

Engineer	Jerry Williams, P.E.
Email Address	jerry.williams@wv.gov
Company Name	Columbia Gas Transmission, LLC
Company ID	071-00008
Facility Name	Seneca Compressor Station
Permit Number	R13-2715F
County	Pendleton
Newspaper	<i>The Pendleton Times</i> 358 2304
Company Email and "Attention To:"	Steven A. Nelson snelson@cpg.com
Environmental Contact Email Address	Lacey Ivey livey@cpg.com
Regional Office (if applicable)	EPRO
New or Modified Source?	modified
Construction, Modification, or Relocation?	modification
Type of Facility	natural gas compressor station
"Located" or "To Be Located"?	located
Place where I can find electronic versions of your notice, engineering evaluation, and draft permit	Q:\AIR_QUALITY\Willi\Permit Applications Under Review\Columbia Gas Transmission\R13-2715F Seneca Compressor Station

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# INTERNAL PERMITTING DOCUMENT TRACKING MANIFEST

Company Name Columbia Gas Transmission, LLC

Permitting Action Number R13-2715F Total Days 53 DAQ Days 23

**Permitting Action:**

- Permit Determination
- General Permit
- Administrative Update
- Temporary
- Relocation
- Construction
- Modification
- PSD (Rule 14)
- NNSR (Rule 19)

**Documents Attached:**

- Engineering Evaluation/Memo
- Draft Permit
- Notice
- Denial
- Final Permit/General Permit Registration
- Completed Database Sheet
- Withdrawal
- Letter
- Other (specify) \_\_\_\_\_

Date	From	To	Action Requested
3/18/2016	Jerry <i>dw</i>	Bev	Please review and approve to go to public notice.
<i>3/21</i>	<i>Bev</i>	<i>Jerry</i>	<i>Go to Notice</i>
<i>3/22</i>	<i>Jerry</i>	<i>SANDIE</i>	<i>APPROVED FOR NOTICE.</i>

NOTE: Retain a copy of this manifest for your records when transmitting your document(s).

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**NON-CONFIDENTIAL**

# AIR QUALITY PERMIT NOTICE

## Notice of Intent to Approve

On January 25, 2016, Columbia Gas Transmission LLC applied to the WV Department of Environmental Protection, Division of Air Quality (DAQ) for a permit to modify a natural gas compressor facility (Seneca Compressor Station) located on West Virginia 28 North, Seneca Rocks, Pendleton County, WV at latitude 38.84861 and longitude -79.37607. A preliminary evaluation has determined that all State and Federal air quality requirements will be met by the proposed facility. The DAQ is providing notice to the public of its preliminary determination to issue the permit R13-2715F.

The following increase in potential emissions will be authorized by this permit action: Particulate Matter less than 10 microns, 2.53 tons per year (TPY); Sulfur Dioxide, 0.29 TPY; Oxides of Nitrogen, 23.42 TPY; Carbon Monoxide, 92.52 TPY; Volatile Organic Compounds, 15.96 TPY; Total Hazardous Air Pollutants, 0.40 TPY; Carbon Dioxide Equivalents, 59,030 TPY.

Written comments or requests for a public meeting must be received by the DAQ before 5:00 p.m. on **(Day of Week, Month, Day, Year)**. A public meeting may be held if the Director of the DAQ determines that significant public interest has been expressed, in writing, or when the Director deems it appropriate.

The purpose of the DAQ's permitting process is to make a preliminary determination if the proposed modification will meet all state and federal air quality requirements. The purpose of the public review process is to accept public comments on air quality issues relevant to this determination. Only written comments received at the address noted below within the specified time frame, or comments presented orally at a scheduled public meeting, will be considered prior to final action on the permit. All such comments will become part of the public record.

Jerry Williams, P.E.  
WV Department of Environmental Protection  
Division of Air Quality  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304  
Telephone: 304/926-0499, ext. 1223  
FAX: 304/926-0478

Additional information, including copies of the draft permit, application and all other supporting materials relevant to the permit decision may be obtained by contacting the engineer listed above. The draft permit and engineering evaluation can be downloaded at:

[www.dep.wv.gov/daq/Pages/NSRPermitsforReview.aspx](http://www.dep.wv.gov/daq/Pages/NSRPermitsforReview.aspx)



**west virginia** department of environmental protection

Division of Air Quality  
601 57<sup>th</sup> Street SE  
Charleston, WV 25304  
Phone (304) 926-0475 • FAX: (304) 926-0479

Earl Ray Tomblin, Governor  
Randy C. Huffman, Cabinet Secretary  
www.dep.wv.gov

**ENGINEERING EVALUATION / FACT SHEET**

BACKGROUND INFORMATION

Application No.: R13-2715F  
Plant ID No.: 071-00008  
Applicant: CGT Gas Transmission LLC (CGT)  
Facility Name: Seneca Compressor Station  
Location: Seneca Rocks, Pendleton County  
SIC Code: 4922  
NAICS Code: 486210  
Application Type: Modification  
Received Date: January 25, 2016  
Engineer Assigned: Jerry Williams, P.E.  
Fee Amount: \$2,000  
Date Received: January 25, 2016  
Complete Date: February 24, 2016  
Due Date: May 24, 2016  
Applicant Ad Date: January 21, 2016  
Newspaper: *The Pendleton Times*  
UTM's: Easting: 640.9 km      Northing: 4,301.2 km      Zone: 17  
Description: Installation of one (1) new natural gas-fired turbine, one (1) fuel gas heater and twenty three (23) catalytic space heaters.

