



west virginia department of environmental protection

Division of Air Quality
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Jim Justice, Governor
Austin Caperton, Cabinet Secretary
www.dep.wv.gov

**GENERAL PERMIT REGISTRATION APPLICATION
ENGINEERING EVALUATION / FACT SHEET**

BACKGROUND INFORMATION

Registration No.: G60-C093
Plant ID No.: 067-00110
Applicant: Dominion Hope Gas, Inc.
Facility Name: Summersville City Plant
Location: Summersville, Nicholas County
SIC Code: 9511
NAICS Code: 221210
Application Type: Relocation
Received Date: January 19, 2017
Engineer Assigned: Thornton E. Martin Jr.
Fee Amount: \$1,500.00
Date Received: January 20, 2017
Complete Date: February 17, 2017
Applicant Ad Date: January 26, 2017
Newspaper: *The Nicholas Chronicle*
UTM's: Easting: 516.6613 km Northing: 4241.2713 km Zone: 17
Description: The Summersville City Plant is being relocated to a new facility (constructed about 1 mile from the existing facility). This Application is for the relocation of the emergency generator to the new facility.

DESCRIPTION OF PROCESS

On April 19, 2012, a 2009 Eaton EGEN48, natural gas-fired emergency generator, (EG-1) was permitted (G65-C358) to be used only during times of disrupted purchase power. The engine used to power the generator is an EPA Certified engine (Certificate Number: GNX-NRSI-09-01), rated at 75 bhp (48 kW) @ 1,800 RPM and classified as a four-stroke rich-burn type. Natural gas is combined with air and is combusted producing emissions. This application is to relocate the emergency engine to the new Summersville City Plant located about 1 mile from the original facility.

SITE INSPECTION

This application is for the relocation of an existing generator unit (2009 MY) for back-up power supply to critical functions. A site inspection was deemed unnecessary by the writer at this time, however, the facilities will be placed on the emergency generator list of sources from this permitting action.

Directions: From Charleston take I79 N until exit 57. Turn onto US19 S towards Beckley. Travel for approximately 25 miles, turn left onto WV41/Webster Road. Travel approximately 1 mile on WV-41 and turn left onto Trade Zone Drive in the Glade Creek Business Park. Travel 400 ft. to Hope Gas Summersville City Plant (on left).

ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

The emission factors for EG-1 are from Generac and AP-42. The emission factors from Generac in g/bhp-hr are: NO_x, 5.58; CO, 79.94; and VOC, 0.98. The emission factors from AP-42 in lb/MMBTU are: SO₂, 5.88 x 10⁻⁴, PM₁₀, 0.01941; and Formaldehyde, 2.05 x 10⁻².

The following are the estimated emissions:

Source ID	Emission Source	Pollutant	Maximum Hourly Emissions (lb/hr)	Maximum Annual Emissions (tpy)
EG-1	Eaton EGEN48 75 bhp	Nitrogen Oxides	0.92	0.23
		Carbon Monoxide	13.22	3.30
		Volatile Organic Compounds	0.16	0.04
		Sulfur Dioxide	<0.01	<0.01
		Particulate Matter	<0.01	<0.01
		Formaldehyde	0.01	<0.01

REGULATORY APPLICABILITY

45CSR4 - To Prevent and Control the Discharge of Air Pollutants Into the Open Air Which Causes or Contributes to an Objectionable Odor or Odors

The facility is subject to the requirements of 45CSR4 and shall not allow the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public.

45CSR13 - Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Administrative Updates, Temporary Permits, General Permits, and Procedures for Evaluation

The proposed construction is subject to the requirements of 45CSR13 because it would create an uncontrolled potential to discharge greater than (6) pounds per hour and ten (10) tons per year of a regulated air pollutant (CO).

