January 23, 2017

Mr. William F. Durham
Director
WVDEP, Division of Air Quality
601 – 57th Street SE
Charleston, West Virginia 25304

Re: Columbia Gas Transmission, Title V Renewal Application, R30-02100001-2012

Dear Mr. Durham,

Columbia Pipeline Group (CPG) and SLR International Corporation have prepared the attached 45CSR30 Title V Renewal Application for the Coco Compressor Station located in Kanawha County, West Virginia (Facility ID 039-00049). The facility is currently operating under Title V operating permit number R30-03900049-2012. However on November 29, 2016 a construction permit was issued under permit number R13-2087F and therefore these changes have been incorporated in this renewal application.

In preparation for this renewal the existing terms and conditions of the Title V permit were reviewed and evaluated. As a result of this evaluation, suggested Title V permit language has been developed that moves away from the old natural gas General Permit format. This is in an effort to enhance compliance clarity and bring the permit up to EPA's current expectations. These suggested changes to permit content and format have been compiled within a proposed permit document submitted for consideration within this application. The proposed permit has also been supplied in Microsoft Word format within the electronic submittal in hopes of being a useful tool for the reviewing Engineer.

SLR would be more than happy to discuss the details of the proposed permit language or the Title V Renewal Application at your convenience. If any additional information is needed, please feel free to contact me by telephone at (304) 545-8563 or by e-mail at jhanshaw@slrconsulting.com

Sincerely,
SLR International Corporation

Jesse Hanshaw
Principal Engineer

SLR International Corporation 8 Capitol Street, Suite 300, Charleston, WV 25301
T: (681) 205-8949 **F:** (681) 205-8969 www.slrconsulting.com
Offices throughout USA, UK, Ireland, Canada, Australia, Namibia, and South Africa

global environmental solutions

Columbia Gas Transmission, LLC

Coco Compressor Station

Facility ID No. 039-00049

Elkview, West Virginia

Title V Operating Permit Renewal Application

SLR Ref: 116.01272.00028

January 2017

Columbia Pipeline Group

Title V Operating Permit Renewal Application

Prepared for:

Columbia Gas Transmission, LLC
1700 MacCorkle Avenue, SE
Charleston, West Virginia 25314

This document has been prepared by SLR International Corporation. The material and data in this permit application were prepared under the supervision and direction of the undersigned.

Chris Boggess
Associate Engineer

Jesse Hanshaw, P.E.
Principal Engineer

CONTENTS

ATTACHMENTS

Notes:
ATTACHMENT F – N/A – Source is in compliance with all facility wide requirements
ATTACHMENT G – N/A – No control devices utilized at the facility
ATTACHMENT H – N/A – No CAM plan requirements at the facility

APPLICATION FOR PERMIT

Title V Operating Permit Renewal Application

Coco Compressor Station, Facility ID No. 039-00049
Elkview, West Virginia

Columbia Gas Transmission, LLC
1700 MacCorkle Avenue, SE
Charleston, West Virginia

January 2017

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

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

1. **Name of Applicant (As registered with the WV Secretary of State's Office):** Columbia Gas Transmission, LLC	**2. Facility Name or Location:** Coco Compressor Station
3. DAQ Plant ID No.: 039-00049	**4. Federal Employer ID No. (FEIN):** 31-0802435-30

5. **Permit Application Type:**

☐ Initial Permit — When did operations commence? 1951

☒ Permit Renewal — What is the expiration date of the existing permit? 10/31/2017

☐ Update to Initial/Renewal Permit Application

6. Type of Business Entity:

☐ Corporation ☐ Governmental Agency ☒ LLC
☐ Partnership ☐ Limited Partnership

7. Is the Applicant the:

☐ Owner ☐ Operator ☒ Both

If the Applicant is not both the owner and operator, please provide the name and address of the other party.

_____

_____

_____

8. Number of onsite employees:

Less than ten (10) employees

9. Governmental Code:

☒ Privately owned and operated; 0
☐ Federally owned and operated; 1
☐ State government owned and operated; 2
☐ County government owned and operated; 3
☐ Municipality government owned and operated; 4
☐ District government owned and operated; 5

10. Business Confidentiality Claims

Does this application include confidential information (per 45CSR31)? ☐ Yes ☒ No

If yes, identify each segment of information on each page that is submitted as confidential, and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's *"PRECAUTIONARY NOTICE-CLAIMS OF CONFIDENTIALITY"* guidance.

11. Mailing Address		
Street or P.O. Box: 1700 MacCorkle Avenue, SE		
City: Charleston	**State:** WV	**Zip:** 25314
Telephone Number: (304) 357-2047	**Fax Number:** (304) 357-2770	

12. Facility Location		
Street: 7 Coco Road	**City:** Elkview	**County:** Kanawha
UTM Easting: 463.523 km	**UTM Northing:** 4,250.476 km	**Zone:** ☒ 17 or ☐ 18
Directions: Traveling from the intersection of State Route 114 and Secondary Route 49, proceed 3.4 miles and bear right on Route 49. Go 3.6 miles from the intersection of Routes 47 and 49 and turn left onto Secondary Route 71 (Coco Road). Travel approximately 1.5 miles; the station is located on the right side of the road.		
Portable Source? ☐ Yes ☒ No		
Is facility located within a nonattainment area? ☐ Yes ☒ No		**If yes, for what air pollutants?**
Is facility located within 50 miles of another state? ☐ Yes ☒ No		**If yes, name the affected state(s).**
Is facility located within 100 km of a Class I Area[1]? ☐ Yes ☒ No **If no, do emissions impact a Class I Area[1]?** ☐ Yes ☒ No		**If yes, name the area(s).**

[1] *Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.*

13. Contact Information		
Responsible Official: Tim Sweeney		**Title:** Manager of Operations
Street or P.O. Box: 1700 MacCorkle Avenue, SE		
City: Charleston	**State:** WV	**Zip:** 25314
Telephone Number: (304) 722-8486	**Fax Number:** (304) 357-2770	
E-mail address: tim_sweeney@transcanada.com		
Environmental Contact: Lacey A. Ivey		**Title:** Principal Air
Street or P.O. Box: 1700 MacCorkle Avenue, SE		
City: Charleston	**State:** WV	**Zip:** 25314
Telephone Number: (337) 241-0686	**Fax Number:**	
E-mail address: lacey_ivey@transcanada.com		
Application Preparer: Jesse Hanshaw		**Title:** Principal Engineer
Company: SLR International Corporation		
Street or P.O. Box: 8 Capitol St., Suite 300		
City: Charleston	**State:** WV	**Zip:** 25301
Telephone Number: (304) 545-8563	**Fax Number:** (681) 205-8969	
E-mail address: jhanshaw@slrconsulting.com		

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Natural Gas Transmission	Natural Gas	486210	4922

Provide a general description of operations.

Coco Compressor Station is a natural gas transmission facility covered by Standard Industrial Classification (SIC) Code 4922. The station has the potential to operate twenty-four (24) hours per day, seven (7) days per week, fifty-two (52) weeks per year. The station consists of five (5) 880 hp, 2SLB reciprocating engines, one (1) 1,100 hp, 2SLB reciprocating engine, one (1) 4,000 hp, 2SLB reciprocating engine, one (1) 1,175 hp, 4SLB reciprocating engine/generator, one (1) 4.2 mmBtu/hr gas fired boiler, one (1) 9.38 mmBtu/hr regeneration gas heater, and one (1) 0.12 mmBtu/hr fuel gas heater.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

Section 2: Applicable Requirements

18. Applicable Requirements Summary	
Instructions: Mark all applicable requirements.	
☒ SIP	☐ FIP
☒ Minor source NSR (45CSR13)	☐ PSD (45CSR14)
☒ NESHAP (45CSR34)	☐ Nonattainment NSR (45CSR19)
☒ Section 111 NSPS	☒ Section 112(d) MACT standards
☐ Section 112(g) Case-by-case MACT	☐ 112(r) RMP
☐ Section 112(i) Early reduction of HAP	☐ Consumer/commercial prod. reqts., section 183(e)
☐ Section 129 Standards/Reqts.	☐ Stratospheric ozone (Title VI)
☐ Tank vessel reqt., section 183(f)	☐ Emissions cap 45CSR§30-2.6.1
☐ NAAQS, increments or visibility (temp. sources)	☐ 45CSR27 State enforceable only rule
☒ 45CSR4 State enforceable only rule	☐ Acid Rain (Title IV, 45CSR33)
☐ Emissions Trading and Banking (45CSR28)	☐ **C**ompliance **A**ssurance **M**onitoring (40CFR64)
☐ CAIR NO_x Annual Trading Program (45CSR39)	☐ CAIR NO_x Ozone Season Trading Program (45CSR40)
☐ CAIR SO_2 Trading Program (45CSR41)	

19. Non Applicability Determinations

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

45CSR4 – *To Prevent and Control the Discharge of Air Pollutants into the Open Air Which Causes or Contributes to an Objectionable Odor or Odors:* According to 45CSR§4-7.1, this rule shall not apply to the following sources of objectionable odor until such time as feasible control methods are developed: Internal Combustion Engines

45CSR10 – *To Prevent and Control Air Pollution from the Emission of Sulfur Oxides:* 45CSR10 is not applicable to the facility's heaters because maximum design heat input (DHI) is less than 10 MMBtu/hr

45CSR21 – *To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds:* All storage tanks at the station, which are listed as insignificant sources, either are below 40,000 gallons in capacity or have a maximum true vapor pressure of less than 10.5 kPa which exempts the facility from 45CSR§21-28. The compressor station is not engaged in the extraction or fractionation of natural gas which exempts the facility from 45CSR§21-29

45CSR27 – *To Prevent and Control the Emissions of Toxic Air Pollutants:* Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment "used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight."

☒ Permit Shield

19. Non Applicability Determinations *(Continued)* - *Attach additional pages as necessary.*

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

40 CFR 60 Subpart Dc – *Standards of Performance for Steam Generating Units:* The boilers and heaters at this facility are less than 10 mmBtu/hr; Hence Subpart Dc is not applicable in accordance with 60.40c(a)

40 CFR 60 Subpart GG – *Standards of Performance for Stationary Gas Turbines*: There are no turbine engines at this facility.

40 CFR 60 Subparts K,Ka – *Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced Prior to July 23, 1984:* All tanks at the facility are either below 40,000 gallons in capacity as specified in 60.110a(a) or were installed after the applicability date of July 23, 1984.

40 CFR 60 Subpart Kb – *Standards of Performance for Volatile Organic Liquid Storage Vessels:* Storage Tank A14 is exempt from the requirements of this subpart as specified in 60.110b(b) because the liquids stored in the tank have a maximum true vapor pressure of less than 3.5 kPa. All other tanks at the facility are exempt because of storage capacities are less than $75m^3$ (19,813 gallons) as specified in 60.110b(a)

40 CFR 60 Subpart KKK – *Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant:* This compressor station is not engaged in the extraction or fractionation of natural gas liquids from field gas, the fractionation of mixed natural gas liquids to natural gas products, or both.

40 CFR 60 Subpart IIII – *Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*: There are no compression ignition engines at this facility.

40 CFR 60 Subpart KKKK – *Standards of Performance for Stationary Combustion Turbines*: There are no turbine engines at this facility.

40 CFR 60 Subpart OOOO – *Standards of Performance for Crude Oil and Natural Gas Production, Transmission and Distribution*: The Storage Vessel requirement defined for transmission sources was found not to apply to the A19 Storage vessel constructed in 2012 due to its PTE being 845.5 lb/yr of VOCs. This tank and its emissions are considered listed under the insignificant activities within this application. All other vessels commenced construction, prior to August 23, 2011 in accordance with the applicability criteria defined within [40CFR§60.5365(e)].

40 CFR 60 Subpart OOOOa – *Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced after September 18, 2015*. The GHG and VOC requirements defined by this NSPS are not applicable to this site because all affected sources commenced constructed prior to September 18, 2015 in accordance with [40CFR§60.5365a]

40 CFR 63 Subpart HHH – *National Emission Standards for Hazardous Air Pollutants from Natural gas Transmission and Storage Facilities:* This facility does not have a glycol dehydration unit and is therefore not subject to the requirements of this subpart.

40 CFR 63 Subpart YYYY – *Turbine MACT*: There are no turbine engines at this facility.

40 C.F.R. 63 Subpart JJJJJJ; *National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers Area Sources:* This subpart does not apply to the facility since the boilers and heaters are fueled by natural gas as defined in 40CFR§63.11195(e).

40 CFR 64 – *Compliance Assurance Monitoring (CAM):* There are no add-on controls at this facility; therefore, in accordance with 40CFR§64.2(b)(1), CAM is not applicable to this facility.

☒ Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*).

T5 – 3.1.1 – 45 CSR 6-3.1 – Open burning prohibited
T5 – 3.1.2 – 45 CSR 6-3.2 – Open burning exemption stipulations
T5 – 3.1.3 – 40 CFR Part 61 and 45 CSR 34 – Asbestos inspection and removal
T5 – 3.1.4 – 45 CSR 4 – No objectionable odors
T5 – 3.1.5 – 45 CSR 11-5.2 – Standby plans for emergency episodes
T5 – 3.1.6 – WV Code 22-5-4 (a) (14) – Annual emission inventory reporting
T5 – 3.1.7 – 40 CFR Part 82 Subpart F – Ozone depleting substances
T5 – 3.1.8 – 40 CFR Part 68 – Risk Management Plan
T5 – 3.1.9 – 45 CSR 30-12.7 – Odor Control for Mercaptan
T5 – 3.1.10 – 45 CSR 30-12.7 – Emergency Operating Conditions / unit replacement
T5 – 3.3.1 – 45 CSR 22-5-4(a)(14-15) & 45CSR13 - Stack Testing - Conduct stack testing as required
T5 – 3.4.1 – 45 CSR 30-5.1 - Monitoring information – general monitoring requirements
T5 – 3.4.2 – 45 CSR 30-5.1 - Retention of records - Maintain records for a period of 5 years
T5 – 3.4.3 – 45 CSR 30-5.1 - Odors - Maintain records of odor complaints and corrective actions
T5 – 3.4.4 – 45 CSR 17.3 – Fugitive PM shall not cause statutory Air Pollution
T5 – 3.5.1 – 45 CSR 30-4.4. and 5.1.c.3.D – All documents required by permit shall be certified by a Responsible Official
T5 – 3.5.2 – 45 CSR 30-5.1.c.3.E. - A permittee may request confidential treatment
T5 – 3.5.3 – 45 CSR 30-5 - Communication required or permitted to be made to the DEP and/or USEPA
T5 – 3.5.4 – 45 CSR 30-8 - Certified emissions statement – Operator will Submit a certified emissions statement and pay fees on an annual basis
T5 – 3.5.5 – 45 CSR 30-5.3.e. - Compliance certification. The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ
T5 – 3.5.6 – 45 SR§30-5.1.c.3.A - Semi-annual monitoring reports.
T5 – 3.5.7 – 45 CSR 30-5.7.a through e. - Emergencies
T5 – 3.5.8 – 45 CSR 30-5.1.c.3.B. and C. - Deviations
T5 – 3.5.9 – 45 CSR 30-4.3.h.1.B. New applicable requirements. If any requirement is promulgated, the permittee will meet such requirements on a timely basis
T5 – 3.5.10 – 45 CSR 30-5.1.c.3.C. Natural Gas Use certification during Compliance Certification

☒ Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

T5 – 3.1.3 – 40 CFR Part 61 and 45 CSR 34 – Prior to demolition/construction buildings will be inspected for asbestos and documented accordingly
T5 – 3.1.4 – 45 CSR 4 – Permittee shall maintain records of all odor complaints received
T5 – 3.1.5 – 45 CSR 11 – Upon request by the Secretary, the permittee shall prepare a standby plan
T5 – 3.1.6 – WV 22-5-4 – The permittee shall submit annual emission inventory reports
T5 – 3.1.7 – 40 CFR Part 82 Subpart F – The permittee will prohibit maintenance, service, or repair of appliances containing ozone depleting substances without persons certified pursuant to 40 CFR 82.161
T5 – 3.1.8 – 40 CFR Part 68 – Should the permittee become subject to 40 CFR Part 68, a RMP shall be submitted
T5 – 3.1.10 – 45CSR§30-12.7 For emergency situations which interrupt the critical supply of natural gas to the public, and which pose a life threatening circumstance to the customer, the permittee is allowed to temporarily replace failed engine(s). Proper notice will be provided to the WVDAQ
T5 – 3.3.1 – 45 CSR 22-5-4 Stack Testing – All protocols and reports will be submitted to the WVDAQ
T5 – 3.4.1 & 3.4.2 – 45 CSR 30-5.1 Retention of Records - Maintain records of all information required by permit for 5 yrs.
T5 – 3.4.3 – 45 CSR 30-5.1 Odors - Maintain records of all odor complaints and responses.
T5 – 3.5.1 – 45 CSR 30-4.4 *and* 5.1 Responsible Official - Reports, certifications, etc. shall contain a certification by the responsible official.
T5 – 3.5.4 – 45 CSR 30-8 Certified emissions statement – Operator will Submit a certified emissions statement and pay fees on an annual basis
T5 – 3.5.5 – 45 SR§30-5.3.e Compliance Certification - Prepare and submit an emission inventory as requested
T5 – 3.5.6 – 45 CSR§30-5.1.c.3.A. Semi-annual monitoring reports.
T5 – 3.5.7 – 45 CSR30-5.7.a through e. - For reporting emergency situations, refer to Section 2.17 of this permit
T5 – 3.5.8 – 45 CSR 30-5.1.c.3.B. and C. – Deviations, In addition to required monitoring reports, the permittee shall promptly submit supplemental reports and notices of deviations / include upset conditions, cause of deviation(s) and corrective actions.
T5 – 3.5.9 – 45 CSR 30-4.3.h.1.B. New applicable requirements. If any requirement is promulgated, the permittee will meet such requirements on a timely basis
T5 – 3.5.10 – 45 CSR 30-5.1.c.3.C. During compliance certification, the facility shall certify that the facility burns natural gas in all stationary equipment except, when applicable, for emergency equipment.

Are you in compliance with all facility-wide applicable requirements? ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

21. Active Permits/Consent Orders		
Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit *(if any)*
R30-03900049-2012(SM01)	08/18/2015	
R13-2087F	11/29/2016	
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22. Inactive Permits/Obsolete Permit Conditions		
Permit Number	Date of Issuance	Permit Condition Number
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Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	71.04
Nitrogen Oxides (NO_X)	925.38
Lead (Pb)	-
Particulate Matter ($PM_{2.5}$)[1]	17.22
Particulate Matter (PM_{10})[1]	17.22
Total Particulate Matter (TSP)	17.22
Sulfur Dioxide (SO_2)	0.29
Volatile Organic Compounds (VOC)	44.87
Hazardous Air Pollutants[2]	Potential Emissions
Benzene	0.68
Toluene	0.34
Ethylbenzene	0.04
Xylene	0.10
n-Hexane	0.27
Formaldehyde	19.27
Acetaldehyde	2.71
Total HAPs	27.85
Regulated Pollutants other than Criteria and HAP	Potential Emissions
$CO2_e$	47,881

[1]$PM_{2.5}$ and PM_{10} are components of TSP.
[2]For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.

Section 4: Insignificant Activities

24. Insignificant Activities (Check all that apply)		
☒	1.	Air compressors and pneumatically operated equipment, including hand tools.
☐	2.	Air contaminant detectors or recorders, combustion controllers or shutoffs.
☒	3.	Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
☒	4.	Bathroom/toilet vent emissions.
☒	5.	Batteries and battery charging stations, except at battery manufacturing plants.
☐	6.	Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
☐	7.	Blacksmith forges.
☐	8.	Boiler water treatment operations, not including cooling towers.
☒	9.	Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
☐	10.	CO_2 lasers, used only on metals and other materials which do not emit HAP in the process.
☒	11.	Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
☒	12.	Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
☒	13.	Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
☐	14.	Demineralized water tanks and demineralizer vents.
☐	15.	Drop hammers or hydraulic presses for forging or metalworking.
☐	16.	Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
☐	17.	Emergency (backup) electrical generators at residential locations.

24. Insignificant Activities (Check all that apply)

☐ 18. Emergency road flares.

☒ 19. Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO_x, SO_2, VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units.

Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis:

Emission Point	*VOC Emissions (lb/hr)*	*VOC Emissions (lb/yr)*
A04	0.000	1.71
A05-2	0.000	0.65
A14	0.002	15.81
A15	0.165	1446.11
A16	0.165	1446.11
A17	0.002	15.08
A18	0.000	0.65
A19	0.097	845.49
A20	0.002	15.08
A21	0.002	15.08
B01	0.000	0.00
B02	0.000	0.00
B03	0.000	0.05
B04	0.000	0.29
B05	0.000	0.15
B07	0.000	0.11
Totals	**0.43**	**3802.37**

☐ 20. Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27.

Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis:

☐ 21. Environmental chambers not using hazardous air pollutant (HAP) gases.

☒ 22. Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.

☐ 23. Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.

☒ 24. Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.

☐ 25. Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.

☒ 26. Fire suppression systems.

☒ 27. Firefighting equipment and the equipment used to train firefighters.

24. Insignificant Activities (Check all that apply)		
☒	28.	Flares used solely to indicate danger to the public.
☒	29.	Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
☐	30.	Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
☒	31.	Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
☐	32.	Humidity chambers.
☐	33.	Hydraulic and hydrostatic testing equipment.
☒	34.	Indoor or outdoor kerosene heaters.
☒	35.	Internal combustion engines used for landscaping purposes.
☐	36.	Laser trimmers using dust collection to prevent fugitive emissions.
☐	37.	Laundry activities, except for dry-cleaning and steam boilers.
☒	38.	Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
☐	39.	Oxygen scavenging (de-aeration) of water.
☐	40.	Ozone generators.
☒	41.	Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.)
☒	42.	Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
☐	43.	Process water filtration systems and demineralizers.
☒	44.	Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
☐	45.	Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
☐	46.	Routing calibration and maintenance of laboratory equipment or other analytical instruments.
☐	47.	Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
☐	48.	Shock chambers.
☐	49.	Solar simulators.
☒	50.	Space heaters operating by direct heat transfer.
☐	51.	Steam cleaning operations.
☐	52.	Steam leaks.
☐	53.	Steam sterilizers.
☒	54.	Steam vents and safety relief valves.
☐	55.	Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.

24. Insignificant Activities (Check all that apply)		
☐	56.	Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
☐	57.	Such other sources or activities as the Director may determine.
☒	58.	Tobacco smoking rooms and areas.
☒	59.	Vents from continuous emissions monitors and other analyzers.

Section 5: Emission Units, Control Devices, and Emission Points

25. Equipment Table

Fill out the **Title V Equipment Table** and provide it as **ATTACHMENT D**.

26. Emission Units

For each emission unit listed in the **Title V Equipment Table**, fill out and provide an **Emission Unit Form** as **ATTACHMENT E**.

For each emission unit not in compliance with an applicable requirement, fill out a **Schedule of Compliance Form** as **ATTACHMENT F**.

27. Control Devices

For each control device listed in the **Title V Equipment Table**, fill out and provide an **Air Pollution Control Device Form** as **ATTACHMENT G**.

For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the **Compliance Assurance Monitoring (CAM) Form(s)** for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as **ATTACHMENT H**.

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance

*Note: This Certification must be signed by a responsible official. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.*

a. Certification of Truth, Accuracy and Completeness

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

b. Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

Responsible official (type or print)

Name: Tim Sweeney	Title: Manager of Operations

Responsible official's signature:

Signature: _____ Signature Date: 1-20-2017

(Must be signed and dated in blue ink)

Note: Please check all applicable attachments included with this permit application:

☒	ATTACHMENT A: Area Map
☒	ATTACHMENT B: Plot Plan(s)
☒	ATTACHMENT C: Process Flow Diagram(s)
☒	ATTACHMENT D: Equipment Table
☒	ATTACHMENT E: Emission Unit Form(s)
☐	ATTACHMENT F: Schedule of Compliance Form(s)
☐	ATTACHMENT G: Air Pollution Control Device Form(s)
☐	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

All of the required forms and additional information can be found and downloaded from, the DEP website at www.dep.wv.gov/dag, requested by phone (304) 926-0475, and/or obtained through the mail.