CGT's Seneca Compressor Station was constructed in the early 1950's and was, at the time the minor and major source permitting rules (45CSR13, and 45CSR14/19, respectively) were promulgated, considered a grandfathered source. However, since that time the station has undergone several modifications and has been the subject of various permitting actions. To place the current application in context, the following will summarize each of these previous permitting actions. They are presented in a generally chronological order.

***R13-2715***

On October 29, 2007, Permit Number R13-2715 was issued to replace the station's two existing Allison turbines (identified as E02 and E03) with two new natural gas-fired Solar Taurus 60-7800S turbines (E05 and E06).

***R13-2715A***

On December 18, 2007, a Class I Administrative Update to R13-2715 was issued to CGT for a revision of the natural gas consumption rates of the new Solar Taurus turbines (E05 and E06) as well as revise the full-load CO emission rates of these units.

***R13-2715B***

On January 7, 2008, a Class I Administrative Update to R13-2715A was issued to CGT for a revision of the performance testing requirements of the Solar Taurus turbines (E05 and E06) and revisions to the PM<sub>10</sub> and SO<sub>2</sub> emission rates of the units.

***R13-2715C***

On June 4, 2013, Permit Number R13-2715C was issued to CGT for the addition of two new Solar turbines (E07 and E08), the replacement of two existing grandfathered emergency generators (G1 and G2), and the addition of 36 space heaters. This permit was issued as a synthetic minor to a major source.

***R13-2715D***

On August 4, 2014, Permit Number R13-2715D was issued to CGT for a revision of the CO emission rate of the new Solar Saturn (E07) turbine. In addition, capacities and emission factors of units permitted originally in Permit R13-2715C were updated.

***R13-2715E***

On March 5, 2015, Permit Number R13-2715E was issued to CGT to remove synthetic minor limits on Solar Turbines 03708 (E07) and 03709 (E08) based on retroactive reclassification of Seneca Compressor Station as a minor source in 2013 prior to installation of these turbines.

## DESCRIPTION OF PROCESS/MODIFICATIONS

### ***Existing Facility Description***

CGT's Seneca Station is located near Seneca Rocks, Pendleton County, WV. The station receives natural gas via pipeline from an upstream compressor station, compresses it using natural gas fired turbines and then transmits it via pipeline to a downstream station. The station currently has five (5) primary natural gas fired turbines including two (2) Solar Taurus 60-7800S turbines rated at 7,700 horsepower (hp) each that were installed in 2008, one (1) GE 3132R Frame 3 turbine rated at 13,750 hp that was purchased in 1971 and moved to the Seneca Station in 1981, one (1) refurbished Solar Saturn 10 turbine rated at 1,557 hp, and one (1) Solar Mars 100 turbine rated at 15,432 hp. Associated with the Mars turbine is a small (0.85 mmbtu/hr) fuel gas heater. CGT also has a Waukesha model VGF-136GL (rated at 880 hp) emergency generator and 36 catalytic space heaters (0.072 MMBTU/hr each) at the facility.

### ***Proposed Modifications***

This project includes the installation of one (1) Solar Taurus 70 turbine-driven compressor, one (1) fuel gas heater, and 23 catalytic space heaters. The power output from a natural gas-fired turbine is directly related to the fuel input rate and to the ratio of combustion air to fuel. As ambient temperatures decrease, a turbine's maximum power output will increase due to the increased density of inlet air. The Solar dry-low-NO<sub>x</sub> (DLN) combustion system (known as SoLoNO<sub>x</sub>) limits formation of NO<sub>x</sub>, CO, and VOC by pre-mixing air and fuel prior to combustion. When operating a Solar Taurus 70 turbine at ambient temperatures  $\geq 0^{\circ}\text{F}$  and at loads  $\geq 50\%$ , this DLN system is able to limit the exhaust gas concentration of these pollutants (corrected to 15% O<sub>2</sub>) to 15 ppm NO<sub>x</sub>, 25 ppm CO, and 25 ppm unburned hydrocarbons (UHC, containing at least 80% non-VOC methane and ethane; therefore, 5 ppm VOC). At ambient temperatures less than or equal to 0<sup>o</sup>F, additional pilot fuel is required by the turbine to maintain flame stability, which increases estimated emission concentrations to 42 ppm NO<sub>x</sub>, 100 ppm CO, and 50 ppm UHC (10 ppm VOC). At turbine loads < 50%, additional pilot fuel and air flow are required to maintain flame stability and turbine responsiveness. These changes increase estimated emission concentrations to 66 ppm NO<sub>x</sub>, 4,400 ppm CO, and 440 ppm UHC (88 ppm VOC). Should loads drop below 50%, CGT will make every effort to either bring the load back above 50% or shut a turbine down (e.g. shut down other units and move that volume to the turbine, or shift the turbine volume to other units and shut down the turbine).

In addition, there are changes in NO<sub>x</sub>, CO, and VOC emissions during the initial fuel light-off, turbine loading, and flame stabilization steps associated with turbine startup. There are also changes in emissions during the normal turbine shutdown sequence. The turbine will be limited to 200 startup/shutdown cycles per year. For a Solar Taurus 70 turbine, the startup sequence takes less than 10 minutes to complete prior to engaging the DLN system. The shutdown sequence for a Solar Taurus 70 turbine requires approximately 10 minutes.

## SITE INSPECTION

Due to the nature of the proposed modification, the writer did not perform a site inspection of the facility for this permitting action. The facility was last inspected by DAQ Compliance/ Enforcement (C/E) Inspector Joseph Kreger of the Eastern Panhandle Regional Office on March 11, 2015. This inspection found the facility be "Status 30 - In Compliance."

