV | No | NR | FGNXB08.02NL-014 | 0.95 | 2.24 | 86.43 | 1800 | 127.46 | 50.13 |
| SG080 | 8.0 | FGNXB08.02NL | LPL | No | NR | FGNXB08.02NL-014 | 1.00 | 2.77 | 71.36 | 1800 | 128.09 | 46.61 | |
| Large Spark Ignited Engines (LSIE) | SG130 (DF) | 6.8 | FGNXB06.82C3 | NG & LP | Yes | Cat Muff | FGNXB06.82C3-033 | 0.06 | 0.05 | 0.92 | 3000 | 193.49 | 72.31 |
| | SG150 (DF) | 6.8 | FGNXB06.82C3 | NG & LP | Yes | Cat Muff | FGNXB06.82C3-033 | 0.18 | 0.14 | 1.54 | 3600 | 231.00 | 91.34 |
| | SG100 | 9.0 | FGNXB08.92C1 | NG | Yes | Cat Muff | FGNXB08.92C1-035 | 0.17 | 0.003 | 0.06 | 1800 | 148.90 | 46.86 |
| | SG100 (DF) | 9.0 | FGNXB08.92C1 | NG/LPV | Yes | Cat Muff | FGNXB08.92C1-035 | 0.30 | 0.400 | 0.79 | 1800 | 133.16 | 45.36 |
| | SG100 (DF) | 9.0 | FGNXB08.92C1 | NG/LPL | Yes | Cat Muff | FGNXB08.92C1-035 | 0.34 | 0.006 | 1.10 | 1800 | 135.75 | 45.47 |
| | SG100 | 9.0 | FGNXB08.92C2 | LPG | Yes | Cat Muff | FGNXB08.92C2-036 | 0.03 | 0.08 | 0.13 | 1800 | 157.67 | 53.08 |
| | SG100 | 9.0 | FGNXB08.92C2 | LPL | Yes | Cat Muff | FGNXB08.92C2-036 | 0.07 | 0.04 | 0.30 | 1800 | 156.15 | 54.47 |
| | SG130,150 | 9.0 | FGNXB08.92C3 | NG | Yes | Cat Muff | FGNXB08.92C3-053 | 0.10 | 0.03 | 0.02 | 1800 | 230.30 | 71.97 |
| | SG130,150 (DF) | 9.0 | FGNXB08.92C3 | NG/LPV | Yes | Cat Muff | FGNXB08.92C3-053 | 0.10 | 0.03 | 0.02 | 1800 | 230.30 | 71.97 |
| | SG130,150 (DF) | 9.0 | FGNXB08.92C3 | NG/LPL | Yes | Cat Muff | FGNXB08.92C3-053 | 0.10 | 0.03 | 0.02 | 1800 | 230.30 | 71.97 |
| | MG130,150 | 9.0 | FGNXB08.92C3 | NG | Yes | Cat Muff | FGNXB08.92C3-053 | 0.10 | 0.03 | 0.02 | 1800 | 230.30 | 71.97 |
| | MG130,150 (DF) | 9.0 | FGNXB08.92C3 | NG/LPV | Yes | Cat Muff | FGNXB08.92C3-053 | 0.10 | 0.03 | 0.02 | 1800 | 230.30 | 71.97 |
| | MG130,150 (DF) | 9.0 | FGNXB08.92C3 | NG/LPL | Yes | Cat Muff | FGNXB08.92C3-053 | 0.10 | 0.03 | 0.02 | 1800 | 230.30 | 71.97 |
| | SG130, 150 | 9.0 | FGNXB08.92C4 | LPG | Yes | Cat Muff | FGNXB08.92C4-054 | 0.02 | 0.57 | 1.30 | 1800 | 230.30 | 75.43 |
| | SG130, 150 | 9.0 | FGNXB08.92C4 | LPL | Yes | Cat Muff | FGNXB08.92C4-054 | 0.02 | 0.57 | 1.30 | 1800 | 230.30 | 75.43 |
| | MG130,150 | 9.0 | FGNXB08.92C4 | LPG | Yes | Cat Muff | FGNXB08.92C4-054 | 0.02 | 0.57 | 1.30 | 1800 | 230.30 | 75.43 |
| | MG130,150 | 9.0 | FGNXB08.92C4 | LPL | Yes | Cat Muff | FGNXB08.92C4-054 | 0.02 | 0.57 | 1.30 | 1800 | 230.30 | 75.43 |