ATTACHMENT A

AREA MAP

Title V Operating Permit Renewal Application

Coco Compressor Station, Facility ID No. 039-00049
Elkview, West Virginia

Columbia Gas Transmission, LLC
1700 MacCorkle Avenue, SE
Charleston, West Virginia

January 2017

GPS Coordinates of Sites:
Lat: 38.40177, Long: -81.41776

UTM Coordinates of Sites:
Easting: 463.523 km, Northing: 4,250.476 km, Zone: 17

Columbia Gas Transmission, LLC
1700 MacCorkle Avenue, SE
Charleston, WV 25314

Report
Title V Operating Permit Renewal Application
Coco Compressor Station (ID No. 039-00049)

Drawing
Attachment A - Area Map

Date: July 2016

Drawn By: CLB

Project: 116.01272.00028

SLR

ATTACHMENT B

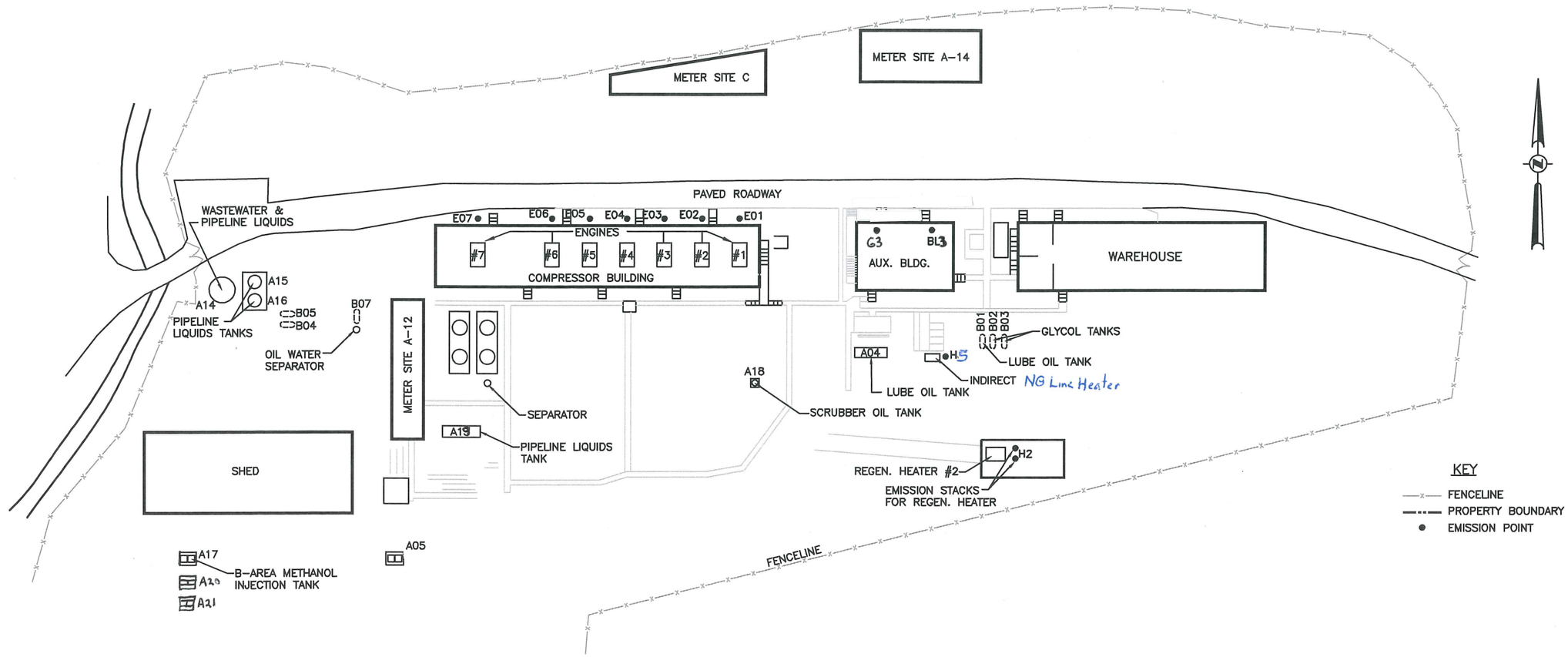
PLOT PLAN

Title V Operating Permit Renewal Application

Coco Compressor Station, Facility ID No. 039-00049
Elkview, West Virginia

Columbia Gas Transmission, LLC
1700 MacCorkle Avenue, SE
Charleston, West Virginia

January 2017



SIGNIFICANT EMISSION UNITS	
Emission Point ID	Equipment Category
E01	Recip Engine/Integral Compressor No. 00801
E02	Recip Engine/Integral Compressor No. 00802
E03	Recip Engine/Integral Compressor No. 00803
E04	Recip Engine/Integral Compressor No. 00804
E05	Recip Engine/Integral Compressor No. 00805
E06	Recip Engine/Integral Compressor No. 00806
E07	Recip Engine/Integral Compressor No. 00807
G3	Recip Engine/Generator No. 008G3
B3	Boiler No. 3
H2	Regeneration Gas Heater (2 Stacks)
H5	NG Line Heater

ELEVATION = 700 FEET
LAT. 38°24'07" LONG. 81°25'02"

70 0 70

SCALE IN FEET

SCALE: AS SHOWN	DESIGNED BY	DATE	DRAWING TITLE: Site Plan Columbia Gas Transmission Corp. Coco Station	
CONFIDENTIAL–ALL RIGHTS RESERVED–PROPERTY OF	DRAWN BY: TSH	DATE: 22SEP10		
	CHECKED BY: DW	DATE: 22SEP10	CAD DRAWING FILE	
RDU, NORTH CAROLINA 27560	APPROVED BY: DW	DATE: 22SEP10	CONTRACT NO.: 31827062	DRAWING NO.: COCO–BM5 REV.: 0

S:\AC3D–Proj–YR\2010\10–0412–nisource\008\Coco–bm5.dwg October 17, 2011 – 9:23 AM October

Figure 2–2. Plot Plan

ATTACHMENT C

PROCESS FLOW DIAGRAM

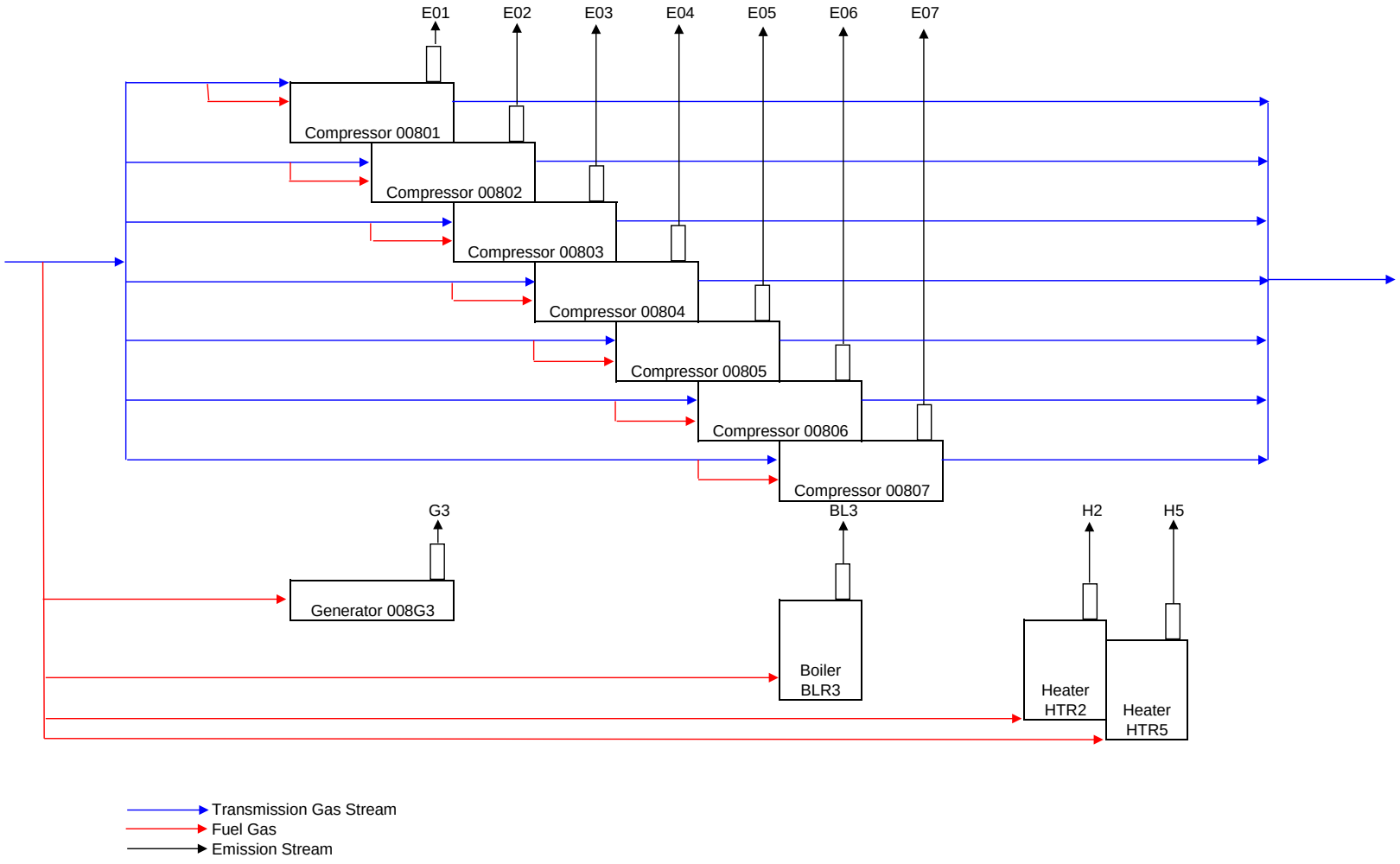
Title V Operating Permit Renewal Application

Coco Compressor Station, Facility ID No. 039-00049
Elkview, West Virginia

Columbia Gas Transmission, LLC
1700 MacCorkle Avenue, SE
Charleston, West Virginia

January 2017

ATTACHMENT C
COCO COMPRESSOR STATION PROCESS FLOW DIAGRAM



ATTACHMENT D

EQUIPMENT TABLE

Title V Operating Permit Renewal Application

Coco Compressor Station, Facility ID No. 039-00049
Elkview, West Virginia

Columbia Gas Transmission, LLC
1700 MacCorkle Avenue, SE
Charleston, West Virginia

January 2017

ATTACHMENT D - Title V Equipment Table

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 19 of the General Forms)

Emission Point ID[1]	Control Device[1]	Emission Unit ID[1]	Emission Unit Description	Design Capacity	Year Installed/ Modified
BL3	N/A	BLR3*	Gas-Fired Boiler; Cleaver-Brooks; Model # M4S-4000	4.2 MMBtu/hr	2012
E01	N/A	00801*	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMV-8TF; 2 Cycle, Lean Burn	880 hp	1951
E02	N/A	00802*	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMV-8TF; 2 Cycle, Lean Burn	880 hp	1951
E03	N/A	00803*	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMV-8TF; 2 Cycle, Lean Burn	880 hp	1951
E04	N/A	00804*	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMV-8TF; 2 Cycle, Lean Burn	880 hp	1951
E05	N/A	00805*	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMV-8TF; 2 Cycle, Lean Burn	880 hp	1951
E06	N/A	00806*	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMVA-8; 2 Cycle, Lean Burn	1,100 hp	1960
E07	N/A	00807*	Reciprocating Engine/Integral Compressor; Cooper-Bessemer 8W-330; 2 Cycle, Lean Burn	4,000 hp	1979
G3	N/A	008G3*	Reciprocating Engine/Generator; Waukesha VGF-P48GL; 4 Cycle, Lean Burn	1,175 hp	2016
H2	N/A	HTR2*	Regeneration Gas Heater; Heatec; Model # HCL-610-40G	9.38 MMBtu/hr	2005
H5	N/A	HTR5*	Indirect NG Line Heater; TERI	0.12 MMBtu/hr	2016

[1]For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

*This equipment burns pipeline quality natural gas only.

ATTACHMENT E

EMISSION UNIT FORM(S)

Title V Operating Permit Renewal Application

Coco Compressor Station, Facility ID No. 039-00049
Elkview, West Virginia

Columbia Gas Transmission, LLC
1700 MacCorkle Avenue, SE
Charleston, West Virginia

January 2017

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
BLR3	Gas-fired Boiler	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Boiler

Manufacturer:	**Model number:**	**Serial number:**
Cleaver-Brooks	M4S-4000	NA
Construction date:	**Installation date:**	**Modification date(s):**
NA	2012	NA

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 4.2 mmbtu/hr

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
NA	NA	8,760

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? X Yes ___ No	**If yes, is it?** X Indirect Fired ___ Direct Fired
Maximum design heat input and/or maximum horsepower rating: 4.2 mmBtu/hr	**Type and Btu/hr rating of burners:** 4.2 mmBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas
4,118 scf/hr / 36,070,000 scf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Pipeline Quality		1,020 Btu/scf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix A	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
	See Appendix A	
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Appendix A

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

45 CSR§2-3.1. – Opacity Limit; shall not exceed ten (10) percent opacity

40 C.F.R. 63 Subpart DDDDD

40 CFR § 63.7500 and Table 3 (Line 1) – Operating Requirements

40 CFR § 63.7505 – General Requirements

40 CFR § 63.7510(g), and 63.7530(f) – Initial Compliance Requirements

40 CFR § 63.7515(d) – Subsequent Testing & Tune Up Requirements

40 CFR § 63.7540(a)(12) – Continuous Compliance Requirements

40 CFR § 63.7545 – Notification Requirements

40 CFR § 63.7550 – Reporting Requirements

40 CFR § 63.7555 and 63.7560 – Recordkeeping Requirements

<u>X</u> Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45 CSR§2-3.2 – Compliance shall be determined using Method 9

40 C.F.R. 63 Subpart DDDDD

40 CFR § 63.7500(a)(1), (e) and Table 3 (Line 1) – Conduct a tune-up of the unit every five (5) years

40 CFR § 63.7505 – Must be in compliance with emission limits, work practice standards, and operating limits at all times

40 CFR § 63.7510(g) – Must demonstrate initial compliance no later than 61 months after April 1, 2013 or upon initial startup, whichever is later

40 CFR § 63.7515(d) and 63.7540(a)(12) – Subsequent tune-ups of the unit must be conducted every five (5) years

40 CFR § 63.7530(f) – The owner/operator of the unit shall submit the Notification of Compliance Status containing the results of the initial compliance demonstration

40 CFR § 63.7545(c) – Submit the required initial notification no later than 15 days after becoming subject to the subpart

40 CFR § 63.7545(e) – The Notification of Compliance Status report shall be submitted no later than 60 days after initial compliance demonstration and shall contain information specified by (e)(1) through (e)(8)

40 CFR § 63.7550(b)(5) – Submit the first and subsequent compliance reports according to the dates specified for Title V Semi-Annual Reporting.

40 CFR § 63.7550(c) – Compliance reports must contain information specified in (c)(5)(i) through (c)(5)(iii), (c)(5)(xiv) and (c)(5)(xvii)

40 CFR § 63.7555 – Maintain records of notifications and reports submitted to show compliance

40 CFR § 63.7560 – Maintain records in a form suitable and readily available for expeditious review for five (5) years.

Are you in compliance with all applicable requirements for this emission unit? <u>X</u> Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
00801	Reciprocating Engine/Integral Compressor	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
2-cycle lean burn

Manufacturer:	**Model number:**	**Serial number:**
Cooper-Bessemer	GMV-8TF	NA

Construction date:	**Installation date:**	**Modification date(s):**
NA	1951	NA

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 880 hp

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
NA	NA	8,760

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? X Yes ___ No	**If yes, is it?** ___ Indirect Fired X Direct Fired
Maximum design heat input and/or maximum horsepower rating: 880 hp	**Type and Btu/hr rating of burners:** 8,800 Btu/hp-hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas
7,592 scf/hr / 67,206,720 scf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Pipeline Quality		1,020 Btu/scf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix A	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
	See Appendix A	
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Appendix A

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

According to 40 CFR 63.6590(b)(3)(i) and 40 CFR 63.6600(c), this existing, non-emergency, SI 2SLB engine > 500 hp located at a major source of HAPs does not have any requirements under 40 CFR Part 63 Subpart ZZZZ because it was constructed prior to December 12, 2002.

Therefore, there are no specific applicable requirements for this emission unit other than those to submit a certified emission statement in accordance with Title V permit condition 3.5.4 and an annual emission inventory according to Title V permit condition 3.1.6.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The emission unit shall track fuel usage and hours of operation in order to quantify annual emissions from this unit.

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
00802	Reciprocating Engine/Integral Compressor	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
2-cycle lean burn

Manufacturer:	**Model number:**	**Serial number:**
Cooper-Bessemer	GMV-8TF	NA

Construction date:	**Installation date:**	**Modification date(s):**
NA	1951	NA

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 880 hp

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
NA	NA	8,760

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? X Yes ___ No	**If yes, is it?** ___ Indirect Fired X Direct Fired
Maximum design heat input and/or maximum horsepower rating: 880 hp	**Type and Btu/hr rating of burners:** 8,800 Btu/hp-hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas
7,592 scf/hr / 67,206,720 scf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Pipeline Quality		1,000 Btu/scf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix A	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
	See Appendix A	
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Appendix A

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

According to 40 CFR 63.6590(b)(3)(i) and 40 CFR 63.6600(c), this existing, non-emergency, SI 2SLB engine > 500 hp located at a major source of HAPs does not have any requirements under 40 CFR Part 63 Subpart ZZZZ because it was constructed prior to December 12, 2002.

Therefore, there are no specific applicable requirements for this emission unit other than those to submit a certified emission statement in accordance with Title V permit condition 3.5.4 and an annual emission inventory according to Title V permit condition 3.1.6.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The emission unit shall track fuel usage and hours of operation in order to quantify annual emissions from this unit.

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
00803	Reciprocating Engine/Integral Compressor	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
2-cycle lean burn.

Manufacturer:	**Model number:**	**Serial number:**
Cooper-Bessemer	GMV-8TF	NA

Construction date:	**Installation date:**	**Modification date(s):**
NA	1951	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 880 hp

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
NA	NA	8,760

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? X Yes ___ No	**If yes, is it?** ___ Indirect Fired X Direct Fired
Maximum design heat input and/or maximum horsepower rating: 880 hp	**Type and Btu/hr rating of burners:** 8,800 Btu/hp-hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas
7,592 scf/hr / 67,206,720 scf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Pipeline Quality		1,020 Btu/scf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix A	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
	See Appendix A	
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Appendix A

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

According to 40 CFR 63.6590(b)(3)(i) and 40 CFR 63.6600(c), this existing, non-emergency, SI 2SLB engine > 500 hp located at a major source of HAPs does not have any requirements under 40 CFR Part 63 Subpart ZZZZ because it was constructed prior to December 12, 2002.

Therefore, there are no specific applicable requirements for this emission unit other than those to submit a certified emission statement in accordance with Title V permit condition 3.5.4 and an annual emission inventory according to Title V permit condition 3.1.6.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The emission unit shall track fuel usage and hours of operation in order to quantify annual emissions from this unit.

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
00804	Reciprocating Engine/Integral Compressor	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
2-cycle lean burn.

Manufacturer:	**Model number:**	**Serial number:**
Cooper-Bessemer	GMV-8TF	NA
Construction date:	**Installation date:**	**Modification date(s):**
NA	1951	

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 880 hp

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
NA	NA	8,760

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? X Yes ___ No	**If yes, is it?** ___ Indirect Fired X Direct Fired
Maximum design heat input and/or maximum horsepower rating: 880 hp	**Type and Btu/hr rating of burners:** 8,800 Btu/hp-hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas
7,592 scf/hr / 67,206,720 scf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Pipeline Quality		1,020 Btu/scf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix A	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
	See Appendix A	
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Appendix A

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

According to 40 CFR 63.6590(b)(3)(i) and 40 CFR 63.6600(c), this existing, non-emergency, SI 2SLB engine > 500 hp located at a major source of HAPs does not have any requirements under 40 CFR Part 63 Subpart ZZZZ because it was constructed prior to December 12, 2002.

Therefore, there are no specific applicable requirements for this emission unit other than those to submit a certified emission statement in accordance with Title V permit condition 3.5.4 and an annual emission inventory according to Title V permit condition 3.1.6.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The emission unit shall track fuel usage and hours of operation in order to quantify annual emissions from this unit.

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
00805	Reciprocating Engine/Integral Compressor	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
2-cycle lean burn.

Manufacturer:	**Model number:**	**Serial number:**
Cooper-Bessemer	GMV-8TF	NA

Construction date:	**Installation date:**	**Modification date(s):**
NA	1951	NA

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 880 hp

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
NA	NA	8,760

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? X Yes ___ No	**If yes, is it?** ___ Indirect Fired X Direct Fired
Maximum design heat input and/or maximum horsepower rating: 880 hp	**Type and Btu/hr rating of burners:** 8,800 Btu/hp-hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas
7,592 scf/hr / 67,206,720 scf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Pipeline Quality		1,020 Btu/scf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix A	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
	See Appendix A	
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Appendix A

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

According to 40 CFR 63.6590(b)(3)(i) and 40 CFR 63.6600(c), this existing, non-emergency, SI 2SLB engine > 500 hp located at a major source of HAPs does not have any requirements under 40 CFR Part 63 Subpart ZZZZ because it was constructed prior to December 12, 2002.

Therefore, there are no specific applicable requirements for this emission unit other than those to submit a certified emission statement in accordance with Title V permit condition 3.5.4 and an annual emission inventory according to Title V permit condition 3.1.6.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The emission unit shall track fuel usage and hours of operation in order to quantify annual emissions from this unit.

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
00806	Reciprocating Engine/Integral Compressor	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
2-cycle lean burn.

Manufacturer:	**Model number:**	**Serial number:**
Cooper-Bessemer	GMVA-8	NA

Construction date:	**Installation date:**	**Modification date(s):**
NA	1960	NA

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 1,100 hp

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
NA	NA	8,760

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? X Yes ___ No	**If yes, is it?** ___ Indirect Fired X Direct Fired
Maximum design heat input and/or maximum horsepower rating: 1,100 hp	**Type and Btu/hr rating of burners:** 8,400 Btu/hp-hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas
9,059 scf/hr / 79,356,840 scf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Pipeline Quality		1,020 Btu/scf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix A	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
	See Appendix A	
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Appendix A

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

According to 40 CFR 63.6590(b)(3)(i) and 40 CFR 63.6600(c), this existing, non-emergency, SI 2SLB engine > 500 hp located at a major source of HAPs does not have any requirements under 40 CFR Part 63 Subpart ZZZZ because it was constructed prior to December 12, 2002.

Therefore, there are no specific applicable requirements for this emission unit other than those to submit a certified emission statement in accordance with Title V permit condition 3.5.4 and an annual emission inventory according to Title V permit condition 3.1.6.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The emission unit shall track fuel usage and hours of operation in order to quantify annual emissions from this unit.

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
00807	Reciprocating Engine/Integral Compressor	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
2-cycle lean burn.

Manufacturer:	**Model number:**	**Serial number:**
Cooper-Bessemer	8W-330	NA

Construction date:	**Installation date:**	**Modification date(s):**
NA	1979	NA

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 4,000 hp

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
NA	NA	8,760

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel?	**If yes, is it?**
X Yes ___ No	___ Indirect Fired X Direct Fired

Maximum design heat input and/or maximum horsepower rating:	**Type and Btu/hr rating of burners:**
4,000 hp	7,800 Btu/hp-hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas
30,588 scf/hr / 267,950,880 scf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Pipeline Quality		1,020 Btu/scf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix A	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
	See Appendix A	
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Appendix A

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

According to 40 CFR 63.6590(b)(3)(i) and 40 CFR 63.6600(c), this existing, non-emergency, SI 2SLB engine > 500 hp located at a major source of HAPs does not have any requirements under 40 CFR Part 63 Subpart ZZZZ because it was constructed prior to December 12, 2002.

Therefore, there are no specific applicable requirements for this emission unit other than those to submit a certified emission statement in accordance with Title V permit condition 3.5.4 and an annual emission inventory according to Title V permit condition 3.1.6.

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

The emission unit shall track fuel usage and hours of operation in order to quantify annual emissions from this unit.

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
008G3	Reciprocating Engine/Generator	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
4-cycle lean burn.

Manufacturer:	**Model number:**	**Serial number:**
Waukesha	VGF-P48GL	NA

Construction date:	**Installation date:**	**Modification date(s):**
NA	2016	NA

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 1175 hp

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
NA	NA	500 hrs/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? X Yes ___ No	**If yes, is it?** ___ Indirect Fired X Direct Fired
Maximum design heat input and/or maximum horsepower rating: 1175 hp	**Type and Btu/hr rating of burners:** 7,733 Btu/hp-hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas
8,908 scf/hr / 4,049,000 scf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Pipeline Quality		1,020 Btu/scf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix A	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
	See Appendix A	
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Appendix A

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 C.F.R. 60 Subpart JJJJ

40 C.F.R. § 60.4233(e), 60.4234, and Table 1 (Line 14) – Operating Requirements

40 C.F.R. § 60.4236(c) – Installation Requirements

40 C.F.R. § 60.4237(a) – Monitoring Requirements

40 C.F.R. § 60. 4243(b), (d), (e) and (g) – Compliance Requirements

40 C.F.R. § 60.4244 – Testing Requirements

40 C.F.R. § 60.4245(a) and (b) – Reporting Requirements

40 C.F.R. 63 Subpart ZZZZ

40 C.F.R. § 63.6590(b)(1)(i) – Limited Requirements

40 C.F.R. § 63.6605 – Operating Requirements

40 C.F.R. § 63.6640(f) – Continuous Compliance Requirements

40 C.F.R. § 63.6645 – Notification Submittal Requirements

45 C.S.R. 13, Permit R13-2087F

Condition 5.1.2 –The authorized emergency Generator/Engine (008G3;G3) shall be the make, model, and size as specified under Emission Units Table 1.0, shall only be fired by pipeline-quality natural gas , and shall not operate in excess of 500 hours per year (during periods of non-emergencies).

Condition 5.1.3 – Emission Limitations; Emissions from the unit shall not exceed the following;

Pollutant	***Maximum Hourly Emissions (lb/hr)***	***Maximum Annual Emissions (ton/yr)***
NO_X	5.18	1.30
CO	3.37	0.84
VOC	0.10	0.03

Condition 6.1.2 – Owner/operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 hp) must comply with the following emission standards [40CFR§60.4233(e)]

- NO_X – 2.0 g/hp-hr or 160 ppmvd @ 15% O_2
- CO – 4.0 g/hp-hr or 540 ppmvd @ 15% O_2
- VOC – 1.0 g/hp-hr or 86 ppmvd @ 15% O_2

Condition 6.1.3 – Owner/operators of stationary SI ICE must operate and maintain station SI ICE that achieve the emission standards as required in Condition 6.1.2 over the entire life of the engine [40CFR§60.4234]

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

40 C.F.R. 60 Subpart JJJJ

40 C.F.R. § 60.4233(e), 60.4234 and Table 1 (Line 14) – Unit shall comply with the emission standards set forth for NOx (2.0 g/hp-hr), CO (4.0 g/hp-hr) and VOC (1.0 g/hp-hr) for the entire life of the engine.

40 C.F.R. § 60.4237(a) – Install a non-resettable meter to monitor hours of operation.

40 C.F.R. § 60.4243(b) – Compliance;

- Permittee shall keep a maintenance plan for unit and a record of all maintenance conducted.
- Permittee shall also operate in a manner consistent with good air pollution control practice to minimize emissions.

- Permittee shall conduct an initial performance test and subsequent testing every 8,760 hours or three (3) years whichever comes first.