## ESTIMATE OF EMISSIONS BY REVIEWING ENGINEER

CGT provided detailed calculations of the facility-wide pre-modification PTE and the calculations of the PTE of the new emission units added under R13-2715F in Attachment N of the permit application. This information is substantively the same as previously submitted and reviewed in previous permit applications. This section will discuss the emissions from the Solar Taurus 70 turbine, fuel gas heater, and catalytic heaters which are the only emission units being substantively modified as part of this permitting action.

### ***Solar Saturn Taurus 70 Turbine (E09)***

Potential emissions from the 10,613 hp (@ 32° F), 87.69 MMBtu/hr (HHV @ 32° F) natural gas-fired Solar Taurus 70 combustion turbine are based on emission factors provided from the vendor, based on the emission factors provided for natural gas combustion as given in AP-42 Section 3.1. (AP-42 is a database of emission factors maintained by USEPA), material balance, and on emission factors from 40 CFR 98, Subpart C. Emissions were based on the MDHI of the engine and annual emissions were based on the combination of potential operating modes (normal load @ 32° F, low temp (<0° F), low load (<50 %), startup/shutdown). The following table details the emission factor source and the PTE of the combustion turbine:

<b>Pollutant</b>	<b>Emission Factor</b>	<b>Source</b>	<b>Hourly (lb/hr)<sup>1</sup></b>	<b>Annual (ton/yr)<sup>2</sup></b>
NO <sub>x</sub>	0.060 lb/MMBTU LHV	Vendor Data	4.74	22.80
CO	0.061 lb/MMBTU LHV	Vendor Data	4.81	91.80
PM <sub>2.5</sub>	0.0066 lb/MMBTU HHV <sup>4</sup>	AP-42 Table 3.1-2a (4/00)	0.58	2.53
PM <sub>10</sub>	0.0066 lb/MMBTU HHV <sup>4</sup>	AP-42 Table 3.1-2a (4/00)	0.58	2.53
SO <sub>2</sub>	0.0571 lb/MMBTU HHV <sup>4</sup> (hourly) 0.000714 lb/MMBTU HHV <sup>4</sup> (annual)	20 grains S/100 scf (hourly) 0.25 grains S/100 scf (yearly)	5.01	0.27
VOC	0.007 lb/MMBTU LHV	Vendor Data (20% of UHC) <sup>3</sup>	0.55	3.22
Formaldehyde	0.00071 lb/MMBTU HHV <sup>4</sup>	AP-42, Table 3.1-3 (4/00)	0.06	0.27

Pollutant	Emission Factor	Source	Hourly (lb/hr) <sup>1</sup>	Annual (ton/yr) <sup>2</sup>
Total HAPs	0.00103 lb/MMBTU HHV <sup>4</sup>	AP-42, Table 3.1-3 (4/00)	0.09	0.39

- 1 Maximum hourly emission rate based on normal operation at 32° F. Heat input, fuel consumption, and emissions increase as temperature decrease. For the purposes of this permit, hourly emissions are characterized at 32° F.
- 2 Annual emission rate based on combination of potential operating modes for NO<sub>x</sub>, CO and VOC. All other pollutants based on horsepower and brake specific fuel consumption at 32° F.
- 3 VOC based on 20% of vendor data for unburned hydrocarbons (UHC).
- 4 HHV heat input based on HHV=1.1\*LHV.

### ***Fuel Gas Heater (H3)***

Potential emissions from the 0.25 MMBTU/hr natural gas-fired process heater is based on the emission factors provided for natural gas combustion as given in AP-42 Section 1.4. (AP-42 is a database of emission factors maintained by USEPA), and on emission factors from 40 CFR 98, Subpart C. Emissions were based on the MDHI of the heater. The following table details the emission factor source and the PTE of the fuel gas heater:

Pollutant	Emission Factor		Source	Hourly (lb/hr) <sup>1</sup>	Annual (ton/yr) <sup>2</sup>
	lb/MMscf	lb/MMBTU			
NO <sub>x</sub>	100	0.098	AP-42, Table 1.4-1 (7/98)	0.02	0.11
CO	84	0.082	AP-42, Table 1.4-1 (7/98)	0.02	0.09
PM <sub>2.5</sub>	7.6	0.007	AP-42, Table 1.4-2 (7/98)	<0.01	0.01
PM <sub>10</sub>	7.6	0.007	AP-42, Table 1.4-2 (7/98)	<0.01	0.01
SO <sub>2</sub>	-	0.0571 (hourly) 0.000714 (annual)	20 grains S/100 scf (hourly) 0.25 grains S/100 scf (annually)	0.01	<0.01
VOC	5.5	0.005	AP-42, Table 1.4-2 (7/98)	<0.01	0.01
Formaldehyde	0.075	0.00007	AP-42, Table 1.4-3 (7/98)	<0.01	<0.01
Total HAPs	1.89	0.00185	AP-42, Table 1.4-3&4 (7/98)	<0.01	<0.01

### ***23 Catalytic Space Heaters (SH2)***

Potential emissions from the 23 natural gas-fired catalytic space heaters (8 – 0.005 MMBTU/hr, 15 – 0.072 MMBTU/hr) are based on the emission factors provided for natural gas combustion as given in AP-42 Section 1.4. (AP-42 is a database of emission factors maintained

by USEPA), and on emission factors from 40 CFR 98, Subpart C. Emissions were based on the MDHI of the heaters. The following table details the emission factor source and the PTE of the 23 catalytic space heaters:

