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1.0. Definitions

Terms used throughout the General Permit are defined in this section. Unless otherwise indicated, other words and phrases used in this General Permit shall have the meaning ascribed to them in 45CSR2, 45CSR4, 45CSR6, 45CSR10, 45CSR13, and 45CSR22; W.Va. Code §§22-5-1 et seq., as amended.

AFFECTED FACILITY

means, for purposes of this General Permit, any spark ignition internal combustion engine (SI ICE) installed for the purpose of supplying energy to move natural gas at increased pressure from gathering systems, in transmission pipelines or into storage.

AIR POLLUTANT

means any solid, liquid or gas which if discharged into the air, may result in statutory air pollution.

AIR POLLUTION OR STATUTORY AIR POLLUTION

means and is limited to the discharge into the air by an act of man substances (liquid, solid, gaseous, organic or inorganic) in a locality, manner and amount as to be injurious to human health or welfare, animal or plant life or property, or which would interfere with the enjoyment of life or property.

AUTHORIZED REPRESENTATIVE

means a person certified by a Responsible Official who shall represent and have the authority to legally bind the business. An Authorized Representative may be certified through a certification statement submitted with the General Permit Registration Application. Such certification is subject to approval by the Director.

CABINET SECRETARY

means the Cabinet Secretary of the West Virginia Department of Environmental Protection.

C.F.R.

means the United States Code of Federal Regulations.

CONSTRUCTION

means any physical change or change in the method of operation (including fabrication, erection, installation, demolition or modification of an emissions unit or affected facility) which would result in an increase in the potential to emit or an increase in actual emissions of any regulated air pollutant.

CSR

means the West Virginia Code of State Rules.

DAQ

means the Division of Air Quality of the WV Department of Environmental Protection.

DEP

means the Department of Environmental Protection of the West Virginia Bureau of the Environment.

DIRECTOR OF AIR QUALITY OR DIRECTOR

means the Director of the Division of Air Quality or a designated representative appointed by the Cabinet Secretary of the Department of Environmental Protection pursuant to the provisions of W.Va. Code §§22-1-1 et seq.

EMISSION

means the release, escape or discharge of air pollutants into the air.

EMISSION INVENTORY

means an annual submittal, due on or before July 1 of each calendar year for the previous calendar year, containing the speciated pollutants and the corresponding emission poundage or tonnage for each (W.Va. Code §22-5-4(a)(14)).

EMISSIONS UNIT

means any affected facility, part or activity of a stationary source which emits or has the potential to emit any regulated pollutant.

EPA OR USEPA

means the United States Environmental Protection Agency.

GATHERING SYSTEM

means the well pump, auxiliary tanks, gathering lines, and all other equipment used to transport natural gas from a wellhead.

LEAN-BURN ENGINE

means any two or four-stroke spark-ignited internal combustion engine which is not a rich-burn engine.

LOAD

means the ratio of the operating brake horsepower to the rated brake horsepower.

MAINTENANCE OPERATION

means any adjustment, repair, removal, disassembly, cleaning or replacement of components or systems of emission units or air pollution control devices required to be performed on a periodic basis to prevent part failure or malfunction, or those actions anticipated as necessary to correct an overt indication of malfunction or failure for which maintenance is not appropriate.

MAJOR STATIONARY SOURCE OR MAJOR SOURCE

means, for purposes of this General Permit, any stationary source which emits or has the potential to emit two hundred fifty (250) tons per year or more of any regulated air pollutant as defined in 45CSR14 or directly emits or has the potential to emit one hundred (100) tons per year or more of any air pollutant as defined in 45CSR30.

MODIFICATION

means, for purposes of this General Permit, any proposed physical change or change in the method of operation of an affected facility that would require an individual permit pursuant to 45CSR13. Any person operating an existing affected facility who desires to modify and/or increase throughput may complete a General Permit Registration Application and if eligible, receive General Permit registration in lieu of individual permit coverage pursuant to 45CSR13.

NATURAL GAS COMPRESSOR ENGINE (ENGINE)

means a natural gas-fueled reciprocating stationary internal combustion engine used to supply energy to move natural gas at increased pressure from gathering lines, in transmission pipelines or into storage.