40 C.F.R. § 60.4243(d) – Compliance/Operation;
- There is no time limit to operation of unit during emergency situations
- Operation of unit shall be limited to a maximum of 100 hours per calendar year for any combination of maintenance & readiness testing, emergency demand response, periods of voltage or frequency deviations and select non-emergency operations.
- Non-emergency operations shall not exceed 50 hours per calendar year and are to be counted as part of the maximum 100 hours per calendar year operation limitation as described in the previous paragraph

40 C.F.R. § 60.4243(e) – Permittee may operate unit using propane as alternative fuel solely during emergency operations for maximum 100 hours per calendar year.

40 C.F.R. § 60.4243(g) – Permittee shall maintain and operate air to fuel ration controllers appropriately to minimize emissions.

40 C.F.R. § 60.4245(a) and (b) – Permittee shall keep records on maintenance conducted and hours of operation, both for emergency use and non-emergency use.

40 C.F.R. 63 Subpart ZZZZ
40 C.F.R. § 63.6605 – Must comply with all emission, operating, and work practice standards at all times.

40 C.F.R. § 63.6640(f)(1) – There is no time limit to operation of unit during emergency situations.

40 C.F.R. § 63.6640(f)(2) – Operation of unit shall be limited to a maximum of 100 hours per calendar year for any combination of maintenance & readiness testing, emergency demand response, periods of voltage or frequency deviations and select non-emergency operations.

40 C.F.R. § 63.6640(f)(3) – Non emergency operations shall not exceed 50 hours per calendar year and are to be counted as part of the maximum 100 hours per calendar year operation limitation as described in 63.6640(f)(2)

40 C.F.R. § 63.6645(c) – Submit the required initial notification no later than 120 days after becoming subject to the subpart

45 C.S.R. 13, Permit R13-2087F
Condition 5.2.1 – For the purpose of demonstrating compliance with the maximum hours of operation limit set forth in 5.1.2, the permittee shall maintain monthly and rolling twelve month records of the hours of operation of the emergency generator/engine (G3).

Condition 5.4.1 – Permittee shall maintain records of the hours of operation, and the maintenance work performed on the unit.

Condition 6.2.1 – Install a non-resettable meter to monitor hours of operation. [40CFR§60.4237(a)]

Condition 6.3.1 – After July 1, 2009, owner/operators may not install station SI ICE with a maximum engine power of greater than or equal to 500 hp that does not meet the applicable requirements in §60.4233, except that lean burn engines with a maximum engine power greater than or equal to 500 hp and less than 1350 hp that do not meet the applicable requirements in§60.4233 may not be installed after January 1, 2010. [40CFR§60.4236]

Condition 6.3.2 – For emergency stationary SI ICE with a maximum power of greater than 19KW (25 hp), owner/operators may not install engines that do not meet the applicable requirements in§60.4233 after January 1, 2011. [40CFR§60.4236(c)]

Condition 6.4.1 – Owner/operators of station SI ICE that comply with emissions standards specified in §60.4233 must demonstrate compliance by doing the following; [40CFR§60.4243(b)(2)(ii)]
- Permittee shall keep a maintenance plan for unit and a record of all maintenance conducted.
- Permittee shall also operate in a manner consistent with good air pollution control practice to minimize emissions.
- Permittee shall conduct an initial performance test and subsequent testing every 8,760 hours or three (3) years whichever comes first.

Condition 6.4.2 – Owner/operators of emergency stationary ICE must demonstrate compliance by showing operation of unit is conducted within the following parameters; [40CFR§60.4243(d)]
- There is no time limit to operation of unit during emergency situations
- Operation of unit shall be limited to a maximum of 100 hours per calendar year for any combination of maintenance & readiness testing, emergency demand response, periods of voltage or frequency deviations and select non-emergency operations.
- Non-emergency operations shall not exceed 50 hours per calendar year and are to be counted as part of the maximum 100 hours per calendar year operation limitation as described in the previous paragraph

Condition 6.4.3 – Permittee may operate unit using propane as alternative fuel solely during emergency operations for maximum 100 hours per calendar year. [40CFR§60.4243(e)]

Condition 6.5.1 – Owner/operators of stationary SI ICE who conduct performance tests must follow the procedures listed below;

- Each performance test must be conducted within 10 % of 100% peak (or highest achievable) load
- Performance tests may not be conducted during periods of startup, shutdown, or malfunction. If engine is non-operational, you must conduct the performance test immediately upon startup of the engine
- Conduct 3 separate test runs for each performance test. Each test run shall last at least 1 hour
- To determine compliance with the NO_X mass per unit output emission limitation, convert the concentration of NO_X in the engine exhaust using the following equation;

$$ER = \frac{C_d \times 1.912 \times 10^{-3} \times Q \times T}{HP - hr} \qquad (Eq. 1)$$

Where

ER = Emission rate of NO_X in g/HP-hr.

C_d = Measured NO_X concentration in parts per million by volume (ppmv).

1.912×10^{-3} = Conversion constant for ppm NO_X to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, horsepower-hour (HP-hr).

- To determine compliance with the CO mass per unit output emission limitation, convert the concentration of CO in the engine exhaust using the following equation;

$$ER = \frac{C_d \times 1.164 \times 10^{-3} \times Q \times T}{HP - hr} \qquad (Eq. 2)$$

Where

ER = Emission rate of CO in g/HP-hr.

C_d = Measured CO concentration in ppmv.

1.164×10^{-3} = Conversion constant for ppm CO to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

- For purposes of this subpart, when calculating emissions of VOC, emissions of formaldehyde should not be included. To determine compliance with the VOC mass per unit output emission limitation, convert the concentration of VOC in the engine exhaust using the following equation;

$$ER = \frac{C_d \times 1.833 \times 10^{-3} \times Q \times T}{HP - hr} \qquad (Eq. 3)$$

Where:

ER = Emission rate of VOC in g/HP-hr.

C_d = VOC concentration measured as propane in ppmv.

1.833×10^{-3} = Conversion constant for ppm VOC measured as propane, to grams per standard cubic meter at 20 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meters per hour, dry basis.

T = Time of test run, in hours.

HP-hr = Brake work of the engine, in HP-hr.

- If the owner/operator chooses to measure VOC emissions using either Method 18 of 40 CFR part 60, appendix A, or Method 320 of 40 CFR part 63, appendix A, then it has the option of correcting the measured VOC emissions to account for the potential differences in measured values between these methods and Method 25A. The results from Method 18 and Method 320 can be corrected for response factor differences using Equations 4 and 5 of this section. The corrected VOC concentration can then be placed on a propane basis using Equation 6 of this section.

$$RF_i = \frac{C_{Mi}}{C_{Ai}} \qquad \text{(Eq. 4)}$$

Where:

RF_i = Response factor of compound i when measured with EPA Method 25A.

C_{Mi} = Measured concentration of compound i in ppmv as carbon.

C_{Ai} = True concentration of compound i in ppmv as carbon.

$$C_{icorr} = RF_i \times C_{imeas} \qquad \text{(Eq. 5)}$$

Where:

C_{icorr} = Concentration of compound i corrected to the value that would have been measured by EPA Method 25A, ppmv as carbon.

C_{imeas} = Concentration of compound i measured by EPA Method 320, ppmv as carbon.

$$C_{Peq} = 0.6098 \times C_{icorr} \qquad \text{(Eq. 6)}$$

Where:

C_{Peq} = Concentration of compound i in mg of propane equivalent per DSCM.

[40CFR§60.4244]

Condition 6.6.1 – Owner/operator shall keep the following records; [40CFR§60.4245(a)]

- Notifications submitted to comply with the subpart and all documentation supporting any notifircaiton
- Maintenance conducted on the engine
- If the engine is certified, documentation that the engines meets the emission standards
- If the engine in not certified, documentation that the engine is meeting the emissions standards

Condition 6.6.2 – Permittee shall keep records for hours of operation, both for emergency use and non-emergency use. [40CFR§60.4245(b)]

Condition 6.6.3 – Owner/operators of non-certified engines must submit an initial notification that includes the following information; [40CFR§60.4245(c)]

- Name and address of the owner/operator

- Address of affected source
- Engine specific information
- Emission control equipment
- Fuel used

Condition 6.6.4 – Submit performance test results within 60 days of the test completion [40CFR§60.4245(d)]

Condition 6.7.1- Table 3 of 40CFR60, Subpart JJJJ show which parts of the General Provisions in §60.1 through §60.19 apply to the permittee (40CFR§60.4246)

Condition 7.3.1 – Owner/operators of emergency stationary RICE must operate the unit according to the requirements listed below to demonstrate compliance with the subpart; [40CFR§63.6645(f)]

- There is no time limit to operation of unit during emergency situations
- Operation of unit shall be limited to a maximum of 100 hours per calendar year for any combination of maintenance & readiness testing, emergency demand response, periods of voltage or frequency deviations and select non-emergency operations.
- Non-emergency operations shall not exceed 50 hours per calendar year and are to be counted as part of the maximum 100 hours per calendar year operation limitation as described in the previous paragraph

Condition 7.5.1 – Submit the required initial notification [40CFR§63.6645(f)]

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
HTR2	Regeneration Gas Heater	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Regeneration Gas Heater

Manufacturer:	**Model number:**	**Serial number:**
Heatec	HCL-6010-40G(D)	NA
Construction date:	**Installation date:**	**Modification date(s):**
NA	2005	NA

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 9.38 mmBtu/hr

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
NA	NA	8,760

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? X Yes ___ No	**If yes, is it?** ___ Indirect Fired X Direct Fired
Maximum design heat input and/or maximum horsepower rating: 9.38 mmBtu/hr	**Type and Btu/hr rating of burners:** 9.38 mmBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas
9,196 scf/hr / 80,560,000 scf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Pipeline Quality		1,020 Btu/scf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix A	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
	See Appendix A	
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Appendix A

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

45 CSR§2-3.1. – Opacity Limit; shall not exceed ten (10) percent opacity

40 C.F.R. 63 Subpart DDDDD
40 CFR § 63.7500 and Table 3 (Lines 1 & 4) – Operating Requirements

40 CFR § 63.7505 – General Requirements

40 CFR § 63.7510(e), 63.7530(e), and (f) – Initial Compliance Requirements

40 CFR § 63.7515(d) – Subsequent Testing & Tune Up Requirements

40 CFR § 63.7540(a)(12) – Continuous Compliance Requirements

40 CFR § 63.7545(e) – Notification Requirements

40 CFR § 63.7550 – Reporting Requirements

40 CFR § 63.7555 and 63.7560 – Recordkeeping Requirements

45 C.S.R. 13, Permit R13-2087F
Condition 4.1.2 – Emission Limitations; Emissions from the unit shall not exceed the following;

Pollutant	*Hourly Emissions (lb/hr)*	*Annual Emissions (ton/yr)*
NO_X	1.13	4.95
CO	0.35	1.53
VOC	0.05	0.22
SO_X	0.53	0.03
PM_{10}	0.02	0.09

Condition 4.1.7 – The pertinent sections of 45CSR2 applicable to this facility include but are not limited to the following;

- No person shall cause, suffer, allow or permit emissions of smoke and/or particulate matter into open air from any fuel burning unit which is greater than (10) percent opacity based on a six minute block average [§45-2-3.1.]
- No person shall construct, modify or relocate any fuel burning unit without first obtain a permit in accordance with the provisions of W.Va. Code §22-5-1 et seq., and Series 13, 14, 19 and 30 of Title 45 [§45-2-7.1.]

Condition 4.1.8 – The pertinent sections of 45CSR13 applicable to this facility include but are not limited to the following;

- At the time a stationary source is alleged to be in compliance with an applicable emissions standard at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in stack measurement or such other tests the Secretary may specify shall be conducted to determine compliance [§45-13-6.1]
- The Secretary may suspend or revoke a permit, if after six (6) months from the date of issuance, the holder of the permit cannot provide the Secretary, at the Secretary's request, with written proof of a good faith effort that construction, modification, or relocation, if applicable has commenced. Such proof shall be provided no later than thirty (30) days after the Secretary's request. If construction or modification of stationary source is discontinued for a period of eighteen (18) months or longer, the Secretary may suspend or revoke the permit [§45-13-10.2]
- The Secretary may suspend or revoke a permit of general permit registration if the plans and specifications upon which the approval was based or the conditions established in the permit are not adhered to. Upon notice of the Secretary's intent to suspend, modify or revoke a permit, the permit holder may request a conference with the Secretary in accordance with the provisions of W.Va. Code §22-5-1 to show cause why the permit or general permit should not be suspended, modified, or revoked [§45-13-10.3]

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number

or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45 CSR§2-3.2 – Compliance shall be determined using Method 9

40 C.F.R. 63 Subpart DDDDD
40 CFR § 63.7500(a)(1), (e) and Table 3 (Line 1) – Conduct a tune-up of the unit every five (5) years

40 CFR § 63.7500(a)(1) and Table 3 (Line 4) – Conduct a onetime energy assessment of the unit

40 CFR § 63.7505 – Must be in compliance with emission limits, work practice standards, and operating limits at all times

40 CFR § 63.7510(e) – Initial tune-up and onetime energy assessment of unit must be completed by January 31, 2016.

40 CFR § 63.7515(d) and 63.7540(a)(12) – Subsequent tune-ups of the unit must be conducted every five (5) years

40 CFR § 63.7530(e) and (f) – The owner/operator of the unit shall submit the Notification of Compliance Status containing both a signed certification saying the energy assessment was completed according to Table 3 (Line 4) and the results of the initial compliance demonstration

40 CFR § 63.7545(e) – The Notification of Compliance Status report shall be submitted by March 31, 2016 and shall contain information specified by (e)(1) through (e)(8)

40 CFR § 63.7550(b)(5) – Submit the first and subsequent compliance reports according to the dates specified for Title V Semi-Annual Reporting.

40 CFR § 63.7550(c) – Compliance reports must contain information specified in (c)(5)(i) through (c)(5)(iii), (c)(5)(xiv) and (c)(5)(xvii)

40 CFR § 63.7555 – Maintain records of notifications and reports submitted to show compliance

40 CFR § 63.7560 – Maintain records in a form suitable and readily available for expeditious review for five (5) years.

45 C.S.R. 13, Permit R13-2087F
Condition 4.2.1 – Upon request, tests to determine compliance with the emission limitations set forth shall be conducted in accordance with the methods set forth below;

Pollutant	***Test Method***	***Reference***
PM10	5, 5A, 5B, 5C, 5D, 5E, 5F, 5G, or 5H	40 CFR 60, Appendix A
SO2	6, 6A, 6B, or 6C	40 CFR 60, Appendix A
CO	10, 10A, or 10B	40 CFR 60, Appendix A
NOX	7, 7A, 7B, 7C, 7D, or 7E	40 CFR 60, Appendix A
VOC	25, or 25A	40 CFR 60, Appendix A
Opacity	9	40 CFR 60, Appendix A

Condition 4.2.2 – Permittee shall submit to the Secretary a test protocol detailing the proposed test methods, date, and time testing is to take place, testing locations and any other relevant information. Test protocol must be received by the Secretary no less than 30 days prior to the date the testing is to take place. The Secretary shall be notified at least 15 days in advance of the actual dates and times during which the tests will be conducted. The results of emissions testing shall be submitted to the DAQ within 30 days of completion of testing

Condition 4.3.1 – Permittee shall keep records of monitoring information that include the following;

- Date, place as defined in this permit and time of sampling or measurements
- Date analyses were performed
- Company or entity that performed the analyses
- Analytical techniques or methods used
- Results of the analyses; and
- Operating conditions existing at the time of the sampling or measurement

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
HTR5	Indirect Gas Heater	NA

Provide a description of the emission unit (type, method of operation, design parameters, etc.):
Indirect Gas Heater

Manufacturer: OGI Process Equipment, Inc.	**Model number:** TERI 125	**Serial number:** NA
Construction date: NA	**Installation date:** 2016	**Modification date(s):** NA

Design Capacity (examples: furnaces - tons/hr, tanks - gallons): 0.12 mmBtu/hr

Maximum Hourly Throughput: NA	**Maximum Annual Throughput:** NA	**Maximum Operating Schedule:** 8,760

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? X Yes ___ No	**If yes, is it?** X Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: 0.12 mmBtu/hr	**Type and Btu/hr rating of burners:** Horizontal Fire Tube 0.12 mmBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.
Natural Gas
118 scf/hr / 1,030,589 scf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural Gas	Pipeline Quality		1,020 Btu/scf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	See Appendix A	
Nitrogen Oxides (NO_X)		
Lead (Pb)		
Particulate Matter ($PM_{2.5}$)		
Particulate Matter (PM_{10})		
Total Particulate Matter (TSP)		
Sulfur Dioxide (SO_2)		
Volatile Organic Compounds (VOC)		
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
	See Appendix A	
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

See Appendix A

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or construction permit with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

45 CSR§2-3.1. – Opacity Limit; shall not exceed ten (10) percent opacity

40 C.F.R. 63 Subpart DDDDD

40 CFR § 63.7500 and Table 3 (Lines 1 & 4) – Operating Requirements

40 CFR § 63.7505 – General Requirements

40 CFR § 63.7510(e), 63.7530(e), and (f) – Initial Compliance Requirements

40 CFR § 63.7515(d) – Subsequent Testing & Tune Up Requirements

40 CFR § 63.7540(a)(12) – Continuous Compliance Requirements

40 CFR § 63.7545(e) – Notification Requirements

40 CFR § 63.7550 – Reporting Requirements

40 CFR § 63.7555 and 63.7560 – Recordkeeping Requirements

45 C.S.R. 13, Permit R13-2087F

Condition 8.1.1 – Line Heater (H5) shall replace Line Heater (H3). Line Heater (H3) shall be removed from service.

Condition 8.1.2 – Line heater (H5) shall burn only natural gas (fuel subcategory: gas 1).

Condition 8.1.3 - As the annual emission limits given in Table 8.1.4 are based on operating 8,760 hrs/yr at a maximum design heat input of 0.12 mmBtu/hr there is no limit on the annual hours of operation or fuel usage for line heater (H5).

Condition 8.1.4 - The Maximum combustion exhaust emissions from Line Heater (H5) shall not exceed the limits given in the following table:

Pollutant	Hourly (lb/hr)	Annual (lb/yr)
CO	0.01	0.04
NOx	0.01	0.05

Condition 8.1.5 – 45CSR2 – No person shall cause, suffer, allow or permit emissions of smoke and /or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average. **[45CSR§2-3.1]**

Condition 8.1.6 – 40 CFR 63, Subpart DDDD
Boilers and process heaters in the units designated to burn gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 mmBtu/hr must complete a tune up every 5 years as specified in 63.7540. Boilers and process heaters in the units designated to burn gas 1 fuels are not subject to the emission limits in Table 1 or 2 or 11 through 13 to this subpart, or the operating limits in Table 4 to this subpart.

Condition 8.1.7 – Tune-up (a)(10) (i) As applicable, inspect burner and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). **[40CFR§63.7540(a)(10)]**

X Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45 CSR§2-3.2 – Compliance shall be determined using Method 9

40 C.F.R. 63 Subpart DDDDD
40 CFR § 63.7500(a)(1), (e) and Table 3 (Line 1) – Conduct a tune-up of the unit every five (5) years

40 CFR § 63.7505 – Must be in compliance with emission limits, work practice standards, and operating limits at all times

40 CFR § 63.7515(d) and 63.7540(a)(12) – Subsequent tune-ups of the unit must be conducted every five (5) years

40 CFR § 63.7530(e) and (f) – The owner/operator of the unit shall submit the Notification of Compliance Status containing both a signed certification saying the energy assessment was completed according to Table 3 (Line 4) and the results of the initial compliance demonstration

40 CFR § 63.7545(e) – The Notification of Compliance Status report shall be submitted by March 31, 2016 and shall contain information specified by (e)(1) through (e)(8)

40 CFR § 63.7550(b)(5) – Submit the first and subsequent compliance reports according to the dates specified for Title V Semi-Annual Reporting.

40 CFR § 63.7550(c) – Compliance reports must contain information specified in (c)(5)(i) through (c)(5)(iii), (c)(5)(xiv) and (c)(5)(xvii)

40 CFR § 63.7555 – Maintain records of notifications and reports submitted to show compliance

40 CFR § 63.7560 – Maintain records in a form suitable and readily available for expeditious review for five (5) years.

45 C.S.R. 13, Permit R13-2087F
Condition 8.3.1 – If you are required to meet an applicable tune-up work practice standard, you must conduct a 5-yearperformancetune-up according to §63.7540(a)(12), respectively. Each 5-year tune-up specified in §63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed affected source (as defined in §63.7490), the 5-year tune-up must be no later than 61 months after April1, 2013 or the initial startup of the new or reconstructed affected source, whichever is later. **[45CSR34; 40 CFR§63.7515(d)]**

Condition 8.4.1 – The permittee must keep a copy of each notification and report submitted to comply with 40 C.F.R. 63, Supart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 40CFR63.10(b)(2)(xiv).
[45CSR34; 40CFR§63.7555(a)(1)]

Condition 8.4.2 - The permittee shall main records as follows:
a. Records must be in a form suitable and readily available for expeditious review, according to 40CFR63.10(b)(1).
b. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
c. The permittee must keep each record on site, or they must be accessible from on site (for example, through a computer network), for a least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40CFR63.10(b)(1). The permittee may keep the records off site for the remaining 3 years.
[45CSR34; 40 CFR§63.7560]

Condition 8.5.1 - As specified in §63.9(b)(4) and (5), ifyou startup your new or reconstructed affected source on or after January 31, 2013, you must submit an Initial Notification no later than 15 days after the actual date of startup of the affected source.
[40 CFR§63.7545(c)]

Condition 8.5.2 - If you are not required to conduct an initial compliance demonstration as specified in §63.7530(a), the Notification of Compliance Status must only contain the information specified in paragraphs (e)(l) and (8) of this section and must be submitted within 60 days of the compliance date specified at §63.7495(b).
(e) (1) A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with this subpart, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by you or the EPA through a petition process to be a non-waste under §241.3 of this chapter, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of §241.3 of this chapter, and justification for the selection of fuel(s) burned during the compliance demonstration.
(e) (8) In addition to the information required in §63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
(i) "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR part 63 subpart DDDDD at this site according to the procedures in §63.7540(a)(10)(i) through (vi)."
(ii) "This facility has had an energy assessment performed according to §63.7530(e)."
(iii) Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that quality for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: "No secondary materials that are solid waste were combusted in any affected unit."
[40 CFR§§63.7545(e)(l) & (8)]

Condition 8.5.3 - (b) For units that are subject only to a requirement to conduct subsequent 5-year tune-up according to §63.7540(a)(12) and not subject to emission limits or Table 4 operating limits, you may submit only a 5-year compliance report as specified in paragraphs (b)(1) through (4) of this section, instead of a semi-annual compliance report.

(5) For each affected source that is subject to permitting regulations pursuant to part 70 or part 71 of this chapter, and if the permitting authority has established dates for submitting semiannual reports pursuant to 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established in the permit instead of according to the dates in paragraphs (b)(1) through (4) of this section.
[40 CFR§63.7550(b)(5)]

Condition 8.5.4 - A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule.
(1) If the facility is subject to the requirements of a tune up you must submit a compliance report with the information in paragraphs(c)(5)(i) through (iii), (xiv) and (xvii) of this section as follows:

(5) (i) Company and Facility name and address.

(ii) Process unit information, emissions limitations, and operating parameter limitations.

(iii) Date of report and beginning and ending dates of the reporting period.

(xiv) Include the date of the most recent tune-up. Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.