Pollutant	Emission Factor		Source	Hourly (lb/hr)	Annual (ton/yr)
	lb/MMscf	lb/MMBTU			
NO <sub>x</sub>	100	0.098	AP-42, Table 1.4-1 (7/98)	0.11	0.48
CO	84	0.082	AP-42, Table 1.4-1 (7/98)	0.09	0.40
PM <sub>2.5</sub>	7.6	0.007	AP-42, Table 1.4-2 (7/98)	0.01	0.04
PM <sub>10</sub>	7.6	0.007	AP-42, Table 1.4-2 (7/98)	0.01	0.04
SO <sub>2</sub>	-	0.0571 (hourly) 0.000714 (annual)	20 grains S/100 scf (hourly) 0.25 grains S/100 scf (annually)	0.06	<0.01
VOC	5.5	0.005	AP-42, Table 1.4-2 (7/98)	0.01	0.03
Formaldehyde	0.075	0.00007	AP-42, Table 1.4-3 (7/98)	<0.01	<0.01
Total HAPs	1.89	0.00185	AP-42, Table 1.4-3&4 (7/98)	<0.01	<0.01

***Existing Facility-Wide PTE (Post R13-2715E Modification)***

The following table details the proposed post-modification facility-wide PTE of the Seneca Compressor Station.

**Facility-Wide Post-Modification Annual (ton/yr) PTE**

Source	CO	NO <sub>x</sub>	PM <sup>1</sup>	SO <sub>2</sub>	VOCs	CO <sub>2e</sub>	HAPs
Solar Saturn Turbine (E07)	67.60	41.50	1.32	0.05	1.94	8,576	0.08
Solar Mars Turbine (E08)	63.00	31.80	9.42	0.37	3.88	61,264	0.54
Emergency Generator 3 (G3)	0.63	0.97	0.02	<0.01	0.02	200	0.12
Heater 2 (HTR2)	0.31	0.37	0.03	<0.01	0.02	436	<0.01
Catalytic Heaters (SH1)	0.93	1.11	0.08	0.01	0.06	1,329	0.02
Heater 1 (HTR1)	0.21	0.25	0.02	0.00	0.01	297	<0.01
GE Frame 3 Turbine (E04)	45.40	177.30	3.66	0.40	1.16	64,880	0.57
Solar Taurus Turbine 1 (E05)	50.50	18.79	1.96	0.21	14.15	32,440	0.31

Solar Taurus Turbine 2 (E06)	50.50	18.79	1.96	0.21	14.15	32,440	0.31
Equipment Leaks	0.00	0.00	0.00	0.00	0.60	387	~0
Venting	0.00	0.00	0.00	0.00	25.00	16,187	~0
Solar Taurus Turbine (E09)	91.80	22.80	2.53	0.27	3.22	54,515	0.39
Process Heater (H3)	0.09	0.11	0.01	<0.01	0.01	128	<0.01
Catalytic Heaters (SH2)	0.40	0.48	0.04	<0.01	0.03	574	0.01
<b>Facility Wide Total</b>	<b>371.6</b>	<b>314.3</b>	<b>21.0</b>	<b>1.54</b>	<b>63.7</b>	<b>268,499</b>	<b>2.35</b>

1 - All particulate matter emissions are assumed to be less than 2.5 microns. Includes condensables.

***Facility-Wide Emissions Increase***

Based on this changes described above, the following table lists the increase in facility-wide emissions at the Seneca Compressor Station:

**Table 3: Change in Facility-Wide Post-Modification Annual (ton/yr) PTE**

Source	CO	NO <sub>x</sub>	PM <sup>1</sup>	SO <sub>2</sub>	VOCs	CO <sub>2e</sub>	HAP
R13-2715E	279.08	290.88	18.47	1.25	47.74	209,469	1.95
R13-2715F	371.60	314.30	21.00	1.54	63.70	268,499	2.35
<b><i>Change in Emissions →</i></b>	<b>92.52</b>	<b>23.42</b>	<b>2.53</b>	<b>0.29</b>	<b>15.96</b>	<b>59,030</b>	<b>0.40</b>

1 - All particulate matter emissions are assumed to be less than 2.5 microns. Includes condensables.

## REGULATORY APPLICABILITY

The following rules apply to this permitting action:

### **45CSR2 (Particulate Air Pollution from Combustion of Fuel in Indirect Heat Exchangers)**

The purpose of 45CSR2 is to establish emission limitations for smoke and particulate matter which are discharged from fuel burning units. 45CSR2 states that any fuel burning unit that has a heat input under ten (10) million B.T.U.'s per hour is exempt from sections 4 (weight emission standard), 5 (control of fugitive particulate matter), 6 (registration), 8 (testing, monitoring, recordkeeping, reporting) and 9 (startups, shutdowns, malfunctions). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

The individual heat input of the heaters (H3, SH2) are below 10 MMBTU/hr. Therefore, these units are exempt from the aforementioned sections of 45CSR2.

CGT would also be subject to the opacity requirements in 45CSR2, which is 10% opacity based on a six minute block average.

### **45CSR10 (To Prevent and Control Air Pollution from the Emissions of Sulfur Oxides)**

The purpose of 45CSR10 is to establish emission limitations for sulfur dioxide which are discharged from fuel burning units. 45CSR10 states that any fuel burning unit that has a heat input under ten (10) million B.T.U.'s per hour is exempt from sections 3 (weight emission standard), 6 (registration), 7 (permits), and 8 (testing, monitoring, recordkeeping, reporting). However, failure to attain acceptable air quality in parts of some urban areas may require the mandatory control of these sources at a later date.