NATURAL GAS COMPRESSOR STATION

means any permanent combination of equipment (including but not limited to reciprocating internal combustion engine-driven compressors, emergency standby generators, engine driven air compressors, boilers, line heaters, tanks, glycol dehydration units, etc.) that supplies energy to move natural gas at increased pressure from gathering systems, in transmission pipelines or into storage.

OPACITY

means the degree to which particulate emissions reduce the transmission of light and obscure the view of an object in the background.

OPERATING BRAKE HORSEPOWER

means the maximum operating brake horsepower as determined by the maximum load powered by an engine.

PARTICULATE MATTER OR PM

means any material except uncombined water that exists in a finely divided form as a liquid or solid.

PARTICULATE MATTER CAPTURE SYSTEM

means any equipment or method used to confine, collect, and transport particulate matter from elevators, screens, mixers, weighing equipment, bins and other plant components to air pollution control equipment. Particulate matter capture systems shall include, but not be limited to, hoods, bins, ductwork, enclosures and fans.

PM₁₀

means any particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers.

PERSON

means any and all persons, natural or artificial, including the State of West Virginia or any other state, the United States of America, any municipal, statutory, public or private corporation organized or existing under the laws of this or any other state or country and any firm, partnership or association of whatever nature.

POTENTIAL TO EMIT

means the maximum capacity of an affected facility to emit any pollutant under its existing or proposed physical and operational design.

RATED BRAKE HORSEPOWER

means the maximum brake horsepower (bhp) rating at maximum revolutions per minute (rpm) specified for proper engine operation by the manufacturer.

REGISTRANT

means a person who has submitted a General Permit Registration Application and has been granted General Permit registration by the Director.

REGISTRATION

means the process where the owner or operator of an eligible affected facility submits a complete General Permit Registration Application and is granted General Permit registration.

REGISTRATION MODIFICATION

means the General Permit provision for any proposed physical change or change in the method of operation of a registered affected facility.

RELOCATION

means the physical movement of a source outside its existing plant boundaries.

REPLACEMENT

means the removal of an existing engine and subsequent installation of a different engine in its place.

REPLACEMENT IN KIND

means the removal of an existing engine and subsequent installation of an identical engine with the same model number, horsepower, torque and emissions specifications of the engine being replaced. Replacement in kind also refers to removal and subsequent installation of air pollution control devices or an auxiliary air pollution control device with the same specification equipment.

RESPONSIBLE OFFICIAL

means a person who shall represent the business and is a President, Vice President, Secretary, Treasurer, General Partner, General Manager, a member of a Board of Directors or Owner, depending on business structure. Any submitted Registration Application, report, Emission Inventory, Certified Emission Statement, compliance certification record or Certification of Data Accuracy shall be signed by a Responsible Official or an Authorized Representative. A Responsible Official or an Authorized Representative shall have the authority to legally bind the business. An Authorized Representative may be certified by a Responsible Official through a certification statement submitted with the General Permit Registration Application. Such certification is subject to approval by the Director.

RICH-BURN ENGINE

means any four-stroke, naturally aspirated, spark-igniting internal combustion engine or any spark-ignited internal combustion engine that is operated with an exhaust stream oxygen concentration of less than one (1) percent by volume. For engines using catalytic reduction devices, the exhaust gas oxygen concentration shall be determined from the uncontrolled exhaust stream before the catalytic element.

SMOKE

means any small gas borne and airborne particles arising from a process of combustion in sufficient numbers to be visible.

SPARK IGNITION

means relating to either: a gasoline-fueled engine; or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation.

STATIONARY INTERNAL COMBUSTION ENGINE

means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary ICE is not a nonroad engine as defined at 40 CFR 1068.30 (except paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

SOURCE OR STATIONARY SOURCE

means, for purposes of this General Permit, any building, structure, affected facility, installation or emission unit or combination thereof which emits or may emit any regulated air pollutant.

STACK

means, but shall not be limited to, any duct, control equipment exhaust or similar apparatus which vents gases containing any regulated pollutant into the open air.

STANDARD CONDITIONS

means, for purposes of this General Permit, a temperature of 68 degrees F (20 degrees C) and a pressure of 29.92 inches of mercury (760 mm of Hg).

WELLHEAD

means the assembly of fittings, valves, and controls located at ground level and connected to flow lines, tubing and casing of a natural gas production well so as to control the flow of natural gas from a reservoir.