(xviii) For each instance of startup or shutdown include the information required to be monitored, collected or recorded according to the requirements of §63.7555(d).
[40 CFR§63.7550 (c)]

Are you in compliance with all applicable requirements for this emission unit? X Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT F

SCHEDULE OF COMPLIANCE FORM (NOT APPLICABLE)

Title V Operating Permit Renewal Application

Coco Compressor Station, Facility ID No. 039-00049
Elkview, West Virginia

Columbia Gas Transmission, LLC
1700 MacCorkle Avenue, SE
Charleston, West Virginia

January 2017

ATTACHMENT G

AIR POLLUTION CONTROL DEVICE FORM (NOT APPLICABLE)

Title V Operating Permit Renewal Application

Coco Compressor Station, Facility ID No. 039-00049
Elkview, West Virginia

Columbia Gas Transmission, LLC
1700 MacCorkle Avenue, SE
Charleston, West Virginia

January 2017

ATTACHMENT H

COMPLIANCE ASSURANCE MONITORING FORM (NOT APPLICABLE)

Title V Operating Permit Renewal Application

Coco Compressor Station, Facility ID No. 039-00049
Elkview, West Virginia

Columbia Gas Transmission, LLC
1700 MacCorkle Avenue, SE
Charleston, West Virginia

January 2017

APPENDIX A

SUPPORTING CALCULATIONS

Title V Operating Permit Renewal Application

Coco Compressor Station, Facility ID No. 039-00049
Elkview, West Virginia

Columbia Gas Transmission, LLC
1700 MacCorkle Avenue, SE
Charleston, West Virginia

January 2017

Table 1. Annual Potential To Emit (PTE) Summary
Columbia Pipeline Group - Coco Compressor Station

Criteria Pollutants

Proposed PTE - Criteria Pollutants

Source	PM	PM10	PM2.5	SO2	NOx	CO	VOC	CO2e
Engines (ton/yr)	16.773	16.773	16.773	0.244	918.594	67.957	41.632	40835.564
Heaters/Boilers/Reboilers (ton/yr)	0.447	0.447	0.447	0.042	6.785	3.078	0.324	7021.296
Storage Tanks (ton/yr)	-	-	-	-	-	-	1.901	-
Fugitives (ton/yr)	-	-	-	-	-	-	1.010	23.476
Total Emissions (ton/yr)	17.220	17.220	17.220	0.286	925.379	71.035	44.867	47880.336
Total Emissions (lb/hr)	3.931	3.931	3.931	0.065	211.274	16.218	10.244	10931.584

Hazardous Air Pollutants (HAPs)

Proposed PTE - HAPs

Source	Acetaldehyde	Benzene	Toluene	Ethylbenzene	Xylene	n-Hexane	Formaldehyde	Total HAPs
Engines (ton/yr)	2.7095	0.6736	0.3348	0.0375	0.0933	0.1568	19.259	27.735
Heaters/Boilers/Reboilers (ton/yr)	-	0.0001	0.0002	-	-	0.1059	0.004	0.111
Storage Tanks (ton/yr)	-	-	-	-	-	-	-	0.000
Fugitives (ton/yr)	-	-	-	-	-	-	-	0.000
Total Emissions (ton/yr)	2.710	0.674	0.335	0.038	0.093	0.263	19.263	27.846
Total Emissions (lb/hr)	0.619	0.154	0.076	0.009	0.021	0.060	4.398	6.358

Table 2. Reciprocating Engine / Integral Compressor Emissions (E01 - E05)
Cooper-Bessemer GMV-8TF; 2SLB
Columbia Pipeline Group - Coco Compressor Station

Pollutant	Maximum Hourly Emissions					Annual Emissions				
	Emission Factor			PTE per Engine (lb/hr)		Emission Factor			PTE per Engine (tons/yr)	
Criteria Pollutants										
PM/PM10/PM2.5	4.83E-02	lb/MMBtu	(1)	0.37	(a)	4.83E-02	lb/MMBtu	(1)	1.64	(c)
SO_2	0.25 grains S / 100 ft^3		(2)	0.01	(e)	0.25 grains S / 100 ft^3		(2)	0.02	(f)
NOx	3.00E-02	lb/hp-hr	(3)	26.40	(b)	3.00E-02	lb/hp-hr	(3)	115.63	(d)
CO	2.03E-03	lb/hp-hr	(3)	1.79	(b)	2.03E-03	lb/hp-hr	(3)	7.82	(d)
VOC	1.20E-01	lb/MMBtu	(1)	0.93	(a)	1.20E-01	lb/MMBtu	(1)	4.07	(c)
Hazardous Air Pollutants										
1,1,2,2-Tetrachloroethane	6.63E-05	lb/MMBtu	(1)	0.001	(a)	6.63E-05	lb/MMBtu	(1)	0.002	(c)
1,1,2-Trichloroethane	5.27E-05	lb/MMBtu	(1)	0.000	(a)	5.27E-05	lb/MMBtu	(1)	0.002	(c)
1,3-Butadiene	8.20E-04	lb/MMBtu	(1)	0.006	(a)	8.20E-04	lb/MMBtu	(1)	0.028	(c)
1,3-Dichloropropene	4.38E-05	lb/MMBtu	(1)	0.000	(a)	4.38E-05	lb/MMBtu	(1)	0.001	(c)
2-Methylnapthalene	2.14E-05	lb/MMBtu	(1)	0.000	(a)	2.14E-05	lb/MMBtu	(1)	0.001	(c)
2,2,4-Trimethylpentane	8.46E-04	lb/MMBtu	(1)	0.007	(a)	8.46E-04	lb/MMBtu	(1)	0.029	(c)
Acetaldehyde	7.76E-03	lb/MMBtu	(1)	0.060	(a)	7.76E-03	lb/MMBtu	(1)	0.263	(c)
Acrolein	7.78E-03	lb/MMBtu	(1)	0.060	(a)	7.78E-03	lb/MMBtu	(1)	0.264	(c)
Benzene	1.94E-03	lb/MMBtu	(1)	0.015	(a)	1.94E-03	lb/MMBtu	(1)	0.066	(c)
Biphenyl	3.95E-06	lb/MMBtu	(1)	0.000	(a)	3.95E-06	lb/MMBtu	(1)	0.000	(c)
Carbon Tetrachloride	6.07E-05	lb/MMBtu	(1)	0.000	(a)	6.07E-05	lb/MMBtu	(1)	0.002	(c)
Chlorobenzene	4.44E-05	lb/MMBtu	(1)	0.000	(a)	4.44E-05	lb/MMBtu	(1)	0.002	(c)
Chloroform	4.71E-05	lb/MMBtu	(1)	0.000	(a)	4.71E-05	lb/MMBtu	(1)	0.002	(c)
Ethylbenzene	1.08E-04	lb/MMBtu	(1)	0.001	(a)	1.08E-04	lb/MMBtu	(1)	0.004	(c)
Ethylene Dibromide	7.34E-05	lb/MMBtu	(1)	0.001	(a)	7.34E-05	lb/MMBtu	(1)	0.002	(c)
Formaldehyde	5.52E-02	lb/MMBtu	(1)	0.427	(a)	5.52E-02	lb/MMBtu	(1)	1.872	(c)
Methanol	2.48E-03	lb/MMBtu	(1)	0.019	(a)	2.48E-03	lb/MMBtu	(1)	0.084	(c)
Methylene Chloride	1.47E-04	lb/MMBtu	(1)	0.001	(a)	1.47E-04	lb/MMBtu	(1)	0.005	(c)
n-Hexane	4.45E-04	lb/MMBtu	(1)	0.003	(a)	4.45E-04	lb/MMBtu	(1)	0.015	(c)
Naphthalene	9.63E-05	lb/MMBtu	(1)	0.001	(a)	9.63E-05	lb/MMBtu	(1)	0.003	(c)
PAH (POM)	1.34E-04	lb/MMBtu	(1)	0.001	(a)	1.34E-04	lb/MMBtu	(1)	0.005	(c)
Phenol	4.21E-05	lb/MMBtu	(1)	0.000	(a)	4.21E-05	lb/MMBtu	(1)	0.001	(c)
Styrene	5.48E-05	lb/MMBtu	(1)	0.000	(a)	5.48E-05	lb/MMBtu	(1)	0.002	(c)
Toluene	9.63E-04	lb/MMBtu	(1)	0.007	(a)	9.63E-04	lb/MMBtu	(1)	0.033	(c)
Vinyl Chloride	2.47E-05	lb/MMBtu	(1)	0.000	(a)	2.47E-05	lb/MMBtu	(1)	0.001	(c)
Xylenes	2.68E-04	lb/MMBtu	(1)	0.002	(a)	2.68E-04	lb/MMBtu	(1)	0.009	(c)
Total HAP				**0.616**					**2.697**	
Greenhouse Gas Emissions										
CO_2	116.89	lb/MMBtu	(4)	905.19	(a)	116.89	lb/MMBtu	(4)	3964.73	(c)
CH_4	2.2E-03	lb/MMBtu	(4)	0.02	(a)	2.2E-03	lb/MMBtu	(4)	0.07	(c)
N_2O	2.2E-04	lb/MMBtu	(4)	0.00	(a)	2.2E-04	lb/MMBtu	(4)	0.01	(c)
$CO_2e^{(g)}$	-	-		906.12					3968.83	

Calculations:

Maximum Hourly Emissions - If emission factor note 1 or 4 is used, use calculation (a). If emission factor note 3 is used, use calculation (b).

(a) Maximum Hourly Emissions (lb/hr) = Emission factor (lb/MMBtu) * (1MMBtu/1000000 Btu) * Engine Power Output (hp) * Average BSFC (Btu/hp-hr)

(b) Maximum Hourly Emissions (lb/hr) = Emission factor (lb/hp-hr) * Engine Power Output (hp)

Annual Emissions - If emission factor note 1 or 4 is used, use calculation (c). If emission factor note 3 is used, use calculation (d).

(c) Annual emissions (tons/yr) = Emission factor (lb/MMBtu) * (1MMBtu/1000000Btu) * Engine Power Output (hp) * Average BSFC (Btu/hp-hr) * Annual Hours of operation (hr/yr) * (1ton/2000lbs)

(d) Annual emissions (tons/yr) = Emission factor (lb/hp-hr) * Engine Power Output (hp) * Annual Hours of operation (hr/yr) * (1ton/2000lbs)

SO_2 Emissions - If emission factor note 2 is used, use calculations (e) and (f) for hourly and annual emissions, respectively.

(e) Maximum Hourly Emissions SO2 Caclulation (lb/hr) = (0.25 grain S/100ft3) * Fuel throughput (ft3/hr) * (1lb/7000 grains) * (lbmol S/32.06 lb S) * (lbmol SO2/ lbmol S) *(64.07 lb SO2/lbmol SO2)

(f) Annual Emissions SO2 Caclulation (ton/yr) = (0.25 grain S/100ft3) * Fuel throughput (ft3/hr) * (1lb/7000 grains) * (lbmol S/32.06 lb S) * (lbmol SO2/ lbmol S) *(64.07 lb SO2/lbmol SO2) * Annual hours of operation (hr/yr) * (1ton/2000lbs)

MAXIMUM HOURLY EMISSION INPUTS		
Engine Power Output (kW) =	656	
Engine Power Output (hp) =	880	
Number of Engines =	5	
Average BSFC (BTU/HP-hr) =	8,800	(5)
Heat Content Natural Gas(Btu/scf) =	1,020.0	(6)
Fuel Throughput (ft3/hr) =	7,592.2	(7)
PTE Hours of Operation =	1	

ANNUAL EMISSION INPUTS		
Engine Power Output (kW) =	656	
Engine Power Output (hp) =	880	
Number of Engines =	5	
Average BSFC (BTU/HP-hr) =	8,800	(5)
Heat Content Natural Gas(Btu/scf) =	1,020.0	(6)
Fuel Throughput (ft3/hr) =	7,592.2	(7)
PTE Hours of Operation =	8,760	

(g) CO_2 equivalent = [(CO_2 emissions)*(GWP_{CO2})]+[(CH_4 emissions)*(GWP_{CH4})]+[(N_2O emissions)*(GWP_{N2O})]
Global Warming Potential (GWP)

CO_2	1	(8)
CH_4	25	(8)
N_2O	298	(8)

Notes:

(1) AP-42, Chapter 3.2, Table 3.2-1. *Natural Gas-fired Reciprocating Engines* (7/00). Uncontrolled Emission Factors for 2-Stroke Lean-Burn Engines.

(2) AP-42, Chapter 5.3, Section 5.3.1

(3) Emission Factors derived from Stack Test Data

(4) Emission factors are from 40 CFR 98, Subpart C, Table C-1 and C-2.

(5) Fuel consumption from manufacturer's specification sheet.

(6) Value obtained from AP-42, Chapter 3.2, Table 3.2-1, footnote b

(7) Fuel throughput = BSFC (BTU/HP-hr) x Power (HP) / Heat Content (BTU/scf)

(8) Global Warming Potentials obtained from 40 CFR 98, Subpart A, Table A-1

Table 3. Reciprocating Engine / Integral Compressor Emissions (E06)
Cooper-Bessemer GMVA-8; 2SLB
Columbia Pipeline Group - Coco Compressor Station

Pollutant	Maximum Hourly Emissions					Annual Emissions				
	Emission Factor			PTE per Engine (lb/hr)		Emission Factor			PTE per Engine (tons/yr)	
Criteria Pollutants										
PM/PM10/PM2.5	4.83E-02	lb/MMBtu	(1)	0.45	(a)	4.83E-02	lb/MMBtu	(1)	1.96	(c)
SO_2	0.25 grains S / 100 ft^3		(2)	0.01	(e)	0.25 grains S / 100 ft^3		(2)	0.03	(f)
NOx	6.39E-03	lb/hp-hr	(3)	7.03	(b)	6.39E-03	lb/hp-hr	(3)	30.79	(d)
CO	1.01E-03	lb/hp-hr	(3)	1.11	(b)	1.01E-03	lb/hp-hr	(3)	4.87	(d)
VOC	1.20E-01	lb/MMBtu	(1)	1.11	(a)	1.20E-01	lb/MMBtu	(1)	4.86	(c)
Hazardous Air Pollutants										
1,1,2,2-Tetrachloroethane	6.63E-05	lb/MMBtu	(1)	0.001	(a)	6.63E-05	lb/MMBtu	(1)	0.003	(c)
1,1,2-Trichloroethane	5.27E-05	lb/MMBtu	(1)	0.000	(a)	5.27E-05	lb/MMBtu	(1)	0.002	(c)
1,3-Butadiene	8.20E-04	lb/MMBtu	(1)	0.008	(a)	8.20E-04	lb/MMBtu	(1)	0.033	(c)
1,3-Dichloropropene	4.38E-05	lb/MMBtu	(1)	0.000	(a)	4.38E-05	lb/MMBtu	(1)	0.002	(c)
2-Methylnapthalene	2.14E-05	lb/MMBtu	(1)	0.000	(a)	2.14E-05	lb/MMBtu	(1)	0.001	(c)
2,2,4-Trimethylpentane	8.46E-04	lb/MMBtu	(1)	0.008	(a)	8.46E-04	lb/MMBtu	(1)	0.034	(c)
Acetaldehyde	7.76E-03	lb/MMBtu	(1)	0.072	(a)	7.76E-03	lb/MMBtu	(1)	0.314	(c)
Acrolein	7.78E-03	lb/MMBtu	(1)	0.072	(a)	7.78E-03	lb/MMBtu	(1)	0.315	(c)
Benzene	1.94E-03	lb/MMBtu	(1)	0.018	(a)	1.94E-03	lb/MMBtu	(1)	0.079	(c)
Biphenyl	3.95E-06	lb/MMBtu	(1)	0.000	(a)	3.95E-06	lb/MMBtu	(1)	0.000	(c)
Carbon Tetrachloride	6.07E-05	lb/MMBtu	(1)	0.001	(a)	6.07E-05	lb/MMBtu	(1)	0.002	(c)
Chlorobenzene	4.44E-05	lb/MMBtu	(1)	0.000	(a)	4.44E-05	lb/MMBtu	(1)	0.002	(c)
Chloroform	4.71E-05	lb/MMBtu	(1)	0.000	(a)	4.71E-05	lb/MMBtu	(1)	0.002	(c)
Ethylbenzene	1.08E-04	lb/MMBtu	(1)	0.001	(a)	1.08E-04	lb/MMBtu	(1)	0.004	(c)
Ethylene Dibromide	7.34E-05	lb/MMBtu	(1)	0.001	(a)	7.34E-05	lb/MMBtu	(1)	0.003	(c)
Formaldehyde	5.52E-02	lb/MMBtu	(1)	0.510	(a)	5.52E-02	lb/MMBtu	(1)	2.234	(c)
Methanol	2.48E-03	lb/MMBtu	(1)	0.023	(a)	2.48E-03	lb/MMBtu	(1)	0.100	(c)
Methylene Chloride	1.47E-04	lb/MMBtu	(1)	0.001	(a)	1.47E-04	lb/MMBtu	(1)	0.006	(c)
n-Hexane	4.45E-04	lb/MMBtu	(1)	0.004	(a)	4.45E-04	lb/MMBtu	(1)	0.018	(c)
Naphthalene	9.63E-05	lb/MMBtu	(1)	0.001	(a)	9.63E-05	lb/MMBtu	(1)	0.004	(c)
PAH (POM)	1.34E-04	lb/MMBtu	(1)	0.001	(a)	1.34E-04	lb/MMBtu	(1)	0.005	(c)
Phenol	4.21E-05	lb/MMBtu	(1)	0.000	(a)	4.21E-05	lb/MMBtu	(1)	0.002	(c)
Styrene	5.48E-05	lb/MMBtu	(1)	0.001	(a)	5.48E-05	lb/MMBtu	(1)	0.002	(c)
Toluene	9.63E-04	lb/MMBtu	(1)	0.009	(a)	9.63E-04	lb/MMBtu	(1)	0.039	(c)
Vinyl Chloride	2.47E-05	lb/MMBtu	(1)	0.000	(a)	2.47E-05	lb/MMBtu	(1)	0.001	(c)
Xylenes	2.68E-04	lb/MMBtu	(1)	0.002	(a)	2.68E-04	lb/MMBtu	(1)	0.011	(c)
Total HAP				**0.735**					**3.218**	
Greenhouse Gas Emissions										
CO_2	116.89	lb/MMBtu	(4)	1080.06	(a)	116.89	lb/MMBtu	(4)	4730.64	(c)
CH_4	2.2E-03	lb/MMBtu	(4)	0.02	(a)	2.2E-03	lb/MMBtu	(4)	0.09	(c)
N_2O	2.2E-04	lb/MMBtu	(4)	0.00	(a)	2.2E-04	lb/MMBtu	(4)	0.01	(c)
CO_2e[(g)]	-	-		1081.17					4735.53	

Calculations:

Maximum Hourly Emissions - If emission factor note 1 or 4 is used, use calculation (a). If emission factor note 3 is used, use calculation (b).

(a) Maximum Hourly Emissions (lb/hr) = Emission factor (lb/MMBtu) * (1MMBtu/1000000 Btu) * Engine Power Output (hp) * Average BSFC (Btu/hp-hr)

(b) Maximum Hourly Emissions (lb/hr) = Emission factor (lb/hp-hr) * Engine Power Output (hp)

Annual Emissions - If emission factor note 1 or 4 is used, use calculation (c). If emission factor note 3 is used, use calculation (d).

(c) Annual emissions (tons/yr) = Emission factor (lb/MMBtu) * (1MMBtu/1000000Btu) * Engine Power Output (hp) * Average BSFC (Btu/hp-hr) * Annual Hours of operation (hr/yr) * (1ton/2000lbs)

(d) Annual emissions (tons/yr) = Emission factor (lb/hp-hr) * Engine Power Output (hp) * Annual Hours of operation (hr/yr) * (1ton/2000lbs)

SO_2 Emissions - If emission factor note 2 is used, use calculations (e) and (f) for hourly and annual emissions, respectively.

(e) Maximum Hourly Emissions SO2 Caclulation (lb/hr) = (0.25 grain S/100ft3) * Fuel throughput (ft3/hr) * (1lb/7000 grains) * (lbmol S/32.06 lb S) * (lbmol SO2/ lbmol S) *(64.07 lb SO2/lbmol SO2)

(f) Annual Emissions SO2 Caclulation (ton/yr) = (0.25 grain S/100ft3) * Fuel throughput (ft3/hr) * (1lb/7000 grains) * (lbmol S/32.06 lb S) * (lbmol SO2/ lbmol S) *(64.07 lb SO2/lbmol SO2) * Annual hours of operation (hr/yr) * (1ton/2000lbs)

MAXIMUM HOURLY EMISSION INPUTS		
Engine Power Output (kW) =	820	
Engine Power Output (hp) =	1,100	
Number of Engines =	1	
Average BSFC (BTU/HP-hr) =	8,400	(5)
Heat Content Natural Gas(Btu/scf) =	1,020.0	(6)
Fuel Throughput (ft3/hr) =	9,058.8	(7)
PTE Hours of Operation =	1	

ANNUAL EMISSION INPUTS		
Engine Power Output (kW) =	820	
Engine Power Output (hp) =	1,100	
Number of Engines =	1	
Average BSFC (BTU/HP-hr) =	8,400	(5)
Heat Content Natural Gas(Btu/scf) =	1,020.0	(6)
Fuel Throughput (ft3/hr) =	9,058.8	(7)
PTE Hours of Operation =	8,760	

(g) CO_2 equivalent = [(CO_2 emissions)*(GWP_{CO2})]+[(CH_4 emissions)*(GWP_{CH4})]+[(N_2O emissions)*(GWP_{N2O})]
Global Warming Potential (GWP)

CO_2	1	(8)
CH_4	25	(8)
N_2O	298	(8)

Notes:

(1) AP-42, Chapter 3.2, Table 3.2-1. *Natural Gas-fired Reciprocating Engines* (7/00). Uncontrolled Emission Factors for 2-Stroke Lean-Burn Engines.

(2) AP-42, Chapter 5.3, Section 5.3.1

(3) Emission Factors derived from Stack Test Data

(4) Emission factors are from 40 CFR 98, Subpart C, Table C-1 and C-2.

(5) Fuel consumption from manufacturer's specification sheet.

(6) Value obtained from AP-42, Chapter 3.2, Table 3.2-1, footnote b

(7) Fuel throughput = BSFC (BTU/HP-hr) x Power (HP) / Heat Content (BTU/scf)

(8) Global Warming Potentials obtained from 40 CFR 98, Subpart A, Table A-1

Table 4. Reciprocating Engine / Integral Compressor Emissions (E07)
Cooper-Bessemer 8W-330; 2SLB
Columbia Pipeline Group - Coco Compressor Station

Pollutant	Maximum Hourly Emissions					Annual Emissions				
	Emission Factor			PTE per Engine (lb/hr)		Emission Factor			PTE per Engine (tons/yr)	
Criteria Pollutants										
PM/PM10/PM2.5	4.83E-02	lb/MMBtu	(1)	1.51	(a)	4.83E-02	lb/MMBtu	(1)	6.60	(c)
SO_2	0.25 grains S / 100 ft^3		(2)	0.02	(e)	0.25 grains S / 100 ft^3		(2)	0.10	(f)
NOx	1.76E-02	lb/hp-hr	(3)	70.40	(b)	1.76E-02	lb/hp-hr	(3)	308.35	(d)
CO	1.32E-03	lb/hp-hr	(3)	5.28	(b)	1.32E-03	lb/hp-hr	(3)	23.13	(d)
VOC	1.20E-01	lb/MMBtu	(1)	3.74	(a)	1.20E-01	lb/MMBtu	(1)	16.40	(c)
Hazardous Air Pollutants										
1,1,2,2-Tetrachloroethane	6.63E-05	lb/MMBtu	(1)	0.002	(a)	6.63E-05	lb/MMBtu	(1)	0.009	(c)
1,1,2-Trichloroethane	5.27E-05	lb/MMBtu	(1)	0.002	(a)	5.27E-05	lb/MMBtu	(1)	0.007	(c)
1,3-Butadiene	8.20E-04	lb/MMBtu	(1)	0.026	(a)	8.20E-04	lb/MMBtu	(1)	0.112	(c)
1,3-Dichloropropene	4.38E-05	lb/MMBtu	(1)	0.001	(a)	4.38E-05	lb/MMBtu	(1)	0.006	(c)
2-Methylnapthalene	2.14E-05	lb/MMBtu	(1)	0.001	(a)	2.14E-05	lb/MMBtu	(1)	0.003	(c)
2,2,4-Trimethylpentane	8.46E-04	lb/MMBtu	(1)	0.026	(a)	8.46E-04	lb/MMBtu	(1)	0.116	(c)
Acetaldehyde	7.76E-03	lb/MMBtu	(1)	0.242	(a)	7.76E-03	lb/MMBtu	(1)	1.060	(c)
Acrolein	7.78E-03	lb/MMBtu	(1)	0.243	(a)	7.78E-03	lb/MMBtu	(1)	1.063	(c)
Benzene	1.94E-03	lb/MMBtu	(1)	0.061	(a)	1.94E-03	lb/MMBtu	(1)	0.265	(c)
Biphenyl	3.95E-06	lb/MMBtu	(1)	0.000	(a)	3.95E-06	lb/MMBtu	(1)	0.001	(c)
Carbon Tetrachloride	6.07E-05	lb/MMBtu	(1)	0.002	(a)	6.07E-05	lb/MMBtu	(1)	0.008	(c)
Chlorobenzene	4.44E-05	lb/MMBtu	(1)	0.001	(a)	4.44E-05	lb/MMBtu	(1)	0.006	(c)
Chloroform	4.71E-05	lb/MMBtu	(1)	0.001	(a)	4.71E-05	lb/MMBtu	(1)	0.006	(c)
Ethylbenzene	1.08E-04	lb/MMBtu	(1)	0.003	(a)	1.08E-04	lb/MMBtu	(1)	0.015	(c)
Ethylene Dibromide	7.34E-05	lb/MMBtu	(1)	0.002	(a)	7.34E-05	lb/MMBtu	(1)	0.010	(c)
Formaldehyde	5.52E-02	lb/MMBtu	(1)	1.722	(a)	5.52E-02	lb/MMBtu	(1)	7.543	(c)
Methanol	2.48E-03	lb/MMBtu	(1)	0.077	(a)	2.48E-03	lb/MMBtu	(1)	0.339	(c)
Methylene Chloride	1.47E-04	lb/MMBtu	(1)	0.005	(a)	1.47E-04	lb/MMBtu	(1)	0.020	(c)
n-Hexane	4.45E-04	lb/MMBtu	(1)	0.014	(a)	4.45E-04	lb/MMBtu	(1)	0.061	(c)
Naphthalene	9.63E-05	lb/MMBtu	(1)	0.003	(a)	9.63E-05	lb/MMBtu	(1)	0.013	(c)
PAH (POM)	1.34E-04	lb/MMBtu	(1)	0.004	(a)	1.34E-04	lb/MMBtu	(1)	0.018	(c)
Phenol	4.21E-05	lb/MMBtu	(1)	0.001	(a)	4.21E-05	lb/MMBtu	(1)	0.006	(c)
Styrene	5.48E-05	lb/MMBtu	(1)	0.002	(a)	5.48E-05	lb/MMBtu	(1)	0.007	(c)
Toluene	9.63E-04	lb/MMBtu	(1)	0.030	(a)	9.63E-04	lb/MMBtu	(1)	0.132	(c)
Vinyl Chloride	2.47E-05	lb/MMBtu	(1)	0.001	(a)	2.47E-05	lb/MMBtu	(1)	0.003	(c)
Xylenes	2.68E-04	lb/MMBtu	(1)	0.008	(a)	2.68E-04	lb/MMBtu	(1)	0.037	(c)
Total HAP				**2.481**					**10.867**	
Greenhouse Gas Emissions										
CO_2	116.89	lb/MMBtu	(4)	3646.94	(a)	116.89	lb/MMBtu	(4)	15973.60	(c)
CH_4	2.2E-03	lb/MMBtu	(4)	0.07	(a)	2.2E-03	lb/MMBtu	(4)	0.30	(c)
N_2O	2.2E-04	lb/MMBtu	(4)	0.01	(a)	2.2E-04	lb/MMBtu	(4)	0.03	(c)
CO_2e[(g)]	-	-		3650.71					15990.11	

Calculations:

Maximum Hourly Emissions - If emission factor note 1 or 4 is used, use calculation (a). If emission factor note 3 is used, use calculation (b).