The individual heat input of the heaters (H3, SH2) are below 10 MMBTU/hr. Therefore, these units are exempt from the aforementioned sections of 45CSR10.

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

The proposed installation and operation of the Solar Taurus Turbine has the potential to increase the PTE of the Seneca Compressor Station in excess of six (6) lbs/hour and ten (10) TPY of a regulated pollutant and, therefore, pursuant to §45-13-2.17, the change is defined as a "modification" under 45CSR13. Pursuant to §45-13-5.1, "[n]o person shall cause, suffer, allow or permit the construction, modification, relocation and operation of any stationary source to be commenced without . . . obtaining a permit to construct." Therefore, CGT is required to obtain a permit under 45CSR13 for the modification of the facility.

As required under §45-13-8.3 ("Notice Level A"), CGT placed a Class I legal advertisement in a "newspaper of general circulation in the area where the source is . . . located." Additionally, CGT paid the appropriate application fee.

**45CSR16 (Standards of Performance for New Stationary Sources Pursuant to 40 CFR Part 60)**

45CSR16 applies to this source by reference of 40CFR60 Subpart KKKK. These requirements are discussed under that rule below.

**45CSR30 (Requirements for Operating Permits)**

CGT is subject to 45CSR30. The Seneca Compressor Station has the potential to emit more than major regulatory threshold for NO<sub>x</sub> and CO. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, CGT is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

CGT is required to pay the appropriate annual fees and submit an annual Certified Emissions Statement.

**40CFR60 Subpart KKKK (Standards of Performance for Stationary Combustion Turbines)**

Per §60.4305, Subpart KKKK applies to combustion turbines with a peak heat input of 10 MMBTU/hr or greater. Since the new Solar Taurus turbine is rated at 87.69 MMBTU/hr it will be subject to the rule. §60.4320 requires the turbines to meet the NO<sub>x</sub> requirement in Table 1 of the rule. Since the Taurus turbine is a new, natural gas fired turbine between 50 and 850 MMBTU/hr, Table 1 requires it to meet a NO<sub>x</sub> limit of 25 ppm at 15% O<sub>2</sub> or 150 ng/J of useful output. To demonstrate compliance with the limit, §60.4400(a) requires both an initial (within 180 days of startup or 60 days of achieving full load operation) and annual (not to exceed 14 months from previous test) performance test. However, §60.4340 allows the permittee to be exempted from the annual testing if continuous emission monitors or continuous parameter monitoring systems are installed that meet the requirements of the section. Additionally, if the NO<sub>x</sub> testing results show emissions less than 75% of the limit, testing frequency can be reduced to once every 2 years (with no more than 26 months after the previous test.)

The rule also limits SO<sub>2</sub> emissions from the turbines. §60.4330(a)(2) allows the facility to meet this limit by burning fuel with a total potential SO<sub>2</sub> emissions of less than 0.06 lb/MMBTU. Additionally, §60.4365(a) exempts the permittee from monitoring fuel sulfur content if a source burns only natural gas that is covered by a purchase or transportation contract that limits sulfur to no more than 20 grains per 100 scf. CGT qualifies for this exemption.

**45CSR14** (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollutants)

**45CSR19** (Permits for Construction and Major Modification of Major Stationary Sources of Air Pollution which Cause or Contribute to Nonattainment)

The Seneca Compressor Station is located in Pendleton County, which is an unclassified county for all criteria pollutants, therefore the Seneca Compressor Station is not applicable to 45CSR19. The Seneca Compressor Station is a major source under PSD rules (§45-14-2.43). In order for a project to become subject to PSD review, the major stationary source must have a significant emissions increase from the project **and** a significant net emissions increase as calculated over the 5 year contemporaneous period. The first step is to determine if the proposed project results in a significant emissions increase utilizing the calculation procedures in 45CSR14 (Permits for Construction and Major Modification of Major Stationary Sources for the Prevention of Significant Deterioration of Air Quality) Section 3.4. The procedure for calculating whether a significant emissions increase will occur depends on the type of emissions units being modified. The procedure for calculating whether a significant net emissions increase will occur at the major stationary source, which is the second step in the process, is contained in 45CSR14 Section 2.46. Regardless of any such preconstruction projections, a major modification results if the project causes a significant emissions increase and a significant net emissions increase.

It is important to note that the emission rate of CO<sub>2</sub>e (in excess of 100,000 tons/year) does not define the source as a major stationary source for the purposes of triggering use of the “significant” emissions increase thresholds under §45-14-2.74(a) to determine major modification classification. This has been the case since GHGs began to be regulated from “non-anyway” sources on July 1, 2011 (see EPA’s Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule) and is not a result (although it was reinforced) of the June 23, 2014 Supreme Court of the United States ruling in *Utility Air Regulatory Group v. Environmental Protection Agency*.

The following table represents the annual potential emissions (tpy) associated with this project:

Source	NO <sub>x</sub>	CO	PM <sub>10/2.5</sub>	VOC	SO <sub>2</sub>
Solar Taurus Turbine (E09)	22.80	91.80	2.53	3.22	0.27
Process Heater (H3)	0.11	0.09	0.01	0.01	<0.01
23 Catalytic Heaters (SH2)	0.48	0.40	0.04	0.03	<0.01
Project Total	23.39	92.29	2.58	16.90	0.28
PSD Significance Level	40	100	15/10	40	40

Final Conclusion

Because no regulated pollutants emissions exceeded the SER, a PSD netting analysis is not necessary, and no PSD review is required.