WELLHEAD COMPRESSOR ENGINE

means a small stationary or portable natural gas compressor engine of 50 brake horsepower or less, located near a gathering system and is not situate at a natural gas compressor station. More than one wellhead compressor engine at a single location shall be considered a natural gas compressor station.

2.0. Class I General Permit Registration Application Requirements

Unless otherwise stated WVDEP DAQ will not determine whether the registrant is subject to an area source air toxics standard requiring Generally Achievable Control Technology (GACT) promulgated after January 1, 2007 pursuant to 40 CFR 63, including the area source air toxics provisions of 40 CFR 63, Subpart HH and 40 CFR 63, Subpart ZZZZ.

The Registration Application requires the following information. Failure to submit this information may result in the Registration Application being deemed incomplete.

Section I. General Information

Complete Section 1 of the Application for General Permit Registration. Use the following guidelines to ensure a complete application:

1. Name of Applicant as registered with the WV Secretary of State's Office.
2. Federal Employer ID Number (FEIN)
3. Applicant's Mailing Address
4. If applicant is a subsidiary company please provide the name of the parent company
5. Provide as Attachment A a copy of the current WV Business Registration.

Section II. Facility Information

Complete Section 2 of the Application for General Permit Registration. Use the following guidelines to ensure a complete application:

7. Type of Plant or Facility (SIICE)
8. Standard Industrial Classification (SIC) Code for the Affected facility (4922 – Natural Gas Transmission, 1321 – Natural Gas Liquids, or 1311 – Crude Petroleum and Natural Gas)
9. Division of Air Quality Facility ID Number (for existing affected facilities). ID# ____ - _____
10. List all current DAQ permit numbers associated with this affected facility, include any Rule 13 and Title V permits.

Operating Site Information

Complete Section 3 of the Application for General Permit Registration. Use the following guidelines to ensure a complete application:

11. Name of Primary Operating Site
12. Operating Site's Mailing Address
13. Does the Applicant own, lease, have an option to buy, or otherwise have control of the proposed site?
Yes – Please Explain. No – You are not eligible for a permit for this source.
14. Directions to Operating Site
15. Nearest City or Town
16. County
17. UTM Northing (km)
18. UTM Easting (km)
19. UTM Zone

The Universal Transverse Mercator (UTM) coordinate system is a grid-based method of specifying locations on the surface of the Earth. It is used to identify locations on the earth, but differs from the traditional method of latitude and longitude in several respects. The UTM system is not a single map projection. The system instead employs a series of sixty zones, each of which is based on a specifically

defined secant Transverse Mercator projection. However, if you know your latitude and longitude our website offers the capability of converting these to UTM coordinates.

20. Anticipated installation or change date
21. Anticipated startup date
22. Operating Schedule including hours of operation per day, days of operation per week, and weeks of operation per year.

Section III. Attachments and Supporting Documents

Attachment A - Current Business Certificate

If the registrant is a resident of the State of West Virginia the registrant should provide a copy of the registrant's current Business Registration Certificate issued to them from the West Virginia State Tax Department. If the registrant is not a resident of the State of West Virginia, the registrant should provide a copy of the Certificate of Authority/Authority of LLC/Registration.

Attachment B - Process Description

Provide a detailed written description of the operation, plant and/or affected facilities. The Process Description is used in conjunction with the Process Flow Diagram to provide the reviewing engineer a complete understanding of the activity at the operation or plant. Describe in detail and order the complete process.

Use the following guidelines to ensure a complete Process Description:

1. The Process Flow Diagram should be prepared first and used as a guide when preparing the Process Description. The written description shall follow the logical order of the Process Flow Diagram.
2. All sources, affected facilities, and air pollution control devices must be included in the Process Description.
3. When modifications are proposed, describe the modifications and the effect the changes will have on affected facilities, equipment or operation.
4. Proper Source Identification Numbers are used consistently in the Process Description.
5. Additional information that may facilitate the reviewer's understanding of the Process Flow Diagram and/or Process Description is included.

Attachment C – Description of Fugitive Emissions

This information is not required for General Permit G33-A. However, the Director may require a detailed written description of fugitive emissions associated with the process if there is reason to believe the affected facility is close to major source thresholds.

Attachment D – Process Flow Diagram

Provide a diagram or schematic that supplements the Process Description of the operation or plant. The Process Flow Diagram shall show all sources, components or facets of the operation or plant in an understandable line sequence of operation. Appropriate sizing and specifications of equipment should also be shown on the Process Flow Diagram. For a proposed modification, clearly identify the process areas, affected facilities and equipment that will be modified or added, and specify the nature and extent of the modification.

