January 12, 2015

Via Federal Express

John A. Benedict
Director, Division of Air Quality
WV Department of Environmental Protection
601 57th Street, SE
Charleston, WV 25304

Re: CertainTeed Gypsum WV, Inc.
General Permit G60-C Registration Application

Dear Mr. Benedict:

CertainTeed Gypsum WV, Inc. (CertainTeed) recently submitted a Title V operating permit renewal application to the West Virginia Department of Environmental Protection (WVDEP) for its facility in Moundsville, WV. The Moundsville facility is currently operating under WVDEP Permit to Operate R30-05100113-2010 issued on May 27, 2010.

CertainTeed had included the General Permit application for the emergency generators in the Title V renewal permit application. However, based on conversations between Mr. Carlos Davis and the WV DAQ, the WV DAQ has requested that the General Permit application for the engines be submitted to WV DAQ separately. Therefore, with this application, CertainTeed is requesting a General Permit for four emergency engines – one fire pump generator and three lift station engines, which are used to operate the septic system when there is no electricity available from the grid.

Please find two (2) electronic copies of the complete permit application package on CDs, as well as hard copies of the required signatory pages enclosed with this letter. Also included is the registration fee of $1,500 for a Class II – General Permit G-60C for the four emergency engines including in this permit application.

Please feel free to contact me at (304) 843-3007or via email at Justin.L.Cumberledge@saint-gobain.com, or our consultant, Rachel Velthuisen of ENVIRON International Corporation at (919) 529-4747 or rvelthuisen@environcorp.com, if you have any questions or if additional information will be required to process this application.

Thank you for your assistance.

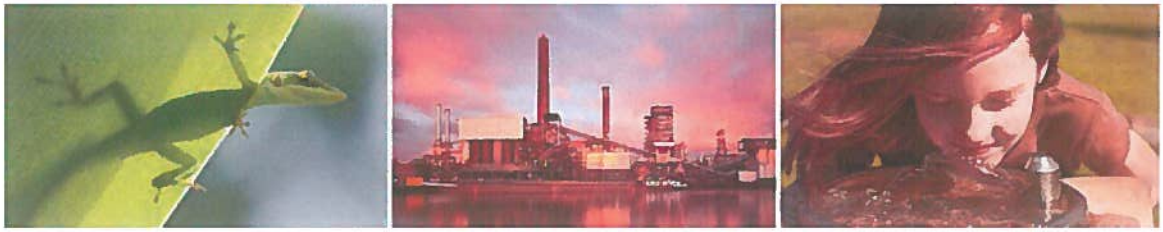
Sincerely,

Justin L. Cumberledge
Process Engineer

JLC:jap
0334247B\PRIN_WP\38633v1

Enclosures

cc: Rachel Velthuisen, ENVIRON
Steve Branoff, ENVIRON
Joseph Sabbatis, SGC
Carlos Davis, SGC



General Permit G60-C
Registration Application

Prepared for:
CertainTeed Gypsum WV, Inc.
Moundsville, WV

Prepared by:
ENVIRON International Corporation
San Francisco, CA

Date:
January 2015

Project Number:
0334247B

ENVIRON

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Table 1-1: CertainTeed Moundsville Emergency Stationary Engines

Stationary Engines	Purpose of Stationary Engine	Engine Make	Model Year	Engine Installation Date	Engine Category	Cylinder Displacement (Liter/cylinder)	Engine Rating (hp)	Engine Usage (hours/yr)
Lift Station Generator 1 (Office)	Emergency Septic System Power	Cummins	2004 -2006	March, 2008	4-Stroke	2.2	37	26
Lift Station Generator 2 (South)		Cummins	2006	March, 2008	4-Stroke	1.6	27	26
Lift Station Generator 3 (North)		Cummins	2006	March, 2008	4-Stroke	1.6	27	28
Fire Pump	Fire Protection	John Deere	2005	March, 2008	4-Stroke	8.1	252	41

3 Emissions Calculations

The combustion of diesel fuel in the emergency stationary engines generates emissions of NO_X, CO, SO_2, PM_{10}, and VOC. All uncontrolled emission factors for stationary engines were obtained from the manufacturers' specification and emissions data sheets. Emissions were calculated as a function of engine rating in horsepower (hp), and estimated hours of operation per year. Detailed explanation of emission calculations is provided in the sections below and calculations are shown in Appendix B.

voluntary emissions limitations, is above the major stationary thresholds, specifically for attainment CO threshold. As such, the Moundsville facility is a major source with respect to PSD. The proposed addition of the generators will not change the PSD standing of the Moundsville facility.