The Seneca Compressor Station is a Major Stationary Source with respect to PSD because they will have emissions of nitrogen oxides and carbon monoxide in excess of 250 tons per year.

TOXICITY OF NON-CRITERIA REGULATED POLLUTANTS

This section provides general toxicity information for those regulated pollutants that may be increased from the proposed changes in substantive amounts and that are not classified as “criteria pollutants.” Criteria pollutants are defined as Carbon Monoxide (CO), Lead (Pb), Oxides of Nitrogen (NO<sub>x</sub>), Ozone, Particulate Matter (PM), Particulate Matter less than 10 microns (PM<sub>10</sub>), Particulate Matter less than 2.5 microns (PM<sub>2.5</sub>), and Sulfur Dioxide (SO<sub>2</sub>). These pollutants have National Ambient Air Quality Standards (NAAQS) set for each that are designed to protect the public health and welfare. Other pollutants of concern, although designated as non-criteria and without national concentration standards, are regulated through various federal and programs designed to limit their emissions and public exposure. These programs include federal source-specific HAPs regulations promulgated under 40 CFR 61 (NESHAPS) and 40 CFR 63 (MACT). Any potential applicability to these programs to the modified emission unit were discussed above under REGULATORY APPLICABILITY.

The majority of non-criteria regulated pollutants fall under the definition of HAPs which, with some revision since, were 188 compounds identified under Section 112(b) of the Clean Air Act (CAA) as pollutants or groups of pollutants that EPA knows or suspects may cause cancer or other serious human health effects. The requested change evaluated herein will result in a small increase of annual formaldehyde emissions from the Solar Saturn turbine (0.27 ton/year) and only small amounts of other individual HAPs. The following table lists each formaldehyde's general carcinogenic risk as based on analysis provided in the Integrated Risk Information System. EPA's Integrated Risk Information System (IRIS) is a human health assessment program that evaluates information on health effects that may result from exposure to environmental contaminants. For a complete discussion of the known health effects of each compound, and the underlying studies supporting these assessments, refer to the IRIS database located at [www.epa.gov/iris](http://www.epa.gov/iris).

**Potential HAPs - Carcinogenic Risk**

HAPs	Type	Known/Suspected Carcinogen	Classification
Formaldehyde	VOC	Yes	B1 - Probable Human Carcinogen

All HAPs have other non-carcinogenic chronic and acute effects. These adverse health affects may be associated with a wide range of ambient concentrations and exposure times and are influenced by source-specific characteristics such as emission rates and local meteorological conditions. Health impacts are also dependent on multiple factors that affect variability in humans such as genetics, age, health status (e.g., the presence of pre-existing disease) and lifestyle (e.g., smoking). As stated previously, *there are no federal or state ambient air quality standards for these specific chemicals.*

AIR QUALITY IMPACT ANALYSIS

The proposed modification does not meet the definition of a “major modification” pursuant to 45CSR14 and, therefore, an air quality impact (computer modeling) analysis was not required. Additionally, based on the nature of the proposed modification, modeling was not required under 45CSR13, Section 7.

## SOURCE AGGREGATION DETERMINATION

“Building, structure, facility, or installation” is defined as all the pollutant emitting activities which belong to the same industrial grouping, are located on one or more contiguous and adjacent properties, and are under the control of the same person.

1. The Seneca Compressor Station will operate under SIC code 4922 (Pipeline Transportation of Natural Gas). There are other compressor stations operated by CGT that share the same two (2) digit SIC code of 49. Therefore, they do share the same two-digit major SIC code of 49.
2. There are no contiguous or adjacent facilities in question that are determined to be under common control with CGT’s Seneca Compressor Station.
3. There are no CGT properties that are on contiguous or adjacent properties with the Seneca Compressor Station.

The Seneca Compressor Station and other CGT compressor stations share the same industrial grouping. However, there are no facilities under common control with the Seneca Compressor Station that are located on contiguous or adjacent properties. Therefore, the emissions from the Seneca Compressor Station should not be aggregated in determining major source or PSD status.

## MONITORING OF OPERATIONS

No changes are being made in the monitoring, compliance demonstrations, record-keeping, and reporting requirements of the permit.

## CHANGES TO PERMIT R13-2715E

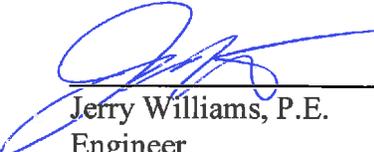
The substantive made changes to R13-2715E were limited to:

Section 1.0 – Added one (1) new natural gas-fired turbine (E09), one (1) fuel gas heater (H3) and twenty three (23) catalytic space heaters (SH2) to the Emission Units table.

- 4.1.5 – Added emission requirements for E09, H3 and SH2.
- 4.1.6 – Added E09 to requirement for combustion of pipeline quality natural gas only.
- 4.1.7 - Added E09 to requirement for natural gas consumption limits.
- 4.1.8 – Added hourly emission requirements for E09.
- 4.1.10 – Added MDHI requirements for H3.
- 4.1.12 – Added MDHI requirements for SH2.
- 4.1.14 – Added E09 to NSPS requirement for NO<sub>x</sub> emissions.
- 4.1.16 – Added E09 to NSPS requirement for SO<sub>2</sub>.