Use the following guidelines to ensure a complete Process Flow Diagram:

1. The Process Flow Diagram shall logically follow the entire process from beginning to end.

2. Identify each source, air pollution control device and transfer point with proper and consistent Source Identification Numbers, Control Device Identification Numbers and Transfer Point Identification Numbers.
3. Include material handling rates for all lines of the Process Flow Diagram. If applicable, include pre- and post-modification material handling rates and identify accordingly.
4. Transfer Point Identification Numbers, consistent with assignments in any emission calculation sheet, should be shown at each transfer point.
5. The process flow lines may appear different for clarity. For example, dot-dash-dot for raw material, and a solid line for finished product. Refuse flow may be identified by a dotted line
6. The process flow lines may be color coded. For example, new or modified equipment may be red, old or existing equipment may be blue; different stages of preparation such as raw material may be green and finished product or refuse another color.

Attachment E – Plot Plan

Provide an accurately scaled and detailed Plot Plan showing the locations of all process equipment and/or affected facilities and air pollution control devices. Show all equipment, affected facilities, enclosures, buildings and plant entrances and exits from the nearest public road(s) as appropriate. Note height, width and length of proposed or existing buildings and structures.

A scale between 1"=10' and 1"=200' should be used with the determining factor being the level of detail necessary to show operation or plant areas, affected facilities, sources, transfer points, etc. An overall small scale plot plan (e.g., 1"=300') should be submitted in addition to larger scale plot plans for process or activity areas (e.g., 1"=50') if the plant is too large to allow adequate detail on a single plot plan. Process or activity areas may be grouped for the enlargements as long as sufficient detail is shown.

Use the following guidelines to ensure a complete Plot Plan:

1. Operation, plant or facility name
2. Company name
3. Company ID number
4. Plot scale, north arrow, date drawn, and submittal date.
5. Fence lines
6. Property lines
7. Base elevation
8. UTM reference coordinates from the Area Map and corresponding reference point elevation
9. Location of all sources labeled with proper and consistent Source Identification numbers

This information is required for all sources regardless of whether it is a construction, modification, or administrative update.

Attachment F – Area Map

Provide a USGS 7.5 minute topographic Area Map showing the current or proposed location of the operation or plant. On this map, identify plant or operation property lines, access roads and any adjacent dwelling, business, public building, school, church, cemetery, community or institutional building or public park.

Mark and reference UTM coordinates (not latitude and longitude) and the corresponding elevation above mean sea level for the operation or plant. UTM coordinates may be acquired from the USGS 7.5" topographical map. UTM coordinates are marked as blue tick marks along the outside edges of the map. These coordinates must be provided for a point inside the plant boundary near the center of the property and be accurate to within fifty meters.

This information is required for all sources regardless of whether it is a construction, modification, or administrative update.

Attachment G – Affected Source Sheets

The purpose of this Class I General Permit is to authorize the construction, modification and relocation, administrative update and operation of eligible SI ICEs through a Class I General Permit registration process. The requirements, provisions, standards and conditions of this Class I General Permit address the prevention and control of regulated air pollutant emissions from the operation of registered SI ICEs. General Permit G33-A is being developed to address the New Source Performance Standards of 40CFR60 Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines.

Provide the appropriate Equipment Data Sheets and Affected Source Sheets (SI ICE Data Sheet, Storage Tank Data Sheet). Proper Source Identification Numbers must be used consistently throughout the Registration Application.

Attachment H - Air Pollution Control Device Data Sheet

This information is not required for General Permit G33-A.

Attachment I - Emissions Calculations

Provide detailed emission calculations which lists the plant or operation's potential to emit (PTE) for criteria and hazardous/toxic pollutants.

Use the following guidelines to ensure complete emission calculations

1. All emission sources are included in the emission calculations, as well as all methods used in the emissions calculations.
2. Proper Source Identification Numbers are used consistently in the Emission Calculations.
3. A printout of the Emission Summary Sheets is attached to the Registration Application.

Attachment J – Class I Legal Advertisement

This information is not required for General Permit G33-A.