45CSR16 - Standards of Performance for New Stationary Sources Pursuant to 40CFR60

45CSR16 incorporates by reference the standards of performance for new stationary sources (40CFR60). This facility has one engine (EG-1) that is subject to 40CFR60 Subpart JJJJ, and is therefore subject to 45CSR16.

45CSR22 - Air Quality Management Fee Program

This facility is subject to the requirements of 45CSR22. This source has a total reciprocating engine capacity less than 1,000 hp and is therefore a 9M source and shall pay an annual fee of \$200.

40CFR60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

This subpart applies to engine EG-1 because the site will commence construction after June 12, 2006, the emergency engine was manufactured on or after January 1, 2009 and it has a horsepower rating > 25 hp. Engine EG-1 has a manufacture date in 2009; is certified to Table 1 to Subpart JJJJ of Part 60 which states that for Emergency type engines (25<HP<130) manufactured after January 01, 2009 must meet emission standards of 10 grams/hp•hr for NO_x+HC and 387 grams/hp•hr for CO. EG-1 is an EPA Certified Engine (EPA Certificate Number: GNX-NRSI-09-01).

40CFR63 Subpart ZZZZ -Standards of Performance for Stationary Spark Ignition Internal Combustion Engines

In consideration of requirements for compliance under the reciprocating internal combustion engines (RICE) National Emissions Standards for Hazardous Air Pollutants, 40 CFR Part 63 Subpart ZZZZ: the RICE NESHAP Summary of Requirements for new Emergency engines greater than 500 hp and less than or equal to 500 hp located at an area source of HAP, constructed on or after June 12, 2006, the relocated engine will be subject to 40 CFR 60, subpart JJJJ, as applicable.

GENERAL PERMIT ELIGIBILITY

All emergency generators installed for the purpose of allowing key systems to continue to operate without interruption during times of utility power outages, including emergency generators installed at Title V(major) facilities and other facilities having additional point sources of emissions, are eligible for Class II General Permit registration except for:

1. Any emergency generator which is a major source as defined in 45CSR14, 45CSR19 or 45CSR30;
2. Any emergency generator subject to the requirements of 45CSR14, 45CSR15, 45CSR19, 45CSR25, 45CSR27, 45CSR30, 45CSR34;
3. Any emergency generator whose estimated hours of operation exceeds 500 hours

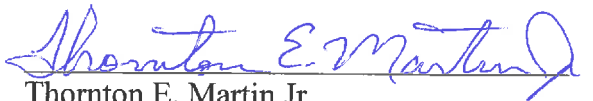
- per year;
4. Any emergency generator located in or which may significantly impact an area which has been determined to be a nonattainment area. Unless otherwise approved by the Secretary.
 5. Any emergency generator which will require an individual air quality permit review process and/or individual permit provisions to address the emission of a regulated pollutant or to incorporate regulatory requirements other than those established by General Permit G60-C.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

Small amounts of non-criteria regulated hazardous or toxic air pollutants such as benzene, ethylbenzene, toluene, xylenes and formaldehyde may be emitted. Total non-criteria regulated hazardous/toxic air pollutant emissions are tabulated for each registered emergency generator in the Class II General Permit Registration Application. A toxicity analysis will be performed when the Director finds existing circumstances and/or submitted data provide cause for an assessment to be made concerning whether a specific emergency generator may interfere with attainment or maintenance of an applicable ambient air quality standard or cause or contribute to degradation of public health and welfare. Any emergency generator granted Class II General Permit registration by the Director shall not have a potential to emit of 10 tons per year of any hazardous/toxic pollutant or 25 tons per year of any combination of hazardous/toxic pollutants.

RECOMMENDATION TO DIRECTOR

Dominion Hope Gas, Inc.'s request to relocate and operate one (1) emergency generator at the new Summersville City Plant, Nicholas County, WV site meets the requirements of General Permit G60-C and all applicable rules and therefore should be granted a General Permit Registration to construct and operate the said facility.


Thornton E. Martin Jr.
Permit Engineer

March 01, 2017

Date