RECOMMENDATION TO DIRECTOR

The information provided in the permit application indicates that CGT meets all the requirements of applicable regulations. Therefore, impact on the surrounding area should be minimized and it is recommended that the Seneca Compressor Station should be granted a 45CSR13 modification permit for their facility.

  
\_\_\_\_\_  
Jerry Williams, P.E.  
Engineer

*MAR 22, 2016*  
\_\_\_\_\_  
Date

*West Virginia Department of Environmental Protection*

*Earl Ray Tomblin  
Governor*

*Division of Air Quality*

*Randy C. Huffman  
Cabinet Secretary*

# Permit to Modify



**R13-2715F**

*This permit is issued in accordance with the West Virginia Air Pollution Control Act (West Virginia Code §§ 22-5-1 et seq.) and 45 C.S.R. 13 — Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation. The permittee identified at the facility listed below is authorized to construct the stationary sources of air pollutants identified herein in accordance with all terms and conditions of this permit.*

Issued to:  
**Columbia Gas Transmission, LLC**  
**Seneca Compressor Station**  
**071-00008**

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*William F. Durham  
Director*

*Issued: Draft*

*This permit will supercede and replace Permit R13-2715E issued on March 5, 2015.*

Facility Location: Seneca Rocks, Pendleton County, West Virginia  
Mailing Address: 1700 MacCorkle Ave. SE  
Charleston, WV 25314  
Facility Description: Natural Gas Compressor Station  
NAICS Codes: 486210  
UTM Coordinates: 640.9 km Easting • 4,301.2 km Northing • Zone 17  
Latitude/Longitude: 38.84861/-79.37607  
Permit Type: Modification  
Desc. of Change: Installation of one (1) new natural gas-fired turbine, one (1) fuel gas heater and twenty three (23) catalytic space heaters.

*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.*

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*The source is subject to 45CSR30. Changes authorized by this permit must also be incorporated into the facility's Title V operating permit. Commencement of the operations authorized by this permit shall be determined by the appropriate timing limitations associated with Title V permit revisions per 45CSR30.*

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**1.0 Emission Units**

<b>Emission Unit ID</b>	<b>Emission Point ID</b>	<b>Emission Unit Description</b>	<b>Year Installed</b>	<b>Design Capacity</b>	<b>Control Device</b>
HTR1	H1	Heater #1	2008	0.58 mmbtu/hr	None
HTR2	H2	Heater #2	2013	0.85 mmbtu/hr	None
HTR3	H3	Heater #3	2016	0.25 mmbtu/hr	None
03704	E04	GE Frame 3 Turbine	1981	22,000 HP	None
03705	E05	Solar Taurus 60-7800S Turbine	2008	7,491 HP	None
03706	E06	Solar Taurus 60-7800S Turbine	2008	7,491 HP	None
03707	E07	Solar Saturn 10-71400 Turbine	2013	1,557 HP	None
03708	E08	Solar Mars 100-15000S Turbine	2013	15,432 HP	None
03709	E09	Solar Taurus 70 Turbine	2016	10,613 HP	None
037G3	G3	Dresser-Waukesha VGF-L36GL Emergency Generator	2013	880 HP	None
037SH1	SH1	Catalytic Space Heaters (36)	2013	2.60 mmbtu/hr (total)	None
037SH2	SH2	Catalytic Space Heaters (23)	2016	1.12 mmbtu/hr (total)	None

**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 (45 CSR § 30-2.12.). The Director of the Division of Air Quality is the Secretary's designated representative for the purposes of this permit.

**2.2. Acronyms**

<b>CAAA</b>	Clean Air Act Amendments	<b>NO<sub>x</sub></b>	Nitrogen Oxides
<b>CBI</b>	Confidential Business Information	<b>NSPS</b>	New Source Performance Standards
<b>CEM</b>	Continuous Emission Monitor	<b>PM</b>	Particulate Matter
<b>CES</b>	Certified Emission Statement	<b>PM<sub>2,5</sub></b>	Particulate Matter less than 2.5µm in diameter
<b>C.F.R. or CFR</b>	Code of Federal Regulations	<b>PM<sub>10</sub></b>	Particulate Matter less than 10µm in diameter
<b>CO</b>	Carbon Monoxide	<b>Ppb</b>	Pounds per Batch
<b>C.S.R. or CSR</b>	Codes of State Rules	<b>pph</b>	Pounds per Hour
<b>DAQ</b>	Division of Air Quality	<b>ppm</b>	Parts per Million
<b>DEP</b>	Department of Environmental Protection	<b>Ppmv or ppmv</b>	Parts per million by volume
<b>dscm</b>	Dry Standard Cubic Meter	<b>PSD</b>	Prevention of Significant Deterioration
<b>FOIA</b>	Freedom of Information Act	<b>psi</b>	Pounds per Square Inch
<b>HAP</b>	Hazardous Air Pollutant	<b>SIC</b>	Standard Industrial Classification
<b>HON</b>	Hazardous Organic NESHAP	<b>SIP</b>	State Implementation Plan
<b>HP</b>	Horsepower	<b>SO<sub>2</sub></b>	Sulfur Dioxide
<b>lbs/hr</b>	Pounds per Hour	<b>TAP</b>	Toxic Air Pollutant
<b>LDAR</b>	Leak Detection and Repair	<b>TPY</b>	Tons per Year
<b>M</b>	Thousand	<b>TRS</b>	Total Reduced Sulfur
<b>MACT</b>	Maximum Achievable Control Technology	<b>TSP</b>	Total Suspended Particulate
<b>MDHI</b>	Maximum Design Heat Input	<b>USEPA</b>	United States Environmental Protection Agency
<b>MM</b>	Million	<b>UTM</b>	Universal Transverse Mercator
<b>MMBtu/hr or mmbtu/hr</b>	Million British Thermal Units per Hour	<b>VEE</b>	Visual Emissions Evaluation
<b>MMCF/hr or mmcf/hr</b>	Million Cubic Feet per Hour	<b>VOC</b>	Volatile Organic Compounds
<b>NA</b>	Not Applicable	<b>VOL</b>	Volatile Organic Liquids
<b>NAAQS</b>	National Ambient Air Quality Standards		
<b>NESHAPS</b>	National Emissions Standards for Hazardous Air Pollutants		