| | SG150 | 12.9 | FGNXB12.92C2 | NG | Yes | Cat Muff | FGNXB12.92C2-042 | 0.53 | 0.13 | 0.53 | 1800 | 307.87 | 107.99 |
| | MG150 | 12.9 | FGNXB12.92C2 | NG | Yes | Cat Muff | FGNXB12.92C2-042 | 0.53 | 0.13 | 0.53 | 1800 | 307.87 | 107.99 |
| | SG175 | 12.9 | FGNXB12.92C2 | NG | Yes | Cat Muff | FGNXB12.92C2-042 | 0.53 | 0.13 | 0.53 | 1800 | 307.87 | 107.99 |
| | SG200 | 12.9 | FGNXB12.92C2 | NG | Yes | Cat Muff | FGNXB12.92C2-042 | 0.53 | 0.13 | 0.53 | 1800 | 307.87 | 107.99 |
| | MG200 | 12.9 | FGNXB12.92C2 | NG | Yes | Cat Muff | FGNXB12.92C2-042 | 0.53 | 0.13 | 0.53 | 1800 | 307.87 | 107.99 |
| | SG230 | 12.9 | FGNXB12.92C2 | NG | Yes | Cat Muff | FGNXB12.92C2-042 | 0.38 | 0.03 | 0.53 | 1800 | 379.10 | 125.30 |
| | SG250 | 12.9 | FGNXB12.92C2 | NG | Yes | Cat Muff | FGNXB12.92C2-042 | 0.38 | 0.03 | 0.53 | 1800 | 379.10 | 125.30 |
| | MG250 | 12.9 | FGNXB12.92C2 | NG | Yes | Cat Muff | FGNXB12.92C2-042 | 0.38 | 0.03 | 0.53 | 1800 | 379.10 | 125.30 |
| | SG275 | 12.9 | FGNXB12.92C3 | NG | Yes | Cat Muff | FGNXB12.92C3-043 | 0.06 | 0.06 | 0.81 | 2150 | 477.00 | 164.20 |
| | SG300 | 12.9 | FGNXB12.92C3 | NG | Yes | Cat Muff | FGNXB12.92C3-043 | 0.06 | 0.06 | 0.81 | 2150 | 477.00 | 164.20 |
| | MG300 | 12.9 | FGNXB12.92C3 | NG | Yes | Cat Muff | FGNXB12.92C3-043 | 0.06 | 0.06 | 0.81 | 2150 | 477.00 | 164.20 |
| SG150, 175, 200 | 14.2 | FGNXB14.22C1 | NG | Yes | Cat Muff | FGNXB14.22C1-047 | 0.06 | 0.05 | 0.39 | 1800 | 304.00 | 98.54 | |
| MG150 | 14.2 | FGNXB14.22C1 | NG | Yes | Cat Muff | FGNXB14.22C1-047 | 0.06 | 0.05 | 0.39 | 1800 | 304.00 | 98.54 | |
| MG200 | 14.2 | FGNXB14.22C1 | NG | Yes | Cat Muff | FGNXB14.22C1-047 | 0.06 | 0.05 | 0.39 | 1800 | 304.00 | 98.54 | |
| SG230, 250 | 14.2 | FGNXB14.22C1 | NG | Yes | Cat Muff | FGNXB14.22C1-047 | 0.04 | 0.02 | 0.23 | 1800 | 374.00 | 120.84 | |
| MG250 | 14.2 | FGNXB14.22C1 | NG | Yes | Cat Muff | FGNXB14.22C1-047 | 0.04 | 0.02 | 0.23 | 1800 | 374.00 | 120.84 | |
| SG350 | 21.9 | FGNXB21.92C1 | NG | Yes | Cat Muff | FGNXB21.92C1-037 | 0.18 | 0.14 | 0.82 | 1800 | 636.00 | 201.17 | |
| MG350 | 21.9 | FGNXB21.92C1 | NG | Yes | Cat Muff | FGNXB21.92C1-037 | 0.18 | 0.14 | 0.82 | 1800 | 636.00 | 201.17 | |
| SG400 | 21.9 | FGNXB21.92C1 | NG | Yes | Cat Muff | FGNXB21.92C1-037 | 0.18 | 0.14 | 0.82 | 1800 | 636.00 | 201.17 | |
| MG400 | 21.9 | FGNXB21.92C1 | NG | Yes | Cat Muff | FGNXB21.92C1-037 | 0.18 | 0.14 | 0.82 | 1800 | 636.00 | 201.17 | |