4.2 National Emissions Standards for Hazardous Air Pollutants

National Emissions Standards for Hazardous Air Pollutants (NESHAP) are generally only applicable to major sources of HAPs. 40 CFR 63 NESHAP allowable emission limits are established on the basis of a maximum achievable control technology determination for a particular major source. A HAP major source is defined as having potential emissions in excess of 25 tpy for total HAPs and/or potential emissions in excess of 10 tpy for any individual HAP. NESHAP applies to sources in specifically regulated industrial source categories [Clean Air Act Section 112(d)] or on a case-by-case basis [Section 112(g)] for facilities not regulated as a specific industrial source type. In addition to 40 CFR 63 Subpart A (NESHAP Subpart A), the following NESHAP could potentially apply to the Moundsville facility:

- 40 CFR 63 Subpart DDDDD - Industrial, Commercial, and Institutional Boilers and Process Heaters.

Since the Moundsville facility is not a major source of HAPs, this rule does not apply.

- 40 CFR 63 Subpart ZZZZ – Stationary Reciprocating Internal Combustion Engines (RICE).

The Moundsville facility is considered an area source HAPs because the HAP emissions are below the major source thresholds. Therefore, the diesel fueled stationary engines at Moundsville facility are subject to the RICE NESHAP per § 63.6585 (c). According to §63.6590(c)(1), a new stationary RICE, in which the facility commenced construction of the stationary RICE on or after June 12, 2006, is subject to 40 CFR part 60 Subpart IIII, for compression ignition engines (See Section 4.3 for further information).

4.3 New Source Performance Standards

New Source Performance Standards (NSPS), regulated under 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 Moundsville facility.

4.3.1 Subpart IIII

NSPS Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion Engines, is applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE). The engines are subject to 40 CFR part 60 Subpart IIII. The following sub-sections are applicable to emergency stationary CI ICEs at the Moundsville facility (model year pre-2007 with a displacement of < 10 liters per cylinder):

4.4.2 Class II – General Permit G-60C

The purpose of this Class II General Permit is to authorize the construction, modification, administrative update, relocation, and operation of eligible emergency generators through a Class II General Permit registration process. The Class II General Permits address the prevention and control of regulated pollutants from the operation of emergency generator(s). CertainTeed is requesting a Class II General Permit for its four emergency engines, which will be subject to these, permit requirements.

No additional regulations were identified that apply to the Moundsville facility.

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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:

☐ **G10-D** – Coal Preparation and Handling
☐ **G20-B** – Hot Mix Asphalt
☐ **G30-D** – Natural Gas Compressor Stations
☐ **G33-A** – Spark Ignition Internal Combustion Engines
☐ **G35-A** – Natural Gas Compressor Stations (Flare/Glycol Dehydration Unit)
☐ **G40-C** – Nonmetallic Minerals Processing
☐ **G50-B** – Concrete Batch
■ **G60-C** - Class II Emergency Generator
☐ **G65-C** – Class I Emergency Generator
☐ **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):
CertainTeed Gypsum WV, Inc.

2. Federal Employer ID No. **(FEIN):**
20 - 2411363

3. Applicant's mailing address:
9622 Energy Road,
Proctor, WV 26055

4. Applicant's physical address:
10 Energy Road
Moundsville WV 26041

5. If applicant is a subsidiary corporation, please provide the name of parent corporation:

6. **WV BUSINESS REGISTRATION.** Is the applicant a resident of the State of West Virginia? ■ **YES** ☐ **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.):
Gypsum Product Manufacturing

8a. Standard Industrial Classification AND 8b. North American Industry
Classification (SIC) code: **3275** System (NAICS) code: **327420**

9. DAQ Plant ID No. (for existing facilities only):
051 — 00113

10. List all current 45CSR13 and other General Permit numbers associated with this process (for existing facilities only):
R13-2656E

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**.