(a) Maximum Hourly Emissions (lb/hr) = Emission factor (lb/MMBtu) * (1MMBtu/1000000 Btu) * Engine Power Output (hp) * Average BSFC (Btu/hp-hr)

(b) Maximum Hourly Emissions (lb/hr) = Emission factor (lb/hp-hr) * Engine Power Output (hp)

Annual Emissions - If emission factor note 1 or 4 is used, use calculation (c). If emission factor note 3 is used, use calculation (d).

(c) Annual emissions (tons/yr) = Emission factor (lb/MMBtu) * (1MMBtu/1000000Btu) * Engine Power Output (hp) * Average BSFC (Btu/hp-hr) * Annual Hours of operation (hr/yr) * (1ton/2000lbs)

(d) Annual emissions (tons/yr) = Emission factor (lb/hp-hr) * Engine Power Output (hp) * Annual Hours of operation (hr/yr) * (1ton/2000lbs)

SO_2 Emissions - If emission factor note 2 is used, use calculations (e) and (f) for hourly and annual emissions, respectively.

(e) Maximum Hourly Emissions SO2 Caclulation (lb/hr) = (0.25 grain S/100ft3) * Fuel throughput (ft3/hr) * (1lb/7000 grains) * (lbmol S/32.06 lb S) * (lbmol SO2/ lbmol S) *(64.07 lb SO2/lbmol SO2)

(f) Annual Emissions SO2 Caclulation (ton/yr) = (0.25 grain S/100ft3) * Fuel throughput (ft3/hr) * (1lb/7000 grains) * (lbmol S/32.06 lb S) * (lbmol SO2/ lbmol S) *(64.07 lb SO2/lbmol SO2) * Annual hours of operation (hr/yr) * (1ton/2000lbs)

MAXIMUM HOURLY EMISSION INPUTS		
Engine Power Output (kW) =	2983	
Engine Power Output (hp) =	4,000	
Number of Engines =	1	
Average BSFC (BTU/HP-hr) =	7,800	(5)
Heat Content Natural Gas(Btu/scf) =	1,020.0	(6)
Fuel Throughput (ft3/hr) =	30,588.2	(7)
PTE Hours of Operation =	1	

ANNUAL EMISSION INPUTS		
Engine Power Output (kW) =	2983	
Engine Power Output (hp) =	4,000	
Number of Engines =	1	
Average BSFC (BTU/HP-hr) =	7,800	(5)
Heat Content Natural Gas(Btu/scf) =	1,020.0	(6)
Fuel Throughput (ft3/hr) =	30,588.2	(7)
PTE Hours of Operation =	8,760	

(g) CO_2 equivalent = [(CO_2 emissions)*(GWP_{CO2})]+[(CH_4 emissions)*(GWP_{CH4})]+[(N_2O emissions)*(GWP_{N2O})]
Global Warming Potential (GWP)

CO_2	1	(8)
CH_4	25	(8)
N_2O	298	(8)

Notes:

(1) AP-42, Chapter 3.2, Table 3.2-1. *Natural Gas-fired Reciprocating Engines* (7/00). Uncontrolled Emission Factors for 2-Stroke Lean-Burn Engines.

(2) AP-42, Chapter 5.3, Section 5.3.1

(3) Emission Factors derived from Stack Test Data

(4) Emission factors are from 40 CFR 98, Subpart C, Table C-1 and C-2.

(5) Fuel consumption from manufacturer's specification sheet.

(6) Value obtained from AP-42, Chapter 3.2, Table 3.2-1, footnote b

(7) Fuel throughput = BSFC (BTU/HP-hr) x Power (HP) / Heat Content (BTU/scf)

(8) Global Warming Potentials obtained from 40 CFR 98, Subpart A, Table A-1

Table 5. Reciprocating Engine / Generator Emissions (G3)
Waukesha VGF-P48GL; 4SLB
Columbia Pipeline Group - Coco Compressor Station

Pollutant	Emission Factor		PTE (lb/hr)		PTE (ton/yr)	
Criteria Pollutants						
PM/PM10/PM2.5	9.98E-03	lb/MMBtu (1)	0.091	(a)	0.023	(c)
SO_2 (Hourly)	20.0	grains S / 100 ft^2 (2)	0.509	(e)	-	
SO_2 (Annual)	0.25	grains S / 100 ft^3 (2)	-		0.002	(f)
NOx	2.00E+00	g/hp-hr (3)	5.18	(b)	1.30	(d)
CO	1.30E+00	g/hp-hr (3)	3.37	(b)	0.84	(d)
VOC	4.00E-02	g/hp-hr (3)	0.10	(b)	0.03	(d)
Hazardous Air Pollutants						
1,1,2,2-Tetrachloroethane	4.00E-05	lb/MMBtu (1)	0.000	(a)	0.000	(c)
1,1,2-Trichloroethane	3.18E-05	lb/MMBtu (1)	0.000	(a)	0.000	(c)
1,3-Butadiene	2.67E-04	lb/MMBtu (1)	0.002	(a)	0.001	(c)
1,3-Dichloropropene	2.64E-05	lb/MMBtu (1)	0.000	(a)	0.000	(c)
2-Methylnaphthalene	3.32E-05	lb/MMBtu (1)	0.000	(a)	0.000	(c)
2,2,4-Trimethylpentane	2.50E-05	lb/MMBtu (1)	0.000	(a)	0.000	(c)
Acetaldehyde	8.36E-03	lb/MMBtu (1)	0.076	(a)	0.019	(c)
Acrolein	5.14E-03	lb/MMBtu (1)	0.047	(a)	0.012	(c)
Benzene	4.40E-04	lb/MMBtu (1)	0.004	(a)	0.001	(c)
Carbon Tetrachloride	3.67E-05	lb/MMBtu (1)	0.000	(a)	0.000	(c)
Chlorobenzene	3.04E-05	lb/MMBtu (1)	0.000	(a)	0.000	(c)
Chloroform	2.85E-05	lb/MMBtu (1)	0.000	(a)	0.000	(c)
Ethylbenzene	3.97E-05	lb/MMBtu (1)	0.000	(a)	0.000	(c)
Ethylene Dibromide	4.43E-05	lb/MMBtu (1)	0.000	(a)	0.000	(c)
Formaldehyde	5.28E-02	lb/MMBtu (1)	0.480	(a)	0.120	(c)
Methanol	2.50E-03	lb/MMBtu (1)	0.023	(a)	0.006	(c)
Methylene Chloride	2.00E-05	lb/MMBtu (1)	0.000	(a)	0.000	(c)
n-Hexane	1.11E-03	lb/MMBtu (1)	0.010	(a)	0.003	(c)
Naphthalene	7.44E-05	lb/MMBtu (1)	0.001	(a)	0.000	(c)
PAH (POM)	2.69E-05	lb/MMBtu (1)	0.000	(a)	0.000	(c)
Phenanthrene	1.04E-05	lb/MMBtu (1)	0.000	(a)	0.000	(c)
Phenol	2.40E-05	lb/MMBtu (1)	0.000	(a)	0.000	(c)
Styrene	2.36E-05	lb/MMBtu (1)	0.000	(a)	0.000	(c)
Toluene	4.08E-04	lb/MMBtu (1)	0.004	(a)	0.001	(c)
Vinyl Chloride	1.49E-05	lb/MMBtu (1)	0.000	(a)	0.000	(c)
Xylenes	1.84E-04	lb/MMBtu (1)	0.002	(a)	0.000	(c)
Total HAPs			**0.652**		**0.163**	
Greenhouse Gas Emissions						
CO_2	116.89	lb/MMBtu (4)	1062.09	(a)	265.52	(c)
CH_4	2.2E-03	lb/MMBtu (4)	0.02	(a)	0.01	(c)
N_2O	2.2E-04	lb/MMBtu (4)	0.00	(a)	0.00	(c)
$CO_2e^{(g)}$	-	-	1063.18		265.80	

Calculations:

Hourly Emissions - If emission factor note 1 or 4 is used, use calculation (a). If emission factor note 3 is used, use calculation (b).

(a) Maximum Hourly Emissions (lb/hr) = Emission factor (lb/MMBtu) * (1MMBtu/1000000 Btu) * Engine Power Output (hp) * Average BSFC (Btu/hp-hr)

(b) Maximum Hourly Emissions (lb/hr) = Emission factor (g/hp-hr) * Engine Power Output (hp) * (lb/453.6g)

Annual Emissions - If emission factor note 1 or 4 is used, use calculation (c). If emission factor note 3 is used, use calculation (d).

(c) Annual emissions (tons/yr) = Emission factor (lb/MMBtu) * (1MMBtu/1000000Btu) * Engine Power Output (hp) * Average BSFC (Btu/hp-hr) * Annual Hours of operation (hr/yr) * (1ton/2000lbs)

(d) Annual emissions (tons/yr) = Emission factor (g/hp-hr) * Engine Power Output (hp) * Annual Hours of operation (hr/yr) * (1ton/2000lbs) * (lb/453.6g)

SO_2 Emissions - If emission factor note 2 is used, use calculations (e) and (f) for hourly and annual emissions, respectively.

(e) Maximum Hourly Emissions SO2 Caclulation (lb/hr) = (20 grain S/100ft3) * Fuel throughput (ft3/hr) * (1lb/7000 grains) * (lbmol S/32.06 lb S) * (lbmol SO2/ lbmol S) *(64.07 lb SO2/lbmol SO2)

(f) Annual Emissions SO2 Caclulation (ton/yr) = (0.25 grain S/100ft3) * Fuel throughput (ft3/hr) * (1lb/7000 grains) * (lbmol S/32.06 lb S) * (lbmol SO2/ lbmol S) *(64.07 lb SO2/lbmol SO2) * Annual hours of operation (hr/yr) * (1ton/2000lbs)

EMISSION INPUTS TABLE		
Engine Power Output (kW) =	876	
Engine Power Output (hp) =	1,175	
Number of Engines Operating at a Time =	1	
Average BSFC (BTU/HP-hr) =	7,733	(5)
Heat Content Natural Gas(Btu/scf) =	1,020.0	(6)
Fuel Throughput (ft3/hr) =	8,908.1	(7)
PTE Hours of Operation =	500	

(g) CO_2 equivalent = $[(CO_2 \text{ emissions})*(GWP_{CO2})]+[(CH_4 \text{ emissions})*(GWP_{CH4})]+[(N_2O \text{ emissions})*(GWP_{N2O})]$

Global Warming Potential (GWP)

CO_2	1	(8)
CH_4	25	(8)
N_2O	298	(8)

Notes:

(1) AP-42, Chapter 3.2, Table 3.2-2. - *Uncontrolled Emission Factors for 4-Stroke Lean Burn Engines* (7/00)

(2) AP-42, Chapter 5.3, Section 5.3.1

(3) Emission factors supplied from manufacturer's specification sheets

(4) Emission factors are from 40 CFR 98, Subpart C, Table C-1 and C-2.

(5) Fuel consumption from manufacturer's specification sheet.

(6) Value obtained from AP-42, Chapter 3.2, Table 3.2-3, footnote b

(7) Fuel throughput = BSFC (BTU/HP-hr) x Power (HP) / Heat Content (BTU/scf)

(8) Global Warming Potentials obtained from 40 CFR 98, Subpart A, Table A-1

Table 6. Regeneration Gas Heater Emissions (H2)
Heatec; Model # HCL-610-40G
Columbia Pipeline Group - Coco Compressor Station

Pollutant	Emission Factor		PTE (lb/hr)		PTE (ton/yr)	
Criteria Pollutants						
PM/PM10/PM2.5	7.6 lb/MMcf	(1)	0.07	(a)	0.31	(b)
SO_2 (Hourly)	20 grains S / 100ft^3	(5)	0.52	(e)	-	
SO_2 (Annual)	0.25 grains S / 100ft^3	(5)	-		0.03	(f)
NOx	0.120 lb/MMBtu	(2)	1.13	(c)	4.93	(d)
CO	0.037 lb/MMBtu	(2)	0.35	(c)	1.52	(d)
VOC	5.5 lb/MMcf	(1)	0.05	(a)	0.22	(b)
Hazardous Air Pollutants						
Arsenic	2.00E-04 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Benzene	2.10E-03 lb/MMcf	(4)	0.00	(a)	0.000	(b)
Beryllium	1.20E-05 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Cadmium	1.10E-03 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Chromium	1.40E-03 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Cobalt	8.40E-05 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Dichlorobenzene	1.20E-03 lb/MMcf	(4)	0.00	(a)	0.000	(b)
Formaldehyde	7.50E-02 lb/MMcf	(4)	0.00	(a)	0.003	(b)
Hexane	1.80E+00 lb/MMcf	(4)	0.02	(a)	0.073	(b)
Lead	5.00E-04 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Manganese	3.80E-04 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Mercury	2.60E-04 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Naphthalene	6.10E-04 lb/MMcf	(4)	0.00	(a)	0.000	(b)
Nickel	2.10E-03 lb/MMcf	(3)	0.00	(a)	0.000	(b)
PAH/POM	1.29E-03 lb/MMcf	(4)	0.00	(a)	0.000	(b)
Selenium	2.40E-05 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Toluene	3.40E-03 lb/MMcf	(4)	0.00	(a)	0.000	(b)
Total HAP			0.00		0.076	
Greenhouse Gas Emissions						
CO_2	116.89 lb/MMBtu	(6)	1096.42	(c)	4802.32	(d)
CH_4	2.2E-03 lb/MMBtu	(6)	0.02	(c)	0.09	(d)
N_2O	2.2E-04 lb/MMBtu	(6)	0.00	(c)	0.01	(d)
CO_2e[(g)]	- -		1097.55		4807.28	

Calculations:

LB/MMCF

(a) Hourly emissions (lb/hr) = Emission Factor (lb/MMcf) * Fuel Use (MMCF/yr) / Annual hours of operation (hr/yr)

(b) Annual emissions (ton/yr) = Emission Factor (lb/MMcf) * Fuel Use (MMcf/yr) * (1ton/2000lbs)

LB/MMBTU

(c) Hourly Emissions (lb/hr) = Emission Factor (lb/MMBtu) * Fuel Use (MMBtu/hr)

(d) Annual Emissions (ton/yr) = Emission Factor (lb/MMBtu) * Fuel Use (MMBtu/hr) * Hours of operation (hr/yr) * (1ton/2000lbs)

SO_2

(e) Hourly Emissions SO2 Caclulation (lb/hr) = (20 grain S/100ft3) * Fuel throughput (MMft3/yr) * (1000000ft3/1MMft3) / annual hours of operation (hr/yr) * (1lb/7000 grains) * (lbmol S/32.06 lb S) * (lbmol SO2/ lbmol S) *(64.07 lb SO2/lbmol SO2)

(f) Annual Emissions SO2 Caclulation (ton/yr) = (0.25 grain S/100ft3) * Fuel throughput (MMft3/yr) * (1000000ft3/1MMft3) * (1lb/7000 grains) * (lbmol S/32.06 lb S) * (lbmol SO2/ lbmol S) *(64.07 lb SO2/lbmol SO2) * (1ton/2000lbs)

EMISSION INPUTS TABLE	
Fuel Use (MMBtu/hr) =	9.38
Number of Units =	1
Hours of Operation (hr/yr)=	8760
MMBtu/MMcf=	1020
PTE Fuel Use (MMft3/yr) =	80.56

(g) CO_2 equivalent = [(CO_2 emissions)*(GWP_{CO2})]+[(CH_4 emissions)*(GWP_{CH4})]+[(N_2O emissions)*(GWP_{N2O})]

Global Warming Potential (GWP)

CO_2	1	(7)
CH_4	25	(7)
N_2O	298	(7)

Notes:

(1) AP-42, Chapter 1.4, Table 1.4-2. Emission Factors For Criteria Pollutants and Greenhouse Gases From Natural Gas Combustion, July 1998.

(2) Emission factors supplied from manufacturer's specifications sheets

(3) AP-42, Chapter 1.4, Table 1.4-4. Emission Factors For Metals From Natural Gas Combustion, July 1998.

(4) AP-42, Chapter 1.4, Table 1.4-3. Emission Factors for Speciated Organic Compounds from Natural Gas Combustion, July 1998.

(5) AP-42, Chapter 5.3, Section 5.3.1

(6) Emission factors are from 40 CFR 98, Subpart C, Table C-1 and C-2.

(7) Global Warming Potentials obtained from 40 CFR 98, Subpart A, Table A-1

Table 7. Indirect Gas Heater Emissions (H5)
TERI (0.12 MMBtu/hr) NG Line Heater
Columbia Pipeline Group - Coco Compressor Station

Pollutant	Emission Factor		PTE (lb/hr)		PTE (ton/yr)	
Criteria Pollutants						
PM/PM10/PM2.5	7.6 lb/MMcf	(1)	0.00	(a)	0.00	(b)
SO_2 (Hourly)	20 grains S / 100ft^3	(5)	0.01	(e)	-	
SO_2 (Annual)	0.25 grains S / 100ft^3	(5)	-		0.00	(f)
NOx	100 lb/MMcf	(2)	0.01	(a)	0.05	(a)
CO	84 lb/MMcf	(2)	0.01	(a)	0.04	(a)
VOC	5.5 lb/MMcf	(1)	0.00	(a)	0.00	(b)
Hazardous Air Pollutants						
Arsenic	2.00E-04 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Benzene	2.10E-03 lb/MMcf	(4)	0.00	(a)	0.000	(b)
Beryllium	1.20E-05 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Cadmium	1.10E-03 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Chromium	1.40E-03 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Cobalt	8.40E-05 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Dichlorobenzene	1.20E-03 lb/MMcf	(4)	0.00	(a)	0.000	(b)
Formaldehyde	7.50E-02 lb/MMcf	(4)	0.00	(a)	0.000	(b)
Hexane	1.80E+00 lb/MMcf	(4)	0.00	(a)	0.001	(b)
Lead	5.00E-04 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Manganese	3.80E-04 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Mercury	2.60E-04 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Naphthalene	6.10E-04 lb/MMcf	(4)	0.00	(a)	0.000	(b)
Nickel	2.10E-03 lb/MMcf	(3)	0.00	(a)	0.000	(b)
PAH/POM	1.29E-03 lb/MMcf	(4)	0.00	(a)	0.000	(b)
Selenium	2.40E-05 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Toluene	3.40E-03 lb/MMcf	(4)	0.00	(a)	0.000	(b)
Total HAP			0.00		0.001	
Greenhouse Gas Emissions						
CO_2	116.89 lb/MMBtu	(6)	14.03	(c)	61.44	(d)
CH_4	2.2E-03 lb/MMBtu	(6)	0.00	(c)	0.00	(d)
N_2O	2.2E-04 lb/MMBtu	(6)	0.00	(c)	0.00	(d)
CO_2e[(g)]	- -		14.04		61.50	

Calculations:

LB/MMCF

(a) Hourly emissions (lb/hr) = Emission Factor (lb/MMcf) * Fuel Use (MMCF/yr) / Annual hours of operation (hr/yr)

(b) Annual emissions (ton/yr) = Emission Factor (lb/MMcf) * Fuel Use (MMcf/yr) * (1ton/2000lbs)

LB/MMBTU

(c) Hourly Emissions (lb/hr) = Emission Factor (lb/MMBtu) * Fuel Use (MMBtu/hr)

(d) Annual Emissions (ton/yr) = Emission Factor (lb/MMBtu) * Fuel Use (MMBtu/hr) * Hours of operation (hr/yr) * (1ton/2000lbs)

SO_2

(e) Hourly Emissions SO2 Caclulation (lb/hr) = (20 grain S/100ft3) * Fuel throughput (MMft3/yr) * (1000000ft3/1MMft3) / annual hours of operation (hr/yr) * (1lb/7000 grains) * (lbmol S/32.06 lb S) * (lbmol SO2/ lbmol S) *(64.07 lb SO2/lbmol SO2)

(f) Annual Emissions SO2 Caclulation (ton/yr) = (0.25 grain S/100ft3) * Fuel throughput (MMft3/yr) * (1000000ft3/1MMft3) * (1lb/7000 grains) * (lbmol S/32.06 lb S) * (lbmol SO2/ lbmol S) *(64.07 lb SO2/lbmol SO2) * (1ton/2000lbs)

EMISSION INPUTS TABLE	
Fuel Use (MMBtu/hr) =	0.12
Number of Units =	1
Hours of Operation (hr/yr)=	8760
MMBtu/MMcf=	1020
PTE Fuel Use (MMft3/yr) =	1.03

(g) CO_2 equivalent = [(CO_2 emissions)*(GWP_{CO2})]+[(CH_4 emissions)*(GWP_{CH4})]+[(N_2O emissions)*(GWP_{N2O})]
Global Warming Potential (GWP)

CO_2	1	(7)
CH_4	25	(7)
N_2O	298	(7)

Notes:

(1) AP-42, Chapter 1.4, Table 1.4-2. Emission Factors For Criteria Pollutants and Greenhouse Gases From Natural Gas Combustion, July 1998.

(2) AP-42, Chapter 1.4, Table 1.4-1. Emission Factors For Nitrogen Oxides (Nox) and Carbon Monoxide(CO) From Natural Gas Combustion, July 1998.

(3) AP-42, Chapter 1.4, Table 1.4-4. Emission Factors For Metals From Natural Gas Combustion, July 1998.

(4) AP-42, Chapter 1.4, Table 1.4-3. Emission Factors for Speciated Organic Compounds from Natural Gas Combustion, July 1998.

(5) AP-42, Chapter 5.3, Section 5.3.1

(6) Emission factors are from 40 CFR 98, Subpart C, Table C-1 and C-2.

(7) Global Warming Potentials obtained from 40 CFR 98, Subpart A, Table A-1

Table 8. Gas-Fired Boiler Emissions (BL3)
Cleaver-Brooks; Model # M4S-4000
Columbia Pipeline Group - Coco Compressor Station

Pollutant	Emission Factor		PTE (lb/hr)		PTE (ton/yr)	
Criteria Pollutants						
PM/PM10/PM2.5	7.6 lb/MMcf	(1)	0.03	(a)	0.14	(b)
SO_2 (Hourly)	20 grains S / 100ft^3	(5)	0.24	(e)	-	
SO_2 (Annual)	0.25 grains S / 100ft^3	(5)	-		0.01	(f)
NOx	100 lb/MMcf	(2)	0.41	(a)	1.80	(a)
CO	84 lb/MMcf	(2)	0.35	(a)	1.51	(a)
VOC	5.5 lb/MMcf	(1)	0.02	(a)	0.10	(b)
Hazardous Air Pollutants						
Arsenic	2.00E-04 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Benzene	2.10E-03 lb/MMcf	(4)	0.00	(a)	0.000	(b)
Beryllium	1.20E-05 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Cadmium	1.10E-03 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Chromium	1.40E-03 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Cobalt	8.40E-05 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Dichlorobenzene	1.20E-03 lb/MMcf	(4)	0.00	(a)	0.000	(b)
Formaldehyde	7.50E-02 lb/MMcf	(4)	0.00	(a)	0.001	(b)
Hexane	1.80E+00 lb/MMcf	(4)	0.01	(a)	0.032	(b)
Lead	5.00E-04 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Manganese	3.80E-04 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Mercury	2.60E-04 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Naphthalene	6.10E-04 lb/MMcf	(4)	0.00	(a)	0.000	(b)
Nickel	2.10E-03 lb/MMcf	(3)	0.00	(a)	0.000	(b)
PAH/POM	1.29E-03 lb/MMcf	(4)	0.00	(a)	0.000	(b)
Selenium	2.40E-05 lb/MMcf	(3)	0.00	(a)	0.000	(b)
Toluene	3.40E-03 lb/MMcf	(4)	0.00	(a)	0.000	(b)
Total HAP			0.00		0.034	
Greenhouse Gas Emissions						
CO_2	116.89 lb/MMBtu	(6)	490.93	(c)	2150.29	(d)
CH_4	2.2E-03 lb/MMBtu	(6)	0.01	(c)	0.04	(d)
N_2O	2.2E-04 lb/MMBtu	(6)	0.00	(c)	0.00	(d)
CO_2e[(g)]	- -		491.44		2152.51	

Calculations:

LB/MMCF

(a) Hourly emissions (lb/hr) = Emission Factor (lb/MMcf) * Fuel Use (MMCF/yr) / Annual hours of operation (hr/yr)

(b) Annual emissions (ton/yr) = Emission Factor (lb/MMcf) * Fuel Use (MMcf/yr) * (1ton/2000lbs)

LB/MMBTU

(c) Hourly Emissions (lb/hr) = Emission Factor (lb/MMBtu) * Fuel Use (MMBtu/hr)

(d) Annual Emissions (ton/yr) = Emission Factor (lb/MMBtu) * Fuel Use (MMBtu/hr) * Hours of operation (hr/yr) * (1ton/2000lbs)

SO_2

(e) Hourly Emissions SO2 Caclulation (lb/hr) = (20 grain S/100ft3) * Fuel throughput (MMft3/yr) * (1000000ft3/1MMft3) / annual hours of operation (hr/yr) * (1lb/7000 grains) * (lbmol S/32.06 lb S) * (lbmol SO2/ lbmol S) *(64.07 lb SO2/lbmol SO2)

(f) Annual Emissions SO2 Caclulation (ton/yr) = (0.25 grain S/100ft3) * Fuel throughput (MMft3/yr) * (1000000ft3/1MMft3) * (1lb/7000 grains) * (lbmol S/32.06 lb S) * (lbmol SO2/ lbmol S) *(64.07 lb SO2/lbmol SO2) * (1ton/2000lbs)

EMISSION INPUTS TABLE	
Fuel Use (MMBtu/hr) =	4.2
Number of Units =	1
Hours of Operation (hr/yr)=	8760
MMBtu/MMcf=	1020
PTE Fuel Use (MMft3/yr) =	36.07

(g) CO_2 equivalent = [(CO_2 emissions)*(GWP_{CO2})]+[(CH_4 emissions)*(GWP_{CH4})]+[(N_2O emissions)*(GWP_{N2O})]
Global Warming Potential (GWP)

CO_2	1	(7)
CH_4	25	(7)
N_2O	298	(7)

Notes:

(1) AP-42, Chapter 1.4, Table 1.4-2. Emission Factors For Criteria Pollutants and Greenhouse Gases From Natural Gas Combustion, July 1998.