NR: Not Required
 DF: Dual Fuel
 Refer to page 2 for definitions and advisory notes.

STATEMENT OF EXHAUST EMISSIONS 2014 SPARK-IGNITED, NON-SCAQMD

2015 EPA SPARK-IGNITED EXHAUST EMISSIONS DATA

Effective since 2009, the EPA has implemented exhaust emissions regulations on stationary spark-ignited (gaseous) engine generators for emergency applications. All Generac spark-ignited gensets, including SG, MG, QTA and QT series gensets, that are built with engines manufactured in 2009 and later meet the requirements of 40CFR part 60 subpart JJJJ and are EPA certified. These generator sets are labeled as EPA Certified with decals affixed to the engines' valve covers.

The attached documents summarize the general information relevant to EPA certification on these generator sets. This information can be used for submittal data and for permitting purposes, if required. These documents include the following information:

EPA Engine Family

The EPA Engine Family is assigned by the Manufacturer under EPA guidelines for certification purposes and appears on the EPA certificate.

Catalyst Required

Indicates whether an exhaust catalyst and Air/Fuel Ratio control system are required on the generator set to meet EPA certification requirements. Generally, units rated 80kW and smaller do not require a catalyst to meet EPA certification requirements. Please note that some units that do not require a catalyst to meet EPA requirements do need a catalyst if the California SCAQMD option is selected. Please see "California SCAQMD" below for additional information on this option.

Combination Catalyst or Separate Catalyst

SG and MG series generator sets typically utilize a single combination catalyst/silencer as part of meeting EPA certification requirements. Many QT and QTA series generator sets use the same engines as SG and MG series units, but have different exhaust configurations that require the use of conventional silencers with additional separate catalysts installed.

EPA Certificate Number

Upon certification by the EPA, a Certificate Number is assigned by the EPA.

Emissions Actuals -Grams/bhp-hr

Actual exhaust emission data for Total Hydrocarbons (THC), Nitrogen Oxides (NOx) and Carbon Monoxide (CO) that were submitted to EPA and are official data of record for certification. This data can be used for permitting if necessary. Values are expressed in grams per brake horsepower-hour; to convert to grams/kW-hr, multiply by 1.341. Please see advisory notes below for further information.

California Units, SCAQMD CEP Number

A separate low-emissions option is available on many Generac gaseous-fueled generator sets to comply with the more stringent South Coast Air Quality Management District requirements that are recognized in certain areas in California. Gensets that include this option are also EPA Certified.

General Advisory Note to Dealers

The information provided here is proprietary to Generac and its' authorized dealers. This information may only be disseminated upon request, to regulatory governmental bodies for emissions permitting purposes or to specifying organizations as submittal data when expressly required by project specifications, and shall remain confidential and not open to public viewing. This information is not intended for compilation or sales purposes and may not be used as such, nor may it be reproduced without the expressed written permission of Generac Power Systems, Inc.