Attachment K - Electronic Submittal (Optional)

Provide an Electronic Submittal Diskette(s) for all files that are available electronically. The Electronic Submittal Diskette should have the following files in their respective formats (if available):

1. Registration Application file (Microsoft Word or Word Perfect format)
2. Affected Source Sheets (Microsoft Word or Word Perfect format)
3. Process Flow Diagram file
4. Process Description file (Microsoft Word or Word Perfect format)
5. Area Map file
6. Plot Plan file
7. Emission Calculations Spreadsheet (Microsoft Excel format)
8. Air Pollution Control Device Sheet, if required (Microsoft Word or Word Perfect format)

Section IV. Certification of Information

Any General Permit Registration Application shall be signed and certified by a Responsible Official or Authorized Representative as set forth in the General Permit G33-A. Such signature shall constitute an agreement that the applicant will assume responsibility for the construction, modification, relocation, administrative update and/or operation of the stationary source in accordance with the Registration Application, the requirements, provisions, standards or conditions of the General Permit, any other permit or applicable statutory or regulatory requirement (45CSR13). Certify whether or not the registrant is a Corporation, Partnership, Limited Liability Company, Association, Joint Venture, or a Sole Proprietorship.

If the General Permit Registration Application is not signed, it will be returned to the applicant.

Attachment L - General Permit Registration Application Fee

A person submitting a Class I General Permit Registration Application to construct, modify, relocate or administratively update a SI ICE shall pay a Class I General Permit registration fee pursuant to 45CSR13. The registration fee shall be paid by a negotiable instrument (check, draft, warrant or money order) to DEP - Division of Air Quality. The fees associated with General Permit G33-A include:

- a. \$250.00 for Class I General Permit Registrations (Construction/Modification)
- b. \$300.00 for Class I administrative updates

Any submitted Registration Application shall not be deemed to have been received nor administratively complete unless payment of the proper Class I General Permit registration fee(s) is (are) included (45CSR22);

Any General Permit registration fee paid hereunder is not refundable (45CSR22).

G33-A REGISTRATION APPLICATION FORMS

SI ICE DATA SHEET

Source Identification Number ¹							
Engine Manufacturer and Model							
Manufacturer's Rated bhp/rpm							
Source Status ²							
Date Installed/Modified/Removed ³							
Engine Manufactured/Reconstruction Date ⁴							
Is this a Certified Stationary Spark Ignition Engine according to 40CFR60 Subpart JJJJ? (Yes or No) ⁵							
Engine, Fuel and Combustion Data	Engine Type ⁶						
	APCD Type ⁷						
	Fuel Type ⁸						
	H ₂ S (gr/100 scf)						
	Operating bhp/rpm						
	BSFC (Btu/bhp-hr)						
	Fuel throughput (ft ³ /hr)						
	Fuel throughput (MMft ³ /yr)						
	Operation (hrs/yr)						
Reference ⁹	Potential Emissions ¹⁰	lbs/hr	tons/yr	lbs/hr	tons/yr	lbs/hr	tons/yr
	NO _x						
	CO						
	VOC						
	SO ₂						
	PM ₁₀						
	Formaldehyde						

1. Enter the appropriate Source Identification Number for each SI ICE.
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 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§60.4243 as appropriate.

Provide a manufacturer's data sheet for the engine being registered.

6. 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		

7. 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

8. Enter the Fuel Type using the following codes:

PQ	Pipeline Quality Natural Gas	RG	Raw Natural Gas
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9. 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)

10. 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. PTE data from this data sheet shall be incorporated in the *Emissions Summary Sheet*.

General Permit Levels Construction, Modification, Relocation, Administrative Update

Class I General Permits – G10-C (Coal Preparation and Handling), G20-B (Hot Mix Asphalt), G30-B (Natural Gas Compressor Stations), G33-A (Natural Gas Compressor Stations with Flares/Glycol Dehydration Units), G40-B (Nonmetallic Minerals Processing), G50-B (Concrete Batch Plant), G60-B (Emergency Generators)

Class I General Permit – G33-A (SI ICEs greater than or equal to 25 HP and less than or equal to 500 HP), G65-B (Emergency Generators)

General Permit	Public Notice	Review Period as per 45CSR13	Application Fee	Criteria	Application Type
Class II General Permit (Construction)	30 days (applicant)	45 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)	45 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	45 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)	45 days	\$300 + applicable NSPS fees	No change in emissions or an increase less than Class I 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