(2) AP-42, Chapter 1.4, Table 1.4-1. Emission Factors For Nitrogen Oxides (Nox) and Carbon Monoxide(CO) From Natural Gas Combustion, July 1998.

(3) AP-42, Chapter 1.4, Table 1.4-4. Emission Factors For Metals From Natural Gas Combustion, July 1998.

(4) AP-42, Chapter 1.4, Table 1.4-3. Emission Factors for Speciated Organic Compounds from Natural Gas Combustion, July 1998.

(5) AP-42, Chapter 5.3, Section 5.3.1

(6) Emission factors are from 40 CFR 98, Subpart C, Table C-1 and C-2.

(7) Global Warming Potentials obtained from 40 CFR 98, Subpart A, Table A-1

Table 9. Tank Emissions
Columbia Pipeline Group - Coco Compressor Station

Emission Point	Tank Capacity (gal)	Tank Contents	Control Devices	Tank Throughput (bbls/day)	VOC Emission Factor (lbs/bbls)		VOC Emissions (lbs/yr)[(a)]	VOC Emissions (lb/hr)[(b)]	VOC Emissions (tons/yr)[(c)]
A04	4342	Lube Oil	None	1.13	4.13E-03	(1)	1.71	0.000	0.001
A05-2	2000	Scrubber Oil	None	0.26	6.83E-03	(1)	0.65	0.000	0.000
A14	56400	Pipeline Liquids/Waste Water Mix	None	4.80	9.02E-03	(1)	15.81	0.002	0.008
A15	8000	Pipeline Liquids	None	1.57	2.53E+00	(2)	1446.11	0.165	0.723
A16	8000	Pipeline Liquids	None	1.57	2.53E+00	(2)	1446.11	0.165	0.723
A17	550	Methanol	None	0.07	5.76E-01	(1)	15.08	0.002	0.008
A18	2000	Scrubber Oil	None	0.26	6.83E-03	(1)	0.65	0.000	0.000
A19	3000	Pipeline Liquids	None	0.39	5.92E+00	(2)	845.49	0.097	0.423
A20	550	Methanol	None	0.07	5.76E-01	(1)	15.08	0.002	0.008
A21	550	Methanol	None	0.07	5.76E-01	(1)	15.08	0.002	0.008
B01	1500	Glycol	None	0.22	1.24E-06	(1)	0.00	0.000	0.000
B02	3000	Glycol	None	0.22	1.24E-06	(1)	0.00	0.000	0.000
B03	1500	Lube Oil	None	0.20	7.00E-04	(1)	0.05	0.000	0.000
B04	4300	Lube Oil	None	1.13	7.01E-04	(1)	0.29	0.000	0.000
B05	1500	Used Oil	None	0.59	7.00E-04	(1)	0.15	0.000	0.000
B07	5670	Oil/Water Mix	None	0.44	6.90E-04	(1)	0.11	0.000	0.000
Totals							**3802.37**	**0.43**	**1.90**

Calculations:

(a) VOC Emissions (lb/day) = Tank Throughput (bbls/day) * VOC Emission Factor (lbs/bbls)

(b) VOC Emissions (lb/hr) = VOC Emissions (lbs/yr) * (yr/8760hr)

(c) VOC Emissions (ton/yr) = VOC Emissions (lbs/yr) * (1ton/2000lbs)

Notes:

(1) VOC emission factor includes Working/Breathing losses as calculated from TANKS 4.0.9.d

(2) VOC emission factor includes Flashing/Working/Breathing losses calculated from pressurized liquid sample (GOR= 0.059 lb VOC/bbl) direct flash measurement added to working and breathing losses calculated using EPA Tanks 4.09. The pressurized liquid sample was taken from a high pressure separator at a similar site and is considered to be worst case representative with respect to gas composition and pressure at the Station

Table 10. Fugitive Leak Emissions
Columbia Pipeline Group - Coco Compressor Station

Pollutant	Emission Factor			PTE[(a) Gas Service] (tons/yr)
Valves	9.9E-03	lb/hr/source	(1)	28.11
Low Bleed Pneumatic Valves	9.9E-03	lb/hr/source	(1)	0.48
Flanges	8.6E-04	lb/hr/source	(1)	8.53
Connector	4.4E-04	lb/hr/source	(1)	4.38
Other Points in Gas Service	1.9E-02	lb/hr/source	(1)	8.99
Total Gas Released	-	-		50.49
Total VOC Released (gas service)			(b)	**1.01**
			CO2e	23.48

Calculations:

(a) Annual emissions (tons/yr) = [Emission Factor (lb/hr/source)] x [Number of Sources] x [Hours of Operation per Year] x [0.0005 tons/ lb]

(b) Gas sample for station assumed to be worst case at 2 wt % VOC[(3)]

Number of Components in Gas Service

Valves=	647	(2)
Low Bleed Pneumatic Valves=	11	(2)
Connectors=	2,265	(2)
Other Points in Gas Service =	48	(2)
Maximum Hour of Operation =	8,760	

(1) Emission factors from 1995 EPA Protocol for Equipment Leak Emission Estimates, Table 2-4 Oil and Gas Production

(2) *Default Average Component Counts for Major Onshore Natural Gas Production Equipment* from 40 CFR 98, Subpart W, Table W-1B

(3) Worst case VOC wt % assumption for station based on gas sample analysis from compressor stations located in close proximity to the site

(4) Global Warming Potentials obtained from 40 CFR 98, Subpart A, Table A-1

APPENDIX B

PROPOSED PERMIT LANGUAGE

Title V Operating Permit Renewal Application

Coco Compressor Station, Facility ID No. 039-00049
Elkview, West Virginia

Columbia Gas Transmission, LLC
1700 MacCorkle Avenue, SE
Charleston, West Virginia

January 2017

West Virginia Department of Environmental Protection
Division of Air Quality

Earl Ray Tomblin
Governor

Randy C. Huffman
Cabinet Secretary

Permit to Operate

Pursuant to
Title V
of the Clean Air Act

Issued to:

Columbia Gas Transmission, LLC

Coco Compressor Station

R30-03900049-2016

William F. Durham
Director

Issued: • Effective: Draft
Expiration: • Renewal Application Due:

Permit Number: **R30-03900049-2016**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Coco Compressor Station**
Permittee Mailing Address: **1700 MacCorkle Avenue, SE**
Charleston, WV 25314

This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45CSR30 — Requirements for Operating Permits. The permittee identified at the above-referenced facility is authorized to operate the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.

Facility Location:	Elkview, Kanawha County, West Virginia
Facility Mailing Address:	7 Coco Road, Elkview, WV 25071
Telephone Number:	(304) 357-2047
Type of Business Entity:	LLC
Facility Description:	Natural Gas Transmission Facility
SIC Codes:	4922
UTM Coordinates:	463.6 km Easting • 4,250.3 km Northing • Zone 17

Permit Writer: Engineer's Name

Any person whose interest may be affected, including, but not necessarily limited to, the applicant and any person who participated in the public comment process, by a permit issued, modified or denied by the Secretary may appeal such action of the Secretary to the Air Quality Board pursuant to article one [§§ 22B-1-1 et seq.], Chapter 22B of the Code of West Virginia. West Virginia Code §22-5-14.

Issuance of this Title V Operating Permit does not supersede or invalidate any existing permits under 45CSR13, 14 or 19, although all applicable requirements from such permits governing the facility's operation and compliance have been incorporated into the Title V Operating Permit.

Table of Contents

1.0 Emission Units and Active R13, R14, and R19 Permits

1.1. Emission Units

Emission Unit ID	Emission Point ID	Emission Unit Description	Year Installed	Design Capacity	Control Device
00801*	E01	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMV-8TF; 2-cycle, lean burn	1951	880 HP	N/A
00802*	E02	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMV-8TF; 2-cycle, lean burn	1951	880 HP	N/A
00803*	E03	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMV-8TF; 2-cycle, lean burn	1951	880 HP	N/A
00804*	E04	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMV-8TF; 2-cycle, lean burn	1951	880 HP	N/A
00805*	E05	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMV-8TF; 2-cycle, lean burn	1951	880 HP	N/A
00806*	E06	Reciprocating Engine/Integral Compressor; Cooper-Bessemer GMVA-8; 2-cycle, lean burn	1960	1,100 HP	N/A
00807*	E07	Reciprocating Engine/Integral Compressor; Cooper-Bessemer 8W-330; 2-cycle, lean burn	1979	4,000 HP	N/A
BLR3*	BL3	Gas-Fired Boiler; Cleaver-Brooks; Model #M4S-4000	2012	4.2 MMBtu/hr	N/A
HTR2*	H2	Dehy Regeneration Gas Heater; Heatec Model #HCL-610-40G	2005	9.38 MMBtu/hr	N/A
HTR5*	H5	Fuel Gas Heater; TERI 125	2016	0.12 MMBtu/hr	N/A
~~HTR3*~~	~~H3~~	~~Fuel Gas Heater; BS&B~~	~~1999~~	~~0.09 MMBtu/hr~~	~~N/A~~
008G3*	G3	Reciprocating Engine / Generator Waukesha VGF-P48GL; 4 Cycle, Lean Burn	2016	1,175 HP	N/A
~~008G1*~~	~~G1~~	~~Reciprocating Engine / Generator Ingersoll-Rand PVG-6; 4-cycle, rich burn; Emergency~~	~~1951~~	~~275~~	~~N/A~~
~~008G2*~~	~~G2~~	~~Reciprocating Engine / Generator Ingersoll-Rand PVG-6; 4-cycle, rich burn; Emergency~~	~~1951~~	~~306~~	~~N/A~~

* All equipment is fueled exclusively with pipeline quality natural gas.

1.2. Active R13, R14, and R19 Permits

The underlying authority for any conditions from R13, R14, and/or R19 permits contained in this operating permit is cited using the original permit number (e.g. R13-1234). The current applicable version of such permit(s) is listed below.

Permit Number	Date of Issuance
R13-2087	11/29/2016

2.0 General Conditions

2.1. Definitions

2.1.1. All references to the "West Virginia Air Pollution Control Act" or the "Air Pollution Control Act" mean those provisions contained in W.Va. Code §§ 22-5-1 to 22-5-18.

2.1.2. The "Clean Air Act" means those provisions contained in 42 U.S.C. §§ 7401 to 7671q, and regulations promulgated thereunder.

2.1.3. "Secretary" means the Secretary of the Department of Environmental Protection or such other person to whom the Secretary has delegated authority or duties pursuant to W.Va. Code §§ 22-1-6 or 22-1-8 (45CSR§30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

2.1.4. Unless otherwise specified in a permit condition or underlying rule or regulation, all references to a "rolling yearly total" shall mean the sum of the monthly data, values or parameters being measured, monitored, or recorded, at any given time for the previous twelve (12) consecutive calendar months.

2.2. Acronyms

CAAA	Clean Air Act Amendments	**NO_x**	Nitrogen Oxides
CBI	Confidential Business Information	**NSPS**	New Source Performance Standards
CEM	Continuous Emission Monitor		
CES	Certified Emission Statement	**PM**	Particulate Matter
C.F.R. *or* CFR	Code of Federal Regulations	**PM_{10}**	Particulate Matter less than 10μm in diameter
CO	Carbon Monoxide		
C.S.R. *or* CSR	Codes of State Rules	**pph**	Pounds per Hour
DAQ	Division of Air Quality	**ppm**	Parts per Million
DEP	Department of Environmental Protection	**PSD**	Prevention of Significant Deterioration
FOIA	Freedom of Information Act	**psi**	Pounds per Square Inch
HAP	Hazardous Air Pollutant	**SIC**	Standard Industrial Classification
HON	Hazardous Organic NESHAP		
HP	Horsepower	**SIP**	State Implementation Plan
lbs/hr *or* lb/hr	Pounds per Hour	**SO_2**	Sulfur Dioxide
LDAR	Leak Detection and Repair	**TAP**	Toxic Air Pollutant
m	Thousand	**TPY**	Tons per Year
MACT	Maximum Achievable Control Technology	**TRS**	Total Reduced Sulfur
		TSP	Total Suspended Particulate
mm	Million	**USEPA**	United States Environmental Protection Agency
mmBtu/hr	Million British Thermal Units per Hour		
$mmft^3$/hr *or* mmcf/hr	Million Cubic Feet Burned per Hour	**UTM**	Universal Transverse Mercator
NA *or* N/A	Not Applicable	**VEE**	Visual Emissions Evaluation
NAAQS	National Ambient Air Quality Standards	**VOC**	Volatile Organic Compounds
NESHAPS	National Emissions Standards for Hazardous Air Pollutants		

2.3. Permit Expiration and Renewal

2.3.1. Permit duration. This permit is issued for a fixed term of five (5) years and shall expire on the date specified on the cover of this permit, except as provided in 45CSR§30-6.3.b. and 45CSR§30-6.3.c.
[45CSR§30-5.1.b.]

2.3.2. A permit renewal application is timely if it is submitted at least six (6) months prior to the date of permit expiration.
[45CSR§30-4.1.a.3.]

2.3.3. Permit expiration terminates the source's right to operate unless a timely and complete renewal application has been submitted consistent with 45CSR§30-6.2. and 45CSR§30-4.1.a.3.
[45CSR§30-6.3.b.]

2.3.4. If the Secretary fails to take final action to deny or approve a timely and complete permit application before the end of the term of the previous permit, the permit shall not expire until the renewal permit has been issued or denied, and any permit shield granted for the permit shall continue in effect during that time.
[45CSR§30-6.3.c.]

2.4. Permit Actions

2.4.1. This permit may be modified, revoked, reopened and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition.
[45CSR§30-5.1.f.3.]

2.5. Reopening for Cause

2.5.1. This permit shall be reopened and revised under any of the following circumstances:

a. Additional applicable requirements under the Clean Air Act or the Secretary's legislative rules become applicable to a major source with a remaining permit term of three (3) or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to 45CSR§§30-6.6.a.1.A. or B.

b. Additional requirements (including excess emissions requirements) become applicable to an affected source under Title IV of the Clean Air Act (Acid Deposition Control) or other legislative rules of the Secretary. Upon approval by U.S. EPA, excess emissions offset plans shall be incorporated into the permit.

c. The Secretary or U.S. EPA determines that the permit contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the permit.

d. The Secretary or U.S. EPA determines that the permit must be revised or revoked and reissued to assure compliance with the applicable requirements.

[45CSR§30-6.6.a.]

2.6. Administrative Permit Amendments

2.6.1. The permittee may request an administrative permit amendment as defined in and according to the procedures specified in 45CSR§30-6.4.
[45CSR§30-6.4.]

2.7. Minor Permit Modifications

2.7.1. The permittee may request a minor permit modification as defined in and according to the procedures specified in 45CSR§30-6.5.a.
[45CSR§30-6.5.a.]

2.8. Significant Permit Modification

2.8.1. The permittee may request a significant permit modification, in accordance with 45CSR§30-6.5.b., for permit modifications that do not qualify for minor permit modifications or as administrative amendments.
[45CSR§30-6.5.b.]

2.9. Emissions Trading

2.9.1. No permit revision shall be required, under any approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in the permit and that are in accordance with all applicable requirements.
[45CSR§30-5.1.h.]

2.10. Off-Permit Changes

2.10.1. Except as provided below, a facility may make any change in its operations or emissions that is not addressed nor prohibited in its permit and which is not considered to be construction nor modification under any rule promulgated by the Secretary without obtaining an amendment or modification of its permit. Such changes shall be subject to the following requirements and restrictions:

a. The change must meet all applicable requirements and may not violate any existing permit term or condition.

b. The permittee must provide a written notice of the change to the Secretary and to U.S. EPA within two (2) business days following the date of the change. Such written notice shall describe each such change, including the date, any change in emissions, pollutants emitted and any applicable requirement that would apply as a result of the change.

c. The change shall not qualify for the permit shield.

d. The permittee shall keep records describing all changes made at the source that result in emissions of regulated air pollutants, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e. No permittee may make any change subject to any requirement under Title IV of the Clean Air Act (Acid Deposition Control) pursuant to the provisions of 45CSR§30-5.9.

f. No permittee may make any changes which would require preconstruction review under any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) pursuant to the provisions of 45CSR§30-5.9.

[45CSR§30-5.9.]

2.11. Operational Flexibility

2.11.1. The permittee may make changes within the facility as provided by § 502(b)(10) of the Clean Air Act. Such operational flexibility shall be provided in the permit in conformance with the permit application and applicable requirements. No such changes shall be a modification under any rule or any provision of Title I of the Clean Air Act (including 45CSR14 and 45CSR19) promulgated by the Secretary in accordance with Title I of the Clean Air Act and the change shall not result in a level of emissions exceeding the emissions allowable under the permit.
[45CSR§30-5.8]

2.11.2. Before making a change under 45CSR§30-5.8., the permittee shall provide advance written notice to the Secretary and to U.S. EPA, describing the change to be made, the date on which the change will occur, any changes in emissions, and any permit terms and conditions that are affected. The permittee shall thereafter maintain a copy of the notice with the permit, and the Secretary shall place a copy with the permit in the public file. The written notice shall be provided to the Secretary and U.S. EPA at least seven (7) days prior to the date that the change is to be made, except that this period may be shortened or eliminated as necessary for a change that must be implemented more quickly to address unanticipated conditions posing a significant health, safety, or environmental hazard. If less than seven (7) days' notice is provided because of a need to respond more quickly to such unanticipated conditions, the permittee shall provide notice to the Secretary and U.S. EPA as soon as possible after learning of the need to make the change.
[45CSR§30-5.8.a.]

2.11.3. The permit shield shall not apply to changes made under 45CSR§30-5.8., except those provided for in 45CSR§30-5.8.d. However, the protection of the permit shield will continue to apply to operations and emissions that are not affected by the change, provided that the permittee complies with the terms and conditions of the permit applicable to such operations and emissions. The permit shield may be reinstated for emissions and operations affected by the change:

a. If subsequent changes cause the facility's operations and emissions to revert to those authorized in the permit and the permittee resumes compliance with the terms and conditions of the permit, or

b. If the permittee obtains final approval of a significant modification to the permit to incorporate the change in the permit.

[45CSR§30-5.8.c.]

2.11.4. "Section 502(b)(10) changes" are changes that contravene an express permit term. Such changes do not include changes that would violate applicable requirements or contravene enforceable permit terms and conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements.
[45CSR§30-2.39]

2.12. Reasonably Anticipated Operating Scenarios

2.12.1. The following are terms and conditions for reasonably anticipated operating scenarios identified in this permit.

a. Contemporaneously with making a change from one operating scenario to another, the permittee shall record in a log at the permitted facility a record of the scenario under which it is operating and to document the change in reports submitted pursuant to the terms of this permit and 45CSR30.

b. The permit shield shall extend to all terms and conditions under each such operating scenario; and

c. The terms and conditions of each such alternative scenario shall meet all applicable requirements and the requirements of 45CSR30.

[45CSR§30-5.1.i.]

2.13. Duty to Comply

2.13.1. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the West Virginia Code and the Clean Air Act and is grounds for enforcement action by the Secretary or USEPA; for permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application.
[45CSR§30-5.1.f.1.]

2.14. Inspection and Entry

2.14.1. The permittee shall allow any authorized representative of the Secretary, upon the presentation of credentials and other documents as may be required by law, to perform the following:

a. At all reasonable times (including all times in which the facility is in operation) enter upon the permittee's premises where a source is located or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

c. Inspect at reasonable times (including all times in which the facility is in operation) any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under the permit;

d. Sample or monitor at reasonable times substances or parameters to determine compliance with the permit or applicable requirements or ascertain the amounts and types of air pollutants discharged.

[45CSR§30-5.3.b.]

2.15. Schedule of Compliance

2.15.1. For sources subject to a compliance schedule, certified progress reports shall be submitted consistent with the applicable schedule of compliance set forth in this permit and 45CSR§30-4.3.h., but at least every six (6) months, and no greater than once a month, and shall include the following:

a. Dates for achieving the activities, milestones, or compliance required in the schedule of compliance, and dates when such activities, milestones or compliance were achieved; and

b. An explanation of why any dates in the schedule of compliance were not or will not be met, and any preventative or corrective measure adopted.

[45CSR§30-5.3.d.]

2.16. Need to Halt or Reduce Activity not a Defense

2.16.1. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. However, nothing in this paragraph shall be construed as precluding consideration of a need to halt or reduce activity as a mitigating factor in determining penalties for noncompliance if the health, safety, or environmental impacts of halting or reducing operations would be more serious than the impacts of continued operations.
[45CSR§30-5.1.f.2.]

2.17. Emergency

2.17.1. An "emergency" means any situation arising from sudden and reasonably unforeseeable events beyond the control of the source, including acts of God, which situation requires immediate corrective action to restore normal operation, and that causes the source to exceed a technology-based emission limitation under the permit, due to unavoidable increases in emissions attributable to the emergency. An emergency shall not include noncompliance to the extent caused by improperly designed equipment, lack of preventative maintenance, careless or improper operation, or operator error.
[45CSR§30-5.7.a.]

2.17.2. Effect of any emergency. An emergency constitutes an affirmative defense to an action brought for noncompliance with such technology-based emission limitations if the conditions of 45CSR§30-5.7.c. are met.
[45CSR§30-5.7.b.]

2.17.3. The affirmative defense of emergency shall be demonstrated through properly signed, contemporaneous operating logs, or other relevant evidence that:

a. An emergency occurred and that the permittee can identify the cause(s) of the emergency;

b. The permitted facility was at the time being properly operated;

c. During the period of the emergency the permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards, or other requirements in the permit; and

d. Subject to the requirements of 45CSR§30-5.1.c.3.C.1, the permittee submitted notice of the emergency to the Secretary within one (1) working day of the time when emission limitations were exceeded due to the emergency and made a request for variance, and as applicable rules provide. This notice, report, and variance request fulfills the requirement of 45CSR§30-5.1.c.3.B. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken.

[45CSR§30-5.7.c.]

2.17.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
[45CSR§30-5.7.d.]

2.17.5. This provision is in addition to any emergency or upset provision contained in any applicable requirement.
[45CSR§30-5.7.e.]

2.18. Federally-Enforceable Requirements

2.18.1. All terms and conditions in this permit, including any provisions designed to limit a source's potential to emit and excepting those provisions that are specifically designated in the permit as "State-enforceable only", are enforceable by the Secretary, USEPA, and citizens under the Clean Air Act.
[45CSR§30-5.2.a.]

2.18.2. Those provisions specifically designated in the permit as “State-enforceable only” shall become “Federally-enforceable” requirements upon SIP approval by the USEPA.

2.19. Duty to Provide Information

2.19.1. The permittee shall furnish to the Secretary within a reasonable time any information the Secretary may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records required to be kept by the permittee. For information claimed to be confidential, the permittee shall furnish such records to the Secretary along with a claim of confidentiality in accordance with 45CSR31. If confidential information is to be sent to USEPA, the permittee shall directly provide such information to USEPA along with a claim of confidentiality in accordance with 40 C.F.R. Part 2.
[45CSR§30-5.1.f.5.]

2.20. Duty to Supplement and Correct Information

2.20.1. Upon becoming aware of a failure to submit any relevant facts or a submittal of incorrect information in any permit application, the permittee shall promptly submit to the Secretary such supplemental facts or corrected information.
[45CSR§30-4.2.]

2.21. Permit Shield

2.21.1. Compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance provided that such applicable requirements are included and are specifically identified in this permit or the Secretary has determined that other requirements specifically identified are not applicable to the source and this permit includes such a determination or a concise summary thereof.
[45CSR§30-5.6.a.]

2.21.2. Nothing in this permit shall alter or affect the following:

a. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance; or

b. The applicable requirements of the Code of West Virginia and Title IV of the Clean Air Act (Acid Deposition Control), consistent with § 408 (a) of the Clean Air Act.

c. The authority of the Administrator of U.S. EPA to require information under § 114 of the Clean Air Act or to issue emergency orders under § 303 of the Clean Air Act.

[45CSR§30-5.6.c.]

2.22. Credible Evidence

2.22.1. Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee including but not limited to any challenge to the credible evidence rule in the context of any future proceeding.
[45CSR§30-5.3.e.3.B. and 45CSR38]

2.23. Severability

2.23.1. The provisions of this permit are severable. If any provision of this permit, or the application of any provision of this permit to any circumstance is held invalid by a court of competent jurisdiction, the remaining permit terms and conditions or their application to other circumstances shall remain in full force and effect.
[45CSR§30-5.1.e.]

2.24. Property Rights

2.24.1. This permit does not convey any property rights of any sort or any exclusive privilege.
[45CSR§30-5.1.f.4]

2.25. Acid Deposition Control

2.25.1. Emissions shall not exceed any allowances that the source lawfully holds under Title IV of the Clean Air Act (Acid Deposition Control) or rules of the Secretary promulgated thereunder.

a. No permit revision shall be required for increases in emissions that are authorized by allowances acquired pursuant to the acid deposition control program, provided that such increases do not require a permit revision under any other applicable requirement.

b. No limit shall be placed on the number of allowances held by the source. The source may not, however, use allowances as a defense to noncompliance with any other applicable requirement.

c. Any such allowance shall be accounted for according to the procedures established in rules promulgated under Title IV of the Clean Air Act.

[45CSR§30-5.1.d.]

2.25.2. Where applicable requirements of the Clean Air Act are more stringent than any applicable requirement of regulations promulgated under Title IV of the Clean Air Act (Acid Deposition Control), both provisions shall be incorporated into the permit and shall be enforceable by the Secretary and U. S. EPA.
[45CSR§30-5.1.a.2.]