### **2.3. Authority**

This permit is issued in accordance with West Virginia Air Pollution Control Law W.Va. Code §§22-5-1 et seq. and the following Legislative Rules promulgated thereunder:

- 2.3.1. 45CSR13 – *Permits for Construction, Modification, Relocation and Operation of Stationary Sources of Air Pollutants, Notification Requirements, Temporary Permits, General Permits and Procedures for Evaluation;*

### **2.4. Term and Renewal**

- 2.4.1. This permit supercedes and replaces previously issued Permit R13-2715E. This permit shall remain valid, continuous and in effect unless it is revised, suspended, revoked or otherwise changed under an applicable provision of 45CSR13 or any applicable legislative rule.

### **2.5. Duty to Comply**

- 2.5.1. The permitted facility shall be constructed and operated in accordance with the plans and specifications filed in Permit Application R13-2715 through R13-2715F and any modifications, administrative updates, or amendments thereto. The Secretary may suspend or revoke a permit if the plans and specifications upon which the approval was based are not adhered to;  
[45CSR§§13-5.11 and 13-10.3]
- 2.5.2. 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;
- 2.5.3. Violations of any of the conditions contained in this permit, or incorporated herein by reference, may subject the permittee to civil and/or criminal penalties for each violation and further action or remedies as provided by West Virginia Code 22-5-6 and 22-5-7;
- 2.5.4. Approval of this permit does not relieve the permittee herein of the responsibility to apply for and obtain all other permits, licenses and/or approvals from other agencies; i.e., local, state and federal, which may have jurisdiction over the construction and/or operation of the source(s) and/or facility herein permitted.

### **2.6. Duty to Provide Information**

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 administratively updating, modifying, revoking or terminating the permit or to determine compliance with the permit. Upon request, the permittee shall also furnish to the Secretary copies of records 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.

## **2.7. Duty to Supplement and Correct Information**

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.

## **2.8. Administrative Update**

The permittee may request an administrative update to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-4]

## **2.9. Permit Modification**

The permittee may request a minor modification to this permit as defined in and according to the procedures specified in 45CSR13.

[45CSR§13-5.4.]

## **2.10. Major Permit Modification**

The permittee may request a major modification as defined in and according to the procedures specified in 45CSR14 or 45CSR19, as appropriate.

[45CSR§13-5.1]

## **2.11. Inspection and Entry**

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.

## **2.12. Emergency**

- 2.12.1. An "emergency" means any situation arising from sudden and reasonable 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.

- 2.12.2. 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 Section 2.12.3 are met.
- 2.12.3. 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. 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 must contain a detailed description of the emergency, any steps taken to mitigate emission, and corrective actions taken.
- 2.12.4. In any enforcement proceeding, the permittee seeking to establish the occurrence of an emergency has the burden of proof.
- 2.12.5. The provisions of this section are in addition to any emergency or upset provision contained in any applicable requirement.

### **2.13. Need to Halt or Reduce Activity Not a Defense**

It shall not be a defense for a permittee in an enforcement action that it should 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.

### **2.14. Suspension of Activities**

In the event the permittee should deem it necessary to suspend, for a period in excess of sixty (60) consecutive calendar days, the operations authorized by this permit, the permittee shall notify the Secretary, in writing, within two (2) calendar weeks of the passing of the sixtieth (60) day of the suspension period.

### **2.15. Property Rights**

This permit does not convey any property rights of any sort or any exclusive privilege.

**2.16. Severability**

The provisions of this permit are severable and should any provision(s) be declared by a court of competent jurisdiction to be invalid or unenforceable, all other provisions shall remain in full force and effect.

**2.17. Transferability**

This permit is transferable in accordance with the requirements outlined in Section 10.1 of 45CSR13. [45CSR§13-10.1]

**2.18. Notification Requirements**

The permittee shall notify the Secretary, in writing, no later than thirty (30) calendar days after the actual startup of the operations authorized under this permit.

**2.19. Credible Evidence**

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 defense otherwise available to the permittee including, but not limited to, any challenge to the credible evidence rule in the context of any future proceeding.

### 3.0. Facility-Wide Requirements

#### 3.1. Limitations and Standards

- 3.1.1. **Open burning.** The open burning of refuse by any person, firm, corporation, association or public agency 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, suffer, allow or permit 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 require a copy of this notice to be sent to them.  
[40CFR§61.145(b) and 45CSR§34]
- 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. **Permanent shutdown.** A source which has not operated at least 500 hours in one 12-month period within the previous five (5) year time period may be considered permanently shutdown, unless such source can provide to the Secretary, with reasonable specificity, information to the contrary. All permits may be modified or revoked and/or reapplication or application for new permits may be required for any source determined to be permanently shutdown.  
[45CSR§13-10.5.]
- 3.1.6. **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 45 