Advisory Notes on Emissions Actuals

- The stated values are actual exhaust emission test measurements obtained from units representative of the generator types and engines described.
- Values are official data of record as submitted to the EPA and SCAQMD for certification purposes. Testing was conducted in accordance with prevailing EPA protocols, which are typically accepted by SCAQMD and other regional authorities.
- No emission values provided are to be construed as guarantees of emissions levels for any given Generac generator unit.
- Generac Power Systems reserves the right to revise this information without prior notice.
- Consult state and local regulatory agencies for specific permitting requirements.
- The emissions performance data supplied by the equipment manufacturer is only one element required toward completion of the permitting and installation process. State and local regulations may vary on a case-by-case basis and must be consulted by the permit applicant/equipment owner prior to equipment purchase or installation. The data supplied herein by Generac Power Systems cannot be construed as a guarantee of installability of the generator set.
- The emission values provided are the result of multi-mode, weighted scale testing in accordance with EPA testing regulations, and may not be representative of any specific load point.
- The emission values provided are not to be construed as emission limits.



UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
2014 MODEL YEAR
CERTIFICATE OF CONFORMITY
WITH THE CLEAN AIR ACT OF 1990

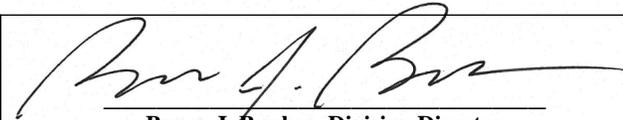
OFFICE OF TRANSPORTATION
AND AIR QUALITY
ANN ARBOR, MICHIGAN 48105

Certificate Issued To: Generac Power Systems, Inc.
(U.S. Manufacturer or Importer)

Certificate Number: EGNXB05.42NN-012

Effective Date:
11/21/2013

Expiration Date:
12/31/2014


Byron J. Bunker, Division Director
Compliance Division

Issue Date:
11/21/2013

Revision Date:
N/A

Manufacturer: Generac Power Systems, Inc.
Engine Family: EGNXB05.42NN
Certificate Number: EGNXB05.42NN-012
Certification Type: Stationary (Part 60)
Fuel : Natural Gas (CNG/LNG)
Emission Standards : NMHC + NO_x (g/kW-hr) : 13.4
HC + NO_x (g/kW-hr) : 13.4
CO (g/kW-hr) : 519
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

Emissions Calculations

Emergency Engine Potential Emissions
Dominion Transmission, Inc.
Grantsville G&P

Input Data: Generac QT048
 Design Class: 4-stroke rich burn
 Engine Power: 82.1 hp (Manufacturer Specs)
 Rated Electrical Output: 48 kW (Manufacturer Specs)
 Fuel Input: 0.77 MMBtu/hr
 Maximum Hours of Operation: 8,760 hrs/yr
 500 hrs/yr
 Fuel Throughput: 756 cf/hr (Manufacturer Specs - worst case)
 378,000 cf/yr
 Heating Value of Natural Gas: 1,020 Btu/cf