3.0 Facility-Wide Requirements

3.1. Limitations and Standards

3.1.1. **Open burning.** The open burning of refuse by any person is prohibited except as noted in 45CSR§6-3.1. **[45CSR§6-3.1.]**

3.1.2. **Open burning exemptions.** The exemptions listed in 45CSR§6-3.1 are subject to the following stipulation: Upon notification by the Secretary, no person shall cause or allow any form of open burning during existing or predicted periods of atmospheric stagnation. Notification shall be made by such means as the Secretary may deem necessary and feasible. **[45CSR§6-3.2.]**

3.1.3. **Asbestos.** The permittee is responsible for thoroughly inspecting the facility, or part of the facility, prior to commencement of demolition or renovation for the presence of asbestos and complying with 40 C.F.R. § 61.145, 40 C.F.R. § 61.148, and 40 C.F.R. § 61.150. The permittee, owner, or operator must notify the Secretary at least ten (10) working days prior to the commencement of any asbestos removal on the forms prescribed by the Secretary if the permittee is subject to the notification requirements of 40 C.F.R. § 61.145(b)(3)(i). The USEPA, the Division of Waste Management and the Bureau for Public Health - Environmental Health requires a copy of this notice to be sent to them. **[40 C.F.R. §61.145(b) and 45CSR34]**

3.1.4. **Odor.** No person shall cause, suffer, allow or permit the discharge of air pollutants which cause or contribute to an objectionable odor at any location occupied by the public. **[45CSR§4-3.1 State-Enforceable only.]**

3.1.5. **Standby plan for reducing emissions.** When requested by the Secretary, the permittee shall prepare standby plans for reducing the emissions of air pollutants in accordance with the objectives set forth in Tables I, II, and III of 45CSR11. **[45CSR§11-5.2]**

3.1.6. **Emission inventory.** The permittee is responsible for submitting, on an annual basis, an emission inventory in accordance with the submittal requirements of the Division of Air Quality. **[W.Va. Code § 22-5-4(a)(14)]**

3.1.7. **Ozone-depleting substances.** For those facilities performing maintenance, service, repair or disposal of appliances, the permittee shall comply with the standards for recycling and emissions reduction pursuant to 40 C.F.R. Part 82, Subpart F, except as provided for Motor Vehicle Air Conditioners (MVACs) in Subpart B:

a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the prohibitions and required practices pursuant to 40 C.F.R. §§ 82.154 and 82.156.

b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 C.F.R. § 82.158.

c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 C.F.R. § 82.161.

[40 C.F.R. 82, Subpart F]

3.1.8. **Risk Management Plan.** Should this stationary source, as defined in 40 C.F.R. § 68.3, become subject to Part 68, then the owner or operator shall submit a risk management plan (RMP) by the date specified in 40 C.F.R. § 68.10 and shall certify compliance with the requirements of Part 68 as part of the annual compliance certification as required by 40 C.F.R. Part 70 or 71.
[40 C.F.R. 68]

3.1.9. No person shall cause, suffer, allow or permit fugitive particulate matter to be discharged beyond the boundary lines of the property on which the discharge originates or at any public or residential location, which causes or contributes to statutory air pollution.
[45CSR§17-3.1; State Enforceable Only]

3.2. Monitoring Requirements

3.2.1. Reserved

3.3. Testing Requirements

3.3.1. **Stack testing.** As per provisions set forth in this permit or as otherwise required by the Secretary, in accordance with the West Virginia Code, underlying regulations, permits and orders, the permittee shall conduct test(s) to determine compliance with the emission limitations set forth in this permit and/or established or set forth in underlying documents. The Secretary, or his duly authorized representative, may at his option witness or conduct such test(s). Should the Secretary exercise his option to conduct such test(s), the operator shall provide all necessary sampling connections and sampling ports to be located in such manner as the Secretary may require, power for test equipment and the required safety equipment, such as scaffolding, railings and ladders, to comply with generally accepted good safety practices. Such tests shall be conducted in accordance with the methods and procedures set forth in this permit or as otherwise approved or specified by the Secretary in accordance with the following:

a. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with 40 C.F.R. Parts 60, 61, and 63, if applicable, in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable.

b. The Secretary may on a source-specific basis approve or specify additional testing or alternative testing to the test methods specified in the permit for demonstrating compliance with applicable requirements which do not involve federal delegation. In specifying or approving such alternative testing to the test methods, the Secretary, to the extent possible, shall utilize the same equivalency criteria as would be used in approving such changes under Section 3.3.1.a. of this permit.

c. All periodic tests to determine mass emission limits from or air pollutant concentrations in discharge stacks and such other tests as specified in this permit shall be conducted in accordance with an approved test protocol. Unless previously approved, such protocols shall be submitted to the Secretary in writing at least thirty (30) days prior to any testing and shall contain the

information set forth by the Secretary. In addition, the permittee shall notify the Secretary at least fifteen (15) days prior to any testing so the Secretary may have the opportunity to observe such tests. This notification shall include the actual date and time during which the test will be conducted and, if appropriate, verification that the tests will fully conform to a referenced protocol previously approved by the Secretary.

d. The permittee shall submit a report of the results of the stack test within 60 days of completion of the test. The test report shall provide the information necessary to document the objectives of the test and to determine whether proper procedures were used to accomplish these objectives. The report shall include the following: the certification described in paragraph 3.5.1; a statement of compliance status, also signed by a responsible official; and, a summary of conditions which form the basis for the compliance status evaluation. The summary of conditions shall include the following:

1. The permit or rule evaluated, with the citation number and language.

2. The result of the test for each permit or rule condition.

3. A statement of compliance or non-compliance with each permit or rule condition.

[WV Code §§ 22-5-4(a)(14-15) and 45CSR13]

3.4. Recordkeeping Requirements

3.4.1. **Monitoring information.** The permittee shall keep records of monitoring information that include the following:

a. The date, place as defined in this permit and time of sampling or measurements;

b. The date(s) analyses were performed;

c. The company or entity that performed the analyses;

d. The analytical techniques or methods used;

e. The results of the analyses; and

f. The operating conditions existing at the time of sampling or measurement.

[45CSR§30-5.1.c.2.A.]

3.4.2. **Retention of records.** The permittee shall retain records of all required monitoring data and support information for a period of at least five (5) years from the date of monitoring sample, measurement, report, application, or record creation date. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the permit. Where appropriate, records may be maintained in computerized form in lieu of the above records.
[45CSR§30-5.1.c.2.B.]

3.4.3. **Odors.** For the purposes of 45CSR4, the permittee shall maintain a record of all odor complaints received, any investigation performed in response to such a complaint, and any responsive action(s) taken.
[45CSR§30-5.1.c. State-Enforceable only.]

3.5. Reporting Requirements

3.5.1. **Responsible official.** Any application form, report, or compliance certification required by this permit to be submitted to the DAQ and/or USEPA shall contain a certification by the responsible official that states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate and complete.
[45CSR§§30-4.4. *and* 5.1.c.3.D.]

3.5.2. A permittee may request confidential treatment for the submission of reporting required under 45CSR§30-5.1.c.3. pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
[45CSR§30-5.1.c.3.E.]

3.5.3. Except for the electronic submittal of the annual certification to the USEPA as required in 3.5.5 below, all notices, requests, demands, submissions and other communications required or permitted to be made to the Secretary of DEP and/or USEPA shall be made in writing and shall be deemed to have been duly given when delivered by hand, mailed first class or by private carrier with postage prepaid to the address(es) set forth below or to such other person or address as the Secretary of the Department of Environmental Protection may designate:

If to the DAQ:

Director
WVDEP
Division of Air Quality
601 57th Street SE
Charleston, WV 25304

Phone: 304/926-0475
FAX: 304/926-0478

If to the US EPA:

Associate Director
Office of Air Enforcement and Compliance Assistance (3AP20)
U. S. Environmental Protection Agency
Region III
1650 Arch Street
Philadelphia, PA 19103-2029

3.5.4. **Certified emissions statement.** The permittee shall submit a certified emissions statement and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality.
[45CSR§30-8.]

3.5.5. **Compliance certification.** The permittee shall certify compliance with the conditions of this permit on the forms provided by the DAQ. In addition to the annual compliance certification, the permittee may be required to submit certifications more frequently under an applicable requirement of this permit. The annual certification shall be submitted to the DAQ and USEPA on or before March 15 of each year, and shall certify compliance for the period ending December 31. The annual certification to the USEPA shall be submitted in electronic format only. It shall be submitted by e-mail to the following address: R3_APD_Permits@epa.gov. The permittee shall maintain a copy of the certification on site for five (5) years from submittal of the certification.
[45CSR§30-5.3.e.]

3.5.6. **Semi-annual monitoring reports.** The permittee shall submit reports of any required monitoring on or before September 15 for the reporting period January 1 to June 30 and on or before March 15 for the reporting period July 1 to December 31. All instances of deviation from permit requirements must be clearly identified in such reports. All required reports must be certified by a responsible official consistent with 45CSR§30-4.4.
[45CSR§30-5.1.c.3.A.]

3.5.7. **Emergencies.** For reporting emergency situations, refer to Section 2.17 of this permit.

3.5.8. **Deviations.**

a. In addition to monitoring reports required by this permit, the permittee shall promptly submit supplemental reports and notices in accordance with the following:

1. Any deviation resulting from an emergency or upset condition, as defined in 45CSR§30-5.7., shall be reported by telephone or telefax within one (1) working day of the date on which the permittee becomes aware of the deviation, if the permittee desires to assert the affirmative defense in accordance with 45CSR§30-5.7. A written report of such deviation, which shall include the probable cause of such deviations, and any corrective actions or preventative measures taken, shall be submitted and certified by a responsible official within ten (10) days of the deviation.

2. Any deviation that poses an imminent and substantial danger to public health, safety, or the environment shall be reported to the Secretary immediately by telephone or telefax. A written report of such deviation, which shall include the probable cause of such deviation, and any corrective actions or preventative measures taken, shall be submitted by the responsible official within ten (10) days of the deviation.

3. Deviations for which more frequent reporting is required under this permit shall be reported on the more frequent basis.

4. All reports of deviations shall identify the probable cause of the deviation and any corrective actions or preventative measures taken.

[45CSR§30-5.1.c.3.C.]

b. The permittee shall, in the reporting of deviations from permit requirements, including those attributable to upset conditions as defined in this permit, report the probable cause of such deviations and any corrective actions or preventive measures taken in accordance with any rules of the Secretary.
[45CSR§30-5.1.c.3.B.]

3.5.9. **New applicable requirements.** If any applicable requirement is promulgated during the term of this permit, the permittee will meet such requirements on a timely basis, or in accordance with a more detailed schedule if required by the applicable requirement.
[45CSR§30-4.3.h.1.B.]

3.6. Compliance Plan

3.6.1. None

3.7. Permit Shield

3.7.1. The permittee is hereby granted a permit shield in accordance with 45CSR§30-5.6. The permit shield applies provided the permittee operates in accordance with the information contained within this permit.

3.7.2. The following requirements specifically identified are not applicable to the source based on the determinations set forth below. The permit shield shall apply to the following requirements provided the conditions of the determinations are met.

45CSR4	*To Prevent and Control the Discharge of Air Pollutants into the Open Air Which Cause or Contributes to an Objectionable Odor or Odors:* This State Rule shall not apply to the following source of objectionable odor until such time as feasible control methods are developed: Internal combustion engines.
45CSR10	*To Prevent and Control Air Pollution from the Emission of Sulfur Oxides:* The sulfur requirement for fuel burning units do not apply to indirect combustion sources at this site because there are no units with design heat inputs above 10 MMBtu/hr. Therefore they are exempt in accordance with 45CSR§10-10.1
45CSR21	*To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds:* All storage tanks at the station, which are listed as insignificant sources, are below 40,000 gallons in capacity which exempts the facility from 45CSR§21-28. The compressor station is not engaged in the extraction or fractionation of natural gas which exempts the facility from 45CSR§21-29.
45CSR27	*To Prevent and Control the Emissions of Toxic Air Pollutants:* Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment "used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight."
40 C.F.R. Part 60 Subpart IIII	*Standards of Performance for Stationary Compression Ignition Internal Combustion Engines*: There are no compression ignition engines at this facility.
40 C.F.R. Part 60 Subpart OOOO	Standards of Performance for Crude Oil and Natural Gas Production, Transmission, and Distribution for which Construction, Modification, or Reconstruction Commenced after August 23, 2011 and on or before September 18, 2015. The Storage Vessel requirements defined for transmission sources were evaluate for one tank A19, which was installed potentially after the applicability date in 2012. However the emission estimates showed insignificant levels below the 6 ton/yr applicability level for VOCs. All other vessels were commenced construction, modification or reconstruction prior to August 23, 2011 accordance with [40CFR§60.5365(e)]
40 C.F.R. Part 60 Subpart OOOOa	Standards of Performance for Crude Oil and Natural Facilities for which Construction, Modification, or Reconstruction Commenced after September 18, 2015. The GHG and VOC requirements defined by this NSPS are not applicable to this site because all affected sources

	commenced constructed prior to September 18, 2015 in accordance with [40CFR§60.5365a]
40 C.F.R. Part 60 Subpart Dc	Standards of Performance for Steam Generating Units: The heating system boiler and line heater at this facility are less than 10 MMBtu/hr design heat capacity, which is below the applicability criteria stated in [40CFR60.40c(a)].
40 C.F.R. Part 60 Subpart K and Ka	Standards of Performance for Petroleum Liquid Storage Vessels. All tanks storing VOL within the applicable size range, 40,000 gallons, commenced construction after the applicability date of July 23, 1984. [40CFR60.110a(a)]
40 C.F.R. Part 60 Subpart Kb	Standards of Performance for Petroleum Liquid Storage Vessels. All tanks at the station are less than 19,813 gallons with the exception of pipeline liquids tank A14 which is above 39,890 gallons in capacity but are exempt due to storing a liquid with a maximum true vapor pressure less than 3.5 kPa. Therefore, all storage vessels are exempt from this subpart as stated in the applicability criteria of [40CFR§§60.110b(a) and (b)]
40 C.F.R. Part 60 Subpart KKK	Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant(s). The station is not engaged in the extraction or fractionation of natural gas liquids from field gas, the fractionation of mixed natural gas liquids from field gas, the fractionation of mixed natural gas liquids to natural gas products, or both. As a result, the Station has no affected sources operating within this source category.
40 C.F.R. Part 60 Subpart GG	The provisions of this subpart are not applicable because there are no turbines installed at this facility
40 C.F.R. Part 63 Subpart YYYY	The provisions of this subpart are not applicable because there are no turbines installed at this Major HAP source.
40 C.F.R. Part 63 Subpart HHH	National Emission Standards for Hazardous Air Pollutants From Natural Gas Transmission and Storage Facilities. The Transmission Station is not subject to Subpart HHH since there are no affected dehydration units utilized at this site.
40 C.F.R. Part 64 CAM	The compliance assurance monitoring provisions of Part 64 are not applicable due there being no add-on controls at this facility. [40CFR§64.2(a)(2)]

3.8. Emergency Operating Scenario

For emergency situations which interrupt the critical supply of natural gas to the public, and which pose a life threatening circumstance to the customer, the permittee is allowed to temporarily replace failed engine(s) as long as all of the following conditions are met:

a. The replacement engine(s) is only allowed to operate until repair of the failed engine(s) is complete, but under no circumstance may the replacement engine(s) operate in excess of sixty (60) days;

b. Both the replacement engine(s) and the repaired failed engine(s) shall not operate at the same time with the exception of any necessary testing of the repaired engine(s) and this testing may not exceed five (5) hours;

c. Potential hourly emissions from the replacement engine(s) are less than or equal to the potential hourly emissions from the engine(s) being replaced;

d. Credible performance emission test data verifying the emission rates associated with the operation of the

substitute engine shall be submitted to the Director within five (5) days;

e. The permittee must provide written notification to the Director within five (5) days of the replacement. This notification must contain:

i. Information to support the claim of life threatening circumstances to justify applicability of this emergency provision;

ii. Identification of the engine(s) being temporarily replaced;

iii. The design parameters of the replacement engine(s) including, but not limited to, the design horsepower and emission factors;

iv. Projected duration of the replacement engine(s); and

v. The appropriate certification by a responsible official.

[45CSR§30-12.7]

4.0 Miscellaneous Indirect Natural Gas Heaters and Boilers less than 10 MMBtu/hr **[Emission Point ID(s): (BL3, H2, H3)]**

4.1. Limitations and Standards

4.1.1. No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR§2-3.1 and 45CSR13, Permit R13-2087, Condition 4.1.7]

4.1.2. Compliance with the visible emission requirements of 45CSR§2-3.1 (Section 4.1.1 of this permit) shall be determined in accordance with 40 C.F.R. Part 60, Appendix A, Method 9 or by using measurements from continuous opacity monitoring systems approved by the Director. The Director may require the installation, calibration, maintenance and operation of continuous opacity monitoring systems and may establish policies for the evaluation of continuous opacity monitoring results and the determination of compliance with the visible emission requirements of 45CSR§2-3.1 (Section 4.1.1 of this permit). Continuous opacity monitors shall not be required on fuel burning units which employ wet scrubbing systems for emission control.
[45CSR§2-3.2.]

4.2. Monitoring Requirements

4.2.1. At such reasonable times as the Secretary may designate, the permittee shall conduct visible emissions observations using Method 22 for the purpose of demonstrating compliance with Section 4.1.1. If visible emissions are observed, the permittee shall conduct a Method 9 reading unless the cause for visible emissions is corrected within 24 hours. Records of observation will be kept for at least 5 years from the date of observation.
[45CSR§30-5.1.c.]

4.3. Testing Requirements

4.3.1. N/A

4.4. Recordkeeping Requirements

4.4.1. N/A

4.5. Reporting Requirements

4.5.1. N/A

5.0 40 C.F.R. 63, Subpart ZZZZ MACT Requirements for New Emergency Reciprocating Internal Combustion SI RICE Engine(s) > 500 HP at Major HAP Sources [Emission Point ID (G3)]

5.1 Limitations and Standards

5.1.1. The permittee shall comply with the following general requirements:

a. The permittee must be in compliance with the operating limitations in this subpart that apply to the permittee at all times.

b. At all times the permittee must operate and maintain any affected source, including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. The general duty to minimize emissions does not require the permittee to make any further efforts to reduce emissions if required levels have been achieved. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR §63.6605]

5.1.2. If you own or operate an emergency stationary RICE, you must operate the emergency stationary RICE according to the requirements in paragraphs (f)(1) through (4) of this section. In order for the engine to be considered an emergency stationary RICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1) through (4) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (4) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary RICE in emergency situations.

(2) You may operate your emergency stationary RICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraphs (f)(3) and (4) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).

(i) Emergency stationary RICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency RICE beyond 100 hours per calendar year.

(ii) Emergency stationary RICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §63.14), or other authorized entity as determined by the Reliability Coordinator, has declared an

Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary RICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary RICE located at major sources of HAP may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. The 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to supply power to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

[40 C.F.R. § 63.6640(f)][45CSR13, R13-2087, Condition 7.3.1]

5.2. Monitoring Requirements

5.2.1. N/A

5.3. Testing Requirements

5.3.1. N/A

5.4. Recordkeeping Requirements

5.4.1. **N/A**

5.5. Reporting Requirements

5.5.1. If you own or operate an emergency stationary RICE with a site rating of more than 100 brake HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §63.6640(f)(2)(ii) and (iii) or that operates for the purpose specified in §63.6640(f)(4)(ii), you must submit an annual report according to the requirements in paragraphs (h)(1) through (3) of this section.

(1) The report must contain the following information:

(i) Company name and address where the engine is located.

(ii) Date of the report and beginning and ending dates of the reporting period.

(iii) Engine site rating and model year.

(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.

(v) Hours operated for the purposes specified in §63.6640(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §63.6640(f)(2)(ii) and (iii).

(vii) Hours spent for operation for the purpose specified in §63.6640(f)(4)(ii), including the date, start time, and end time for engine operation for the purposes specified in §63.6640(f)(4)(ii). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.

(viii) If there were no deviations from the fuel requirements in §63.6604 that apply to the engine (if any), a statement that there were no deviations from the fuel requirements during the reporting period.

(ix) If there were deviations from the fuel requirements in §63.6604 that apply to the engine (if any), information on the number, duration, and cause of deviations, and the corrective action taken.

(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.

(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §63.13.

[40 CFR §63.6650(h)]

5.5.2. If you are required to submit an Initial Notification but are otherwise not affected by the requirements of this subpart, in accordance with §63.6590(b), your notification should include the information in §63.9(b)(2)(i) through (v), and a statement that your stationary RICE has no additional requirements and explain the basis of the exclusion (for example, that it operates exclusively as an emergency stationary RICE if it has a site rating of more than 500 brake HP located at a major source of HAP emissions).

[40 CFR §63.6645(f)][45CSR13, R13-2087, Condition 7.5.1 and 7.6.1]

5.6. Compliance Plan

5.6.1 N/A

6.0 40 C.F.R. 63, Subpart DDDDD MACT Requirements for Boiler(s) and Process Heater(s) [Emission Points IDs: (BL3, H2, H5)]

6.1. Limitations and Standards

6.1.1. Subpart DDDDD applies to new, reconstructed, and existing affected sources as described in paragraphs (a)(1) and (2) of this section.

(1) The affected source of this subpart is the collection at a major source of all existing industrial, commercial, and institutional boilers and process heaters within a subcategory as defined in §63.7575.
[40 CFR §63.7490(a)(1)]

6.1.2. If you have an existing boiler or process heater, you must comply with this subpart no later than January 31, 2016, except as provided in §63.6(i).
[40 CFR §63.7495(b)]

6.1.3. The boiler and process heaters covered by this permit must meet the requirements in paragraphs (a)(1) and (3) of this section as follows, except as provided in paragraphs (b), through (e) of this section. You must meet these requirements at all times the affected unit is operating, except as provided in paragraph (f) of this section.

(1) You must meet the work practice standard in Table 3, Items 1, 2, and 4, except as provided under §63.7522

(2) If the unit is . . .	The permittee must meet the following . . .
1. A new or existing boiler or process heater with a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 million Btu per hour in any of the following subcategories: unit designed to burn gas 1; unit designed to burn gas 2 (other); or unit designed to burn light liquid, or a limited use boiler or process heater	Conduct a tune-up of the boiler or process heater every 5 years as specified in §63.7540. **[BL3, H5]**
2. A new or existing boiler or process heater without a continuous oxygen trim system and with heat input capacity of less than 10 million Btu per hour in the unit designed to burn heavy liquid or unit designed to burn solid fuel subcategories; or a new or existing boiler or process heater with heat input capacity of less than 10 million Btu per hour, but greater than 5 million Btu per hour, in any of the following subcategories: unit designed to burn gas 1; unit designed to burn gas 2 (other); or unit designed to burn light liquid	Conduct a tune-up of the boiler or process heater biennially as specified in §63.7540. **[H2]**
4. An existing boiler or process heater located at a major source facility, not including limited use units	Must have a one-time energy assessment performed by a qualified energy assessor. An energy assessment completed on or after January 1, 2008, that meets or is amended to meet

	the energy assessment requirements in this table, satisfies the energy assessment requirement. A facility that operated under an energy management program developed according to the ENERGY STAR guidelines for energy management or compatible with ISO 50001 for at least one year between January 1, 2008 and the compliance date specified in §63.7495 that includes the affected units also satisfies the energy assessment requirement. The energy assessment must include the following with extent of the evaluation for items a. to e. appropriate for the on-site technical hours listed in §63.7575:
	a. A visual inspection of the boiler or process heater system.
	b. An evaluation of operating characteristics of the boiler or process heater systems, specifications of energy using systems, operating and maintenance procedures, and unusual operating constraints.
	c. An inventory of major energy use systems consuming energy from affected boilers and process heaters and which are under the control of the boiler/process heater owner/operator.
	d. A review of available architectural and engineering plans, facility operation and maintenance procedures and logs, and fuel usage.
	e. A review of the facility's energy management program and provide recommendations for improvements consistent with the definition of energy management program, if identified.

Note: Item 4 of the Table applies to process heaters **[H2]** only, due to it being considered an existing unit under the applicable subpart.

(3) At all times, you must operate and maintain any affected source (as defined in §63.7490), including associated air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions. Determination of whether such operation and maintenance procedures are being used will be based on information available to the Administrator that may include, but is not limited to, monitoring results, review of operation and maintenance procedures, review of operation and maintenance records, and inspection of the source.

[40 CFR§§63.7500(a)(1) and (3)]

6.1.4. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in §63.7540. Boilers and process heaters in the units designed to burn gas 1 fuels subcategory are not subject to the emission limits in Tables 1 and 2 or 11 through 13 to this subpart, or the operating limits in Table 4 to this subpart.
[40 CFR§63.7500(e)] [BL3 and H5]

6.1.5. For existing affected sources (as defined in §63.7490), you must complete an initial tune-up by following the procedures described in §63.7540(a)(10)(i) through (vi) no later than the compliance date specified in §63.7495, except as specified in paragraph (j) of this section. You must complete the one-time energy assessment specified in Table 3 to this subpart no later than the compliance date specified in §63.7495 (January 31, 2016).