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 2nd alternate operating site:	12C. Address of 2nd alternate operating site: Mailing: _____ Physical: _____

13C. Does the applicant own, lease, have an option to buy, or otherwise have control of the proposed site? 9 **YES** 9 **NO**

– IF **YES**, please explain: _____

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

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

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

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

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)

G 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

G I certify that I am a General Partner

FOR A LIMITED LIABILITY COMPANY

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

FOR AN ASSOCIATION

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

FOR A JOINT VENTURE

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

FOR A SOLE PROPRIETORSHIP

G I certify that I am the Owner and Proprietor

G *I hereby certify that* (please print or type) _____

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 _____ 1/13/15
(please use blue ink) Responsible Official Date

Name & Title **Scott Dolan, Plant Manager**
(please print or type)

Signature _____ 1/13/15
(please use blue ink) Authorized Representative (if applicable) Date

Applicant's Name **Justin L. Cumberledge**

Phone & Fax **(304) 843-3007**
Phone Fax

Email Justin.L.Cumberledge@saint-gobain.com

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.)*	☒
Section 6	Tanks	☐
Section 7	Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (40CFR60 Subpart IIII)	☒
Section 8	Standards of Performance for Stationary Spark Ignition Internal Combustion Engines (40CFR60 Subpart JJJJ)	☐

* **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]		EG4 (Fire Pump)			
Engine Manufacturer and Model		John Deere (JW6H-UF38)			
Manufacturer's Rated bhp/rpm		0.143			
Source Status[2]		NS			
Date Installed/Modified/Removed[3]		March 2008			
Engine Manufactured/Reconstruction Date[4]		2005			
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart IIII? (Yes or No)[5]		Yes			
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart JJJJ? (Yes or No)[6]		N/A			
Engine, Fuel and Combustion Data	Engine Type[7]	LB4S			
	APCD Type[8]				
	Fuel Type[9]	Diesel			
	H_2S (gr/100 scf)	--			
	Operating bhp/rpm	0.143			
	BSFC (Btu/bhp-hr)	--			
	Fuel throughput (ft^3/hr)	1.87			
	Fuel throughput ($MMft^3$/yr)	1.87 E-04			
	Operation (hrs/yr)	100			
Reference[10]	Potential Emissions[11]	lbs/hr	tons/yr		
MD	NO_X	4.13	0.206		
MD	CO	0.48	0.024		
MD	VOC	0.15	0.008		
AP-42	SO_x	0.52	0.026		
MD	PM	0.09	0.005		
AP-42	Formaldehyde	0.003	0.0001		
AP-42	CO_2	290	14.5		

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

STORAGE TANK DATA SHEET

Source ID #[1]	Status[2]	Content[3]	Volume[4]	Dia[5]	Throughput[6]	Orientation[7]	Liquid Height[8]

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 HAZARDOUS/TOXIC POLLUTANTS

Emergency Generator Location:

Registration Number (Agency Use) G60-C

	Potential Emissions (lbs/hr)						Potential Emissions (tons/yr)					
Source ID No.	Benzene	Ethyl-benzene	Toluene	Xylenes	n-Hexane	Formalde-hyde	Benzene	Ethyl-benzene	Toluene	Xylenes	n-Hexane	Formalde-hyde
Total												

Appendix B

Supporting Emissions Calculation

Table 2. HAP Emissions from Stationary Engines
CertainTeed Gypsum, Moundsville, WV

Stationary Engine	Engine Rating (hp)[1]	Hours of Operation (hrs/year)[2]
Lift Station Generator 1 (Office)	37	100
Lift Station Generator 2 (South)	27	100
Lift Station Generator 3 (North)	27	100
Fire Pump	252	100

Control Efficiency:	0.00%

Potential HAP Emissions

Pollutant	Emission Unit		Lift Station Generator 1 (Office)	Lift Station Generator 2 (South)	Lift Station Generator 3 (North)	Fire Pump	Total
	(lb/MMBtu)[3]	(lb/hp-hr)[4]	(tpy)				
Benzene	9.33E-04	6.53E-06	1.21E-05	8.82E-06	8.82E-06	8.23E-05	1.12E-04
Toluene	4.09E-04	2.86E-06	5.30E-06	3.87E-06	3.87E-06	3.61E-05	4.91E-05
Xylene	2.85E-04	2.00E-06	3.69E-06	2.69E-06	2.69E-06	2.51E-05	3.42E-05
Propylene	2.58E-03	1.81E-05	3.34E-05	2.44E-05	2.44E-05	2.28E-04	3.10E-04
1,3-Butadiene	3.91E-05	2.74E-07	5.06E-07	3.69E-07	3.69E-07	3.45E-06	4.69E-06
Formaldehyde	1.18E-03	8.26E-06	1.53E-05	1.12E-05	1.12E-05	1.04E-04	1.42E-04
Acetaldehyde	7.67E-04	5.37E-06	9.93E-06	7.25E-06	7.25E-06	6.76E-05	9.21E-05
Acrolein	9.25E-05	6.48E-07	1.20E-06	8.74E-07	8.74E-07	8.16E-06	1.11E-05
Naphthalene	8.48E-05	5.94E-07	1.10E-06	8.01E-07	8.01E-07	7.48E-06	1.02E-05
Acenaphthylene	5.06E-06	3.54E-08	6.55E-08	4.78E-08	4.78E-08	4.46E-07	6.07E-07
Acenaphthene	1.42E-06	9.94E-09	1.84E-08	1.34E-08	1.34E-08	1.25E-07	1.70E-07
Fluorene	2.92E-05	2.04E-07	3.78E-07	2.76E-07	2.76E-07	2.58E-06	3.51E-06
Phenanthrene	2.94E-05	2.06E-07	3.81E-07	2.78E-07	2.78E-07	2.59E-06	3.53E-06
Anthracene	1.87E-06	1.31E-08	2.42E-08	1.77E-08	1.77E-08	1.65E-07	2.24E-07
Fluoranthene	7.61E-06	5.33E-08	9.85E-08	7.19E-08	7.19E-08	6.71E-07	9.14E-07
Pyrene	4.78E-06	3.35E-08	6.19E-08	4.52E-08	4.52E-08	4.22E-07	5.74E-07
Benzo(a)anthracene	1.68E-06	1.18E-08	2.18E-08	1.59E-08	1.59E-08	1.48E-07	2.02E-07
Chrysene	3.53E-07	2.47E-09	4.57E-09	3.34E-09	3.34E-09	3.11E-08	4.24E-08
Benzo(b)fluoranthene	9.91E-08	6.94E-10	1.28E-09	9.36E-10	9.36E-10	8.74E-09	1.19E-08
Benzo(k)fluoranthene	1.55E-07	1.09E-09	2.01E-09	1.46E-09	1.46E-09	1.37E-08	1.86E-08
Benzo(a)pyrene	1.88E-07	1.32E-09	2.43E-09	1.78E-09	1.78E-09	1.66E-08	2.26E-08
Indeno(1,2,3-cd)pyrene	3.75E-07	2.63E-09	4.86E-09	3.54E-09	3.54E-09	3.31E-08	4.50E-08
Dibenz(a,h)anthracene	5.83E-07	4.08E-09	7.55E-09	5.51E-09	5.51E-09	5.14E-08	7.00E-08
Benzo(g,h,i)perylene	4.89E-07	3.42E-09	6.33E-09	4.62E-09	4.62E-09	4.31E-08	5.87E-08
Total HAP			**8.36E-05**	**6.10E-05**	**6.10E-05**	**5.69E-04**	7.75E-04

Notes:

1. Based on information provided by client via email.

2. Three lift station generators aand fire pump can potentially operate for 100 hrs/year; based on 40 CFR 60 §60.4211(f)(2) - emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section may be operated for a maximum of 100 hours per calendar year.

3. HAP emission factors obtained from Diesel Industrial IC Engines, AP-42, Chapter 3.3.

4. Based on information in AP-42, Chapter 3.3. When necessary, an average brake-specific fuel consumption (BSFC) of 7,000 Btu/hp-hr was used to convert from lb/MMBtu to lb/hp-hr.