Emission Calculations

| Pollutant | Emission Factor | | Emissions (8760 hrs/yr) | | | Emissions (500 hrs/yr) | | |
|---------------------------------|-----------------|----------|-------------------------|-----------|-------------|------------------------|-----------|-------------|
| | | | (lb/hr) | (lbs/day) | (tons/yr) | (lb/hr) | (lbs/day) | (tons/yr) |
| Criteria Pollutants | | | | | | | | |
| PM (filterable) | 9.50E-03 | lb/MMBtu | 7.33E-03 | 0.18 | 0.03 | 7.33E-03 | 0.18 | 1.83E-03 |
| PM-10 (filterable) | 9.50E-03 | lb/MMBtu | 7.33E-03 | 0.18 | 0.03 | 7.33E-03 | 0.18 | 1.83E-03 |
| PM-2.5 (filterable) | 9.50E-03 | lb/MMBtu | 7.33E-03 | 0.18 | 0.03 | 7.33E-03 | 0.18 | 1.83E-03 |
| PM (condensibles) | 9.91E-03 | lb/MMBtu | 7.64E-03 | 0.18 | 0.03 | 7.64E-03 | 0.18 | 1.91E-03 |
| SO2 | 5.88E-04 | lb/MMBtu | 4.53E-04 | 0.01 | 1.99E-03 | 4.53E-04 | 0.01 | 1.13E-04 |
| CO | 95.32 | g/hp-hr | 17.25 | 414.07 | 75.57 | 17.25 | 414.07 | 4.31 |
| NO _x | 2.52 | g/hp-hr | 0.46 | 10.95 | 2.00 | 0.46 | 10.95 | 0.11 |
| VOC | 1.60 | g/hp-hr | 0.29 | 6.95 | 1.27 | 0.29 | 6.95 | 0.07 |
| Greenhouse Gases | | | | | | | | |
| CO ₂ | 117.0 | lb/MMBtu | 90.20 | -- | 395.09 | 90.20 | -- | 22.55 |
| CH ₄ | 2.20E-03 | lb/MMBtu | 0.00 | -- | 0.01 | 0.00 | -- | 0.00 |
| N ₂ O | 2.20E-04 | lb/MMBtu | 0.00 | -- | 0.00 | 0.00 | -- | 0.00 |
| CO ₂ e | 117.1 | lb/MMBtu | 90.30 | -- | 395.50 | 90.30 | -- | 22.57 |
| Hazardous Air Pollutants | | | | | | | | |
| 1,1,2,2-Tetrachloroethane | 2.53E-05 | lb/MMBtu | 1.95E-05 | -- | 8.55E-05 | 1.95E-05 | -- | 4.88E-06 |
| 1,1,2-Trichloroethane | 1.53E-05 | lb/MMBtu | 1.18E-05 | -- | 5.17E-05 | 1.18E-05 | -- | 2.95E-06 |
| 1,1-Dichloroethane | 1.13E-05 | lb/MMBtu | 8.71E-06 | -- | 3.82E-05 | 8.71E-06 | -- | 2.18E-06 |
| 1,2-Dichloroethane | 1.13E-05 | lb/MMBtu | 8.71E-06 | -- | 3.82E-05 | 8.71E-06 | -- | 2.18E-06 |
| 1,2-Dichloropropane | 1.30E-05 | lb/MMBtu | 1.00E-05 | -- | 4.39E-05 | 1.00E-05 | -- | 2.51E-06 |
| 1,3-Butadiene | 6.63E-04 | lb/MMBtu | 5.11E-04 | -- | 2.24E-03 | 5.11E-04 | -- | 1.28E-04 |
| 1,3-Dichloropropene | 1.27E-05 | lb/MMBtu | 9.79E-06 | -- | 4.29E-05 | 9.79E-06 | -- | 2.45E-06 |
| Acrolein | 2.63E-03 | lb/MMBtu | 2.03E-03 | -- | 8.88E-03 | 2.03E-03 | -- | 5.07E-04 |
| Acetaldehyde | 2.79E-03 | lb/MMBtu | 2.15E-03 | -- | 9.42E-03 | 2.15E-03 | -- | 5.38E-04 |
| Benzene | 1.58E-03 | lb/MMBtu | 1.22E-03 | -- | 5.34E-03 | 1.22E-03 | -- | 3.05E-04 |
| Butr/isobutyraldehyde | 4.86E-05 | lb/MMBtu | 3.75E-05 | -- | 1.64E-04 | 3.75E-05 | -- | 9.37E-06 |
| Carbon Tetrachloride | 1.77E-05 | lb/MMBtu | 1.36E-05 | -- | 5.98E-05 | 1.36E-05 | -- | 3.41E-06 |
| Chlorobenzene | 1.29E-05 | lb/MMBtu | 9.95E-06 | -- | 4.36E-05 | 9.95E-06 | -- | 2.49E-06 |
| Chloroform | 1.37E-05 | lb/MMBtu | 1.06E-05 | -- | 4.63E-05 | 1.06E-05 | -- | 2.64E-06 |
| Ethane | 7.04E-02 | lb/MMBtu | 5.43E-02 | -- | 2.38E-01 | 5.43E-02 | -- | 1.36E-02 |
| Ethylbenzene | 2.48E-05 | lb/MMBtu | 1.91E-05 | -- | 8.38E-05 | 1.91E-05 | -- | 4.78E-06 |
| Ethylene Dibromide | 2.13E-05 | lb/MMBtu | 1.64E-05 | -- | 7.19E-05 | 1.64E-05 | -- | 4.11E-06 |
| Formaldehyde | 2.05E-02 | lb/MMBtu | 1.58E-02 | -- | 6.92E-02 | 1.58E-02 | -- | 3.95E-03 |
| Methanol | 3.06E-03 | lb/MMBtu | 2.36E-03 | -- | 1.03E-02 | 2.36E-03 | -- | 5.90E-04 |
| Methylene Chloride | 4.12E-05 | lb/MMBtu | 3.18E-05 | -- | 1.39E-04 | 3.18E-05 | -- | 7.94E-06 |
| Naphthalene (POM) | 9.71E-05 | lb/MMBtu | 7.49E-05 | -- | 3.28E-04 | 7.49E-05 | -- | 1.87E-05 |
| PAH | 1.41E-04 | lb/MMBtu | 1.09E-04 | -- | 4.76E-04 | 1.09E-04 | -- | 2.72E-05 |
| Styrene | 1.19E-05 | lb/MMBtu | 9.18E-06 | -- | 4.02E-05 | 9.18E-06 | -- | 2.29E-06 |
| Toluene | 5.58E-04 | lb/MMBtu | 4.30E-04 | -- | 1.88E-03 | 4.30E-04 | -- | 1.08E-04 |
| Vinyl Chloride | 7.18E-06 | lb/MMBtu | 5.54E-06 | -- | 2.43E-05 | 5.54E-06 | -- | 1.38E-06 |
| Xylene | 1.95E-04 | lb/MMBtu | 1.50E-04 | -- | 6.59E-04 | 1.50E-04 | -- | 3.76E-05 |
| TOTAL HAP: | | | 0.08 | | 0.35 | 0.08 | | 0.02 |