[40 CFR§63.7510(e)] [H2]

6.1.6. The permittee must conduct the tune-up while burning the type of fuel (or fuels in case of units that routinely burn a mixture) that provided the majority of the heat input to the boiler or process heater over the 12 months prior to the tune-up.

a. As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

b. Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

c. Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;

d. Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOX requirement to which the unit is subject;

e. Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

f. Maintain on-site and submit, if requested by the Administrator, a report containing the following information:

1. The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;

2. A description of any corrective actions taken as a part of the tune-up; and

3. The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

[40 CFR§63.7540(a)(10)]

6.1.7. If the permittee’s boiler or process heater has a continuous oxygen trim system that maintains an optimum air to fuel ratio, or a heat input capacity of less than or equal to 5 million Btu per hour and the unit is in the units designed to burn gas 1; units designed to burn gas 2 (other); or units designed to burn light liquid subcategories, or meets the definition of limited-use boiler or process heater in 40CFR§63.7575, the permittee must conduct a tune-up of the boiler or process heater every 5 years as specified in condition 6.1.5 to demonstrate continuous compliance. The permittee may delay the burner inspection specified in condition 6.1.5.a until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at

least once every 72 months. If an oxygen trim system is utilized on a unit without emission standards to reduce the tune-up frequency to once every 5 years, set the oxygen level no lower than the oxygen concentration measured during the most recent tune-up.
[45CSR34; 40 CFR§63.7540(a)(12)]

6.1.8. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.
[45CSR34; 40 CFR§63.7540(a)(13)]

6.2. Monitoring Requirements

6.2.1. Reserved

6.3. Testing Requirements

6.3.1. If you are required to meet an applicable tune-up work practice standard, you must conduct an annual, biennial, or 5-year performance tune-up according to §63.7540(a)(10), (11), or (12), respectively. Each annual tune-up specified in §63.7540(a)(10) must be no more than 13 months after the previous tune-up. Each biennial tune-up specified in §63.7540(a)(11) must be conducted no more than 25 months after the previous tune-up. Each 5-year tune-up specified in §63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed affected source (as defined in §63.7490), the first annual, biennial, or 5-year tune-up must be no later than 13 months, 25 months, or 61 months, respectively, after April 1, 2013 or the initial startup of the new or reconstructed affected source, whichever is later.
[40 CFR§63.7515(d)]

6.4. Recordkeeping Requirements

6.4.1. The permittee must keep a copy of each notification and report that you submitted to comply with 40 C.F.R. 63, Subpart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 40CFR§63.10(b)(2)(xiv).
[40 CFR§63.7555(a)(1)]

6.4.2. The permittee shall maintain records as follows:

a. Records must be in a form suitable and readily available for expeditious review, according to 40CFR§63.10(b)(1).

b. As specified in 40CFR§63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.

c. The permittee must keep each record on site, or they must be accessible from on site (for example, through a computer network), for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40CFR§63.10(b)(1). The permittee may keep the records off site for the remaining 3 years.

[45CSR34; 40 CFR§63.7560]

6.5. Reporting Requirements

6.5.1 The permittee shall demonstrate initial compliance by including with the Notification of Compliance Status a signed certification that either the energy assessment was completed according to Table 3 to this subpart, and that the assessment is an accurate depiction of your facility at the time of the assessment, or that the maximum number of on-site technical hours specified in the definition of energy assessment applicable to the facility has been expended.

You must submit the Notification of Compliance Status containing the results of the initial compliance demonstration according to the requirements in §63.7545(e).
[40 CFR§63.7530(e) and (f)] [H2]

6.5.2. If you are required to conduct an initial compliance demonstration as specified in §63.7530, you must submit a Notification of Compliance Status according to §63.9(h)(2)(ii). For the initial compliance demonstration for each boiler or process heater, you must submit the Notification of Compliance Status, including all performance test results and fuel analyses, before the close of business on the 60th day following the completion of all performance test and/or other initial compliance demonstrations for all boiler or process heaters at the facility according to §63.10(d)(2). The Notification of Compliance Status report must contain all the information specified in paragraphs (e)(1) through (8) of this section, as applicable. If you are not required to conduct an initial compliance demonstration as specified in §63.7530(a), the Notification of Compliance Status must only contain the information specified in paragraphs (e)(1) and (8) of this section and must be submitted within 60 days of the compliance date specified at §63.7495(b).

(1) A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with this subpart, description of the fuel(s) burned, including whether the fuel(s) were a secondary material determined by you or the EPA through a petition process to be a non-waste under §241.3 of this chapter, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of §241.3 of this chapter, and justification for the selection of fuel(s) burned during the compliance demonstration.

(8) In addition to the information required in §63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:
(i) "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR part 63 subpart DDDDD at this site according to the procedures in §63.7540(a)(10)(i) through (vi)."
(ii) "This facility has had an energy assessment performed according to §63.7530(e)."
(iii) Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that qualify for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: "No secondary materials that are solid waste were combusted in any affected unit."
[40 CFR§§63.7545(e)(1) & (8)]

6.5.3. Unless the EPA Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report, according to paragraph (h) of this section, by the date in Table 9 to this subpart and according to the requirements in paragraphs (b)(1) through (4) of this section. For units that are subject only to a requirement to conduct subsequent annual, biennial, or 5-year tune-up according to §63.7540(a)(10), (11), or (12), respectively, and not subject to emission limits or Table 4 operating limits, you may submit only an annual, biennial, or 5-year compliance report, as applicable, as specified in paragraphs (b)(1) through (4) of this section, instead of a semi-annual compliance report.

(5) For each affected source that is subject to permitting regulations pursuant to part 70 or part 71 of this chapter, and if the permitting authority has established dates for submitting semiannual reports pursuant to 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established in the permit instead of according to the dates in paragraphs (b)(1) through (4) of this section.

[40 CFR§63.7550(b)(5)]

6.5.4. (c) A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule.

(1) If the facility is subject to the requirements of a tune up you must submit a compliance report with the information in paragraphs (c)(5)(i) through (iii) of this section, (xiv) and (xvii) of this section as follows:

(5)(i) Company and Facility name and address.
(ii) Process unit information, emissions limitations, and operating parameter limitations.
(iii) Date of report and beginning and ending dates of the reporting period.

(xiv) Include the date of the most recent tune-up for each unit subject to only the requirement to conduct an annual, biennial, or 5-year tune-up according to §63.7540(a)(10), (11), or (12) respectively. Include the date of the most recent burner inspection if it was not done annually, biennially, or on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.

(xviii) For each instance of startup or shutdown include the information required to be monitored, collected, or recorded according to the requirements of §63.7555(d).

[40 CFR§63.7550(c)]

6.6. Compliance Plan

6.6.1 N/A

7.0 40 C.F.R. 60, Subpart JJJJ Requirements for Emergency Generators [Emission Point ID: (G3)]

7.1 Limitations and Standards

7.1.1. The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary spark ignition (SD internal combustion engines (ICE) as specified in paragraphs (a.1) through (6) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.

a. Owners and operators of stationary SI ICE that commenced construction after June 12, 2006, where the stationary SI ICE are manufactured:

2. On or after January 1, 2008, for lean bum engines with a maximum engine power greater than or equal to 500 HP and less than 1,350 HP; [40CFR§60.4230(a)(4)(ii)]

[40 C.F.R. §60.4230(a)(4)(ii) and 45CSR13 Permit R13-2087, Condition 6.1.1]

7.1.2 Owners and operators of stationary SI ICE with a maximum engine power greater than or equal to 75 KW (100 HP) (except gasoline and rich bum engines that use LPG) must comply with the emission standards in Table 1 to this subpart for their stationary SI ICE.

Table 7.1.2: Emission standards for Emergency Generators

Equipment ID No.	Engine type and fuel	Maximum engine power	Manufacture date	Emission standards					
				g/HP-hr			ppmvd at 15% O_2		
				NOx	CO	VOC[1]	NOx	CO	IVOC
008G3	Emergency	HP>130		2.0	4.0	1.0	160	540	86

a. Owners and operators of stationary non-certified SI engines may choose to comply with the emission standards in units of either g/HP-hr or ppmvd at 15 percent O_2.
d. For purposes of this subpart, when calculating emissions of volatile organic compounds, emission of formaldehyde should not be included.

[**40 CFR§ 60.4233(e) and 45CSR13 Permit R13-2087, Condition 6.1.2]**

7.1.3. (a) Starting on July 1, 2010, if the emergency stationary SI internal combustion engine that is greater than or equal to 500 HP that was built on or after July 1, 2010, does not meet the standards applicable to non-emergency engines, the owner or operator must install a non-resettable hour meter.
[40 C.F.R. §60.4237(a) and 45CSR13 Permit R13-2087, Condition 6.1.3]

7.1.4. (d) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (d)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (d)(1) through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (d)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

(1) There is no time limit on the use of emergency stationary ICE in emergency situations.

(2) You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (d)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any

operation for non-emergency situations as allowed by paragraph (d)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (d)(2).

(i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.

(ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see §60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.

(iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.

(3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (d)(2) of this section. Except as provided in paragraph (d)(3)(i) of this section, the 50 hours per year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.

(i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:

(A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;
(B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
(C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
(D) The power is provided only to the facility itself or to support the local transmission and distribution system.
(E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

[40 C.F.R. § 60.4243(d) and 45CSR13 Permit R13-2087, Condition 6.4.2]

7.2. Monitoring Requirements

7.2.1. (b) For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1,

2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter.

The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
[40 C.F.R. §60.4245(b) and 45CSR13 Permit R13-2087, Condition 6.2.1]

7.3. Testing Requirements

7.3.1. (b) If you are an owner or operator of a stationary SI internal combustion engine and must comply with the emission standards specified in §60.4233(d) or (e), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) and (2) of this section.

(2) Purchasing a non-certified engine and demonstrating compliance with the emission standards specified in §60.4233(d) or (e) and according to the requirements specified in §60.4244, as applicable, and according to paragraphs (b)(2)(i) and (ii) of this section.

(ii) If you are an owner or operator of a stationary SI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test and conduct subsequent performance testing every 8,760 hours or 3 years, whichever comes first, thereafter to demonstrate compliance.

[40 C.F.R. §60.4243(b)(1), (b)(2) and 45CSR13 Permit R13-2087, Condition 6.4.1]

7.3.2. The permittee shall utilize the test methods as specified within 40 CFR 60.4244 for the initial and subsequent performance testing compliance demonstrations.
[40 C.F.R. §60.4244 and 45CSR13 Permit R13-2087, Condition 6.5.1]

7.4. Recordkeeping Requirements

7.4.1. (a) Owners and operators of all stationary SI ICE must keep records of the information in paragraphs (a)(1) through (4) of this section.

(1) All notifications submitted to comply with this subpart and all documentation supporting any notification.
(2) Maintenance conducted on the engine.

(4) If the stationary SI internal combustion engine is not a certified engine or is a certified engine operating in a non-certified manner and subject to §60.4243(a)(2), documentation that the engine meets the emission standards.

[40 CFR §60.4245(a) and 45CSR13 Permit R13-2087, Condition 6.6.1]

7.5. Reporting Requirements

7.5.1. For all stationary SI emergency ICE greater than or equal to 500 HP manufactured on or after July 1, 2010, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than or equal to 130 HP and less than 500 HP manufactured on or after July 1, 2011 that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. For all stationary SI emergency ICE greater than 25 HP and less than 130 HP manufactured on or after

July 1, 2008, that do not meet the standards applicable to non-emergency engines, the owner or operator of must keep records of the hours of operation of the engine that is recorded through the non-resettable hour meter. The owner or operator must document how many hours are spent for emergency operation, including what classified the operation as emergency and how many hours are spent for non-emergency operation.
[40 CFR §60.4245(b) and 45CSR13 Permit R13-2087, Condition 6.6.2]

7.5.2. Owners and operators of stationary SI ICE greater than or equal to 500 HP that have not been certified by an engine manufacturer to meet the emission standards in §60.4231 must submit an initial notification as required in §60.7(a)(1). The notification must include the information in paragraphs (c)(1) through (5) of this section.
(1) Name and address of the owner or operator;
(2) The address of the affected source;
(3) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
(4) Emission control equipment; and
(5) Fuel used.
[40 CFR §60.4245(c) and 45CSR13 Permit R13-2087, Condition 6.6.2]

7.5.3. Owners and operators of stationary SI ICE that are subject to performance testing must submit a copy of each performance test as conducted in §60.4244 within 60 days after the test has been completed.
[40 CFR §60.4245(d) and 45CSR13 Permit R13-2087, Condition 6.6.3]

7.5.4. If you own or operate an emergency stationary SI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in §60.4243(d)(2)(ii) and (iii) or that operates for the purposes specified in §60.4243(d)(3)(i), you must submit an annual report according to the requirements in paragraphs (e)(1) through (3) of this section.
(1) The report must contain the following information:
(i) Company name and address where the engine is located.
(ii) Date of the report and beginning and ending dates of the reporting period.
(iii) Engine site rating and model year.
(iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
(v) Hours operated for the purposes specified in §60.4243(d)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in §60.4243(d)(2)(ii) and (iii).
(vi) Number of hours the engine is contractually obligated to be available for the purposes specified in §60.4243(d)(2)(ii) and (iii).
(vii) Hours spent for operation for the purposes specified in §60.4243(d)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in §60.4243(d)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
(2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
(3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (*www.epa.gov/cdx*). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in §60.4.
[40 CFR §60.4245(e)]

7.6. Compliance Plan

7.6.1 N/A

8.0 45CSR13, Permit Requirements R13-2087 [Emission Point ID: (H2)]

8.1. Limitations and Standards

8.1.1. Maximum air pollutant emission rates from the listed emission point I.D.'s shall not exceed the following limits:

Emission Point ID	Equipment Description	Pollutant	Emission Rates	
			(lblhr)	(tons/yr)(l)
H2	9.38 MMBtu/hr Regeneration Gas Heater (HTR2)	NOx	1.13	4.95
		co	0.35	1.53
		voc	0.05	0.22
		sox	0.53	0.03
		PM_{10}	0.02	0.09

(1) Based on 8,760 hr/yr of operation.

[45CSR13 Permit R13-2087, Condition 4.1.1]

8.1.2. The 9.38 MM Btu/hr regeneration gas heater (HTR2) shall consume no more than 9,196 scf of natural gas per hour or 8.06 x 10^7 scf of natural gas per year.

[45CSR13 Permit R13-2087, Condition 4.1.2]

8.1.3. The pertinent sections of 45CSR13 applicable to this facility include, but are not limited to, the following:

§45-13-6.1
At the time a stationary source is alleged to be in compliance with an applicable emission standard and at reasonable times to be determined by the Secretary thereafter, appropriate tests consisting of visual determinations or conventional in-stack measurements or such other tests the Secretary may specify shall be conducted to determine compliance.

§45-13-10.2
The Secretary may suspend or revoke a permit if, after six (6) months from the date of issuance, the holder of the permit cannot provide the Secretary, at the Secretary's request, with written proof of a good faith effort that construction, modification, or relocation, if applicable, has commenced. Such proof shall be provided not later than thirty (30) days after the Secretary's request. If construction or modification of a stationary source is discontinued for a period of eighteen (18) months or longer, the Secretary may suspend or revoke the permit.

§45-13-10.3
The Secretary may suspend or revoke a permit or general permit registration if the plans and

specifications upon which the approval was based or the conditions established in the permit are not adhered to. Upon notice of the Secretary's intent to suspend, modify or revoke a permit, the permit holder may request a conference with the Secretary in accordance with the provisions of W.Va Code § 22-5-5 to show cause why the permit or general permit should not be suspended, modified or revoked.

[45CSR13 Permit R13-2087, Condition 4.1.8]

8.2. Monitoring Requirements

8.2.1. N/A

8.3. Testing Requirements

8.3.1. Upon request, tests to determine compliance with the emission limitations set forth in this permit shall be conducted in accordance with the methods as set forth below. The Secretary may require a different test method or approve an alternative method in light of any technology advancements that may occur. Compliance testing shall be conducted at, or near, 100% of the peak load. The permittee may request an alternative test procedure with a written submittal (protocol) to the Secretary.

a. Tests to determine compliance with PM emission limits shall be conducted in accordance with Method 5, SA, 5B, SC, SD, SE, SF, SG, or SH as set forth in 40 CFR 60, Appendix A.

b. Tests to determine compliance with SO_2 emission limits shall be conducted in accordance with Method 6, 6A, 6B, or 6C as set forth in 40 CFR 60, Appendix A.

c. Tests to determine compliance with CO emission limits shall be conducted in accordance with Method 10, 10A, or 10B as set forth in 40 CFR 60, Appendix A.

d. Tests to determine compliance with NOx emission limits shall be conducted in accordance with Method 7, 7A, 7B, 7C, 7D, or 7E as set forth in 40 CFR 60, Appendix A.

e. Tests to determine compliance with VOC emission limits shall be conducted in accordance with Method 25, or 25A as set forth in 40 CFR 60, Appendix A.

f. Tests to determine compliance with Opacity of emissions shall be conducted in accordance with Method 9 as set forth in 40 CFR 60, Appendix A.

[45CSR13 Permit R13-2087, Condition 4.2.1]

8.3.2. With regard to the emissions testing required by the WV Division of Environmental Protection, Division of Air Quality (DAQ), the permittee shall submit to the Secretary of the DAQ a test protocol detailing the proposed test methods, date, and time testing is to take place, testing locations, and any other relevant information. The test protocol must be received by the Secretary no less than thirty (30) days prior to the date the testing is to take place. The Secretary shall be notified at least fifteen (15) days in advance of the actual dates and times during which the tests will be conducted. The results of emissions testing shall be submitted to the DAQ within thirty (30) days of completion of testing.

[45CSR13 Permit R13-2087, Condition 4.2.2]

9.0 45CSR13, Permit Requirements R13-2087 [Emission Point ID: (H5)]

9.1. Limitations and Standards

9.1.1. Line Heater (HTR5; H5) shall replace Line Heater (HTR3; H3). Line Heater (HTR3; H3) shall be removed from service.
[45CSR13 Permit R13-2087, Condition 8.1.1]

9.1.2. Line Heater (HTR5; H5) shall bum only natural gas (fuel subcategory: gas 1).
[45CSR13 Permit R13-2087, Condition 8.1.2]

9.1.3. As the annual emission limits given in Table 8.1.4. are based on operating 8,760 hr/yr at a maximum design heat input capacity of 0.12MM Btu/hr, there is no limit on the annual hours of operation or fuel usage for Line Heater (HTR5; H5).
[45CSR13 Permit R13-2087, Condition 8.1.3]

9.1.4. The maximum combustion exhaust emissions from Line Heater (HTR5; H5) shall not exceed the limits given in the following table:

Table 8.1.4.: Line Heater (HTR5; H5) Emission Limits.

Pollutant	Hourly (lb/hr)	Annual (lb/yr)
CO	0.01	0.04
NOx	0.01	0.05

[45CSR13 Permit R13-2087, Condition 8.1.4]

9.1.5. 45CSR2
No person shall cause, suffer, allow or permit emission of smoke and/or particulate matter into the open air from any fuel burning unit which is greater than ten (10) percent opacity based on a six minute block average.
[45CSR13 Permit R13-2087, Condition 8.1.5]

9.1.6. 40 CFR 63, Subpart DDDDD
Boilers and process heaters in the units designed to bum gas 1 fuels subcategory with a heat input capacity of less than or equal to 5 million Btu per hour must complete a tune-up every 5 years as specified in §63.7540. Boilers and process heaters in the units designed to bum gas 1 fuels subcategory are not subject to the emission limits in Table1 and 2 or 11 through 13 to this subpart, or the operating limits in Table 4 to this subpart.

[45CSR13 Permit R13-2087, Condition 8.1.6]

9.1.7. Tune-up

(a)(10) (i) As applicable, inspect the burner, and clean or replace any components of the burner as necessary (you may perform the burner inspection any time prior to the tune-up or delay the burner inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the

burner inspection until the first outage, not to exceed 36 months from the previous inspection. At units where entry into a piece of process equipment or into a storage vessel is required to complete the tune-up inspections, inspections are required only during planned entries into the storage vessel or process equipment;

(ii) Inspect the flame pattern, as applicable, and adjust the burner as necessary to optimize the flame pattern. The adjustment should be consistent with the manufacturer's specifications, if available;

(iii) Inspect the system controlling the air-to-fuel ratio, as applicable, and ensure that it is correctly calibrated and functioning properly (you may delay the inspection until the next scheduled unit shutdown). Units that produce electricity for sale may delay the inspection until the first outage, not to exceed 36 months from the previous inspection;

(iv) Optimize total emissions of CO. This optimization should be consistent with the manufacturer's specifications, if available, and with any NOx requirement to which the unit is subject;

(v) Measure the concentrations in the effluent stream of CO in parts per million, by volume, and oxygen in volume percent, before and after the adjustments are made (measurements may be either on a dry or wet basis, as long as it is the same basis before and after the adjustments are made). Measurements may be taken using a portable CO analyzer; and

(vi) Maintain on-site and submit, if requested by the Administrator, a report containing the following information:
(A) The concentrations of CO in the effluent stream in parts per million by volume, and oxygen in volume percent, measured at high fire or typical operating load, before and after the tune-up of the boiler or process heater;
(B) A description of any corrective actions taken as a part of the tune-up; and

(C) The type and amount of fuel used over the 12 months prior to the tune-up, but only if the unit was physically and legally capable of using more than one type of fuel during that period. Units sharing a fuel meter may estimate the fuel used by each unit.

[45CSR13 Permit R13-2087, Condition 8.1.7]

9.1.8. If the permittee's boiler or process heater has a heat input capacity of less than or equal to 5 million Btu per hour and the unit is in the units designed to bum gas 1, the permittee must conduct a tune-up of the boiler or process heater every 5 years as specified in condition 8.1.7. to demonstrate continuous compliance. The permittee may delay the burner inspection specified in condition 6.1.4. (a) (10) (i) until the next scheduled or unscheduled unit shutdown, but the permittee must inspect each burner at least once every 72 months.

[45CSR13 Permit R13-2087, Condition 8.1.8]

9.1.9. If the unit is not operating on the required date for a tune-up, the tune-up must be conducted within 30 calendar days of startup.

[45CSR13 Permit R13-2087, Condition 8.1.9]

9.2. Monitoring Requirements

9.2.1. N/A

9.3. Testing Requirements

9.3.1. If you are required to meet an applicable tune-up work practice standard, you must conduct a 5-yearperformancetune-up according to §63.7540(a)(12), respectively. Each 5-year tune-up specified in §63.7540(a)(12) must be conducted no more than 61 months after the previous tune-up. For a new or reconstructed affected source (as defined in §63.7490), the 5-year tune-up must be no later than 61 months after April1, 2013 or the initial startup of the new or reconstructed affected source, whichever is later.

[45CSR13 Permit R13-2087, Condition 8.3.1]

9.4. **Recordkeeping Requirements**

9.4.1. **The permittee must keep a copy of each notification and report submitted to comply with 40 C.F.R. 63, Supart DDDDD, including all documentation supporting any Initial Notification or Notification of Compliance Status or semiannual compliance report that you submitted, according to the requirements in 40CFR63.10(b)(2)(xiv).**

[45CSR13 Permit R13-2087, Condition 8.4.1]

9.4.2. The permittee shall main records as follows:

a. Records must be in a form suitable and readily available for expeditious review, according to 40CFR63.10(b)(1).
b. As specified in 40 CFR 63.10(b)(1), the permittee must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
c. The permittee must keep each record on site, or they must be accessible from on site (for example, through a computer network), for a least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to 40CFR63.10(b)(1). The permittee may keep the records off site for the remaining 3 years.

[45CSR13 Permit R13-2087, Condition 8.4.2]

9.5. **Reporting Requirements**

9.5.1. As specified in §63.9(b)(4) and (5), ifyou startup your new or reconstructed affected source on or after January 31, 2013, you must submit an Initial Notification no later than 15 days after the actual date of startup of the affected source.

[45CSR13 Permit R13-2087, Condition 8.5.1]

9.5.2. If you are not required to conduct an initial compliance demonstration as specified in §63.7530(a), the Notification of Compliance Status must only contain the information specified in paragraphs (e)(l) and (8) of this section and must be submitted within 60 days ofthe compliance date specified at §63.7495(b).

(e) (1) A description of the affected unit(s) including identification of which subcategories the unit is in, the design heat input capacity of the unit, a description of the add-on controls used on the unit to comply with this subpart, description of the fuel(s) burned, including whether the fuel(s) were a secondary material

determined by you or the EPA through a petition process to be a non-waste under §241.3 of this chapter, whether the fuel(s) were a secondary material processed from discarded non-hazardous secondary materials within the meaning of §241.3 of this chapter, and justification for the selection of fuel(s) burned during the compliance demonstration.

(e) (8) In addition to the information required in §63.9(h)(2), your notification of compliance status must include the following certification(s) of compliance, as applicable, and signed by a responsible official:

(i) "This facility completed the required initial tune-up for all of the boilers and process heaters covered by 40 CFR part 63 subpart DDDDD at this site according to the procedures in §63.7540(a)(10)(i) through (vi)."

(ii) "This facility has had an energy assessment performed according to §63.7530(e)."

(iii) Except for units that burn only natural gas, refinery gas, or other gas 1 fuel, or units that quality for a statutory exemption as provided in section 129(g)(1) of the Clean Air Act, include the following: "No secondary materials that are solid waste were combusted in any affected unit."

[45CSR13 Permit R13-2087, Condition 8.5.2]

9.5.3. (b) For units that are subject only to a requirement to conduct subsequent 5-year tune-up according to §63.7540(a)(12) and not subject to emission limits or Table 4 operating limits, you may submit only a 5-year compliance report as specified in paragraphs (b)(1) through (4) of this section, instead of a semi-annual compliance report.

(5) For each affected source that is subject to permitting regulations pursuant to part 70 or part 71 of this chapter, and if the permitting authority has established dates for submitting semiannual reports pursuant to 70.6(a)(3)(iii)(A) or 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established in the permit instead of according to the dates in paragraphs (b)(1) through (4) of this section.

[45CSR13 Permit R13-2087, Condition 8.5.3]

9.5.4. A compliance report must contain the following information depending on how the facility chooses to comply with the limits set in this rule.

(1) If the facility is subject to the requirements of a tune up you must submit a compliance report with the information in paragraphs(c)(5)(i) through (iii), (xiv) and (xvii) of this section as follows:

(5) (i) Company and Facility name and address.

(ii) Process unit information, emissions limitations, and operating parameter limitations.

(iii) Date of report and beginning and ending dates of the reporting period.

(xiv) Include the date of the most recent tune-up. Include the date of the most recent burner inspection if it was not done on a 5-year period and was delayed until the next scheduled or unscheduled unit shutdown.

(xviii) For each instance of startup or shutdown include the information required to be monitored, collected or recorded according to the requirements of §63.7555(d).

[45CSR13 Permit R13-2087, Condition 8.5.4]

APPENDIX C

ELECTRONIC SUBMITTAL

Title V Operating Permit Renewal Application

Coco Compressor Station, Facility ID No. 039-00049
Elkview, West Virginia

Columbia Gas Transmission, LLC
1700 MacCorkle Avenue, SE
Charleston, West Virginia

January 2017