(1) Lb/MMBtu emission factors from AP-42, Section 3.2, Natural Gas-Fired Reciprocating Engines, Table 3.2-3, 7/00

(2) G/hp-hr emission factors from manufacturer specification sheet.

(3) Lb/MMBtu numbers based on 40 CFR Part 98 Tables C-1 and C-2 for natural gas

For example: $CO_2 = (53.06 \text{ kg } CO_2/MMBtu) / (0.453592 \text{ kg/lb}) = 117.0 \text{ lb/MMBtu}$

(4) Global Warming Potentials = 25 for CH₄ and 298 for N₂O (per 40 CFR Part 98 Table A-1 to Subpart A)

For example: $CO_2e = (117.0 \text{ lb/MMBtu}) + (0.0022 \text{ lb/MMBtu} * 25) + (0.00022 \text{ lb/MMBtu} * 298) = 117.1 \text{ lb/MMBtu}$

Attachment J

Class I Legal Advertisement

AIR QUALITY PERMIT NOTICE

Notice of Application

Notice is given that Dominion Transmission, Inc. has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Class II General Permit (G60-C) for the Grantsville G&P field office located on North Side Road, Grantsville, in Calhoun County, West Virginia. The latitude and longitude coordinates are:

Latitude: 38.92106
Longitude: -81.09571

The applicant estimates the increased potential to discharge the following Regulated Air Pollutants will be:

| | |
|-----|----------------|
| CO | + 4.31 tons/yr |
| NOx | + 0.11 tons/yr |
| VOC | + 0.07 tons/yr |

Startup of operation is planned to begin on or about October 2015. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

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

Dated this the **(Day)** day of **(Month)**, **(Year)**.

By: Dominion Transmission, Inc.
Brian Sheppard
VP of Pipeline Operations
445 West Main Street
Clarksburg, WV 26301

Attachment L

General Permit Registration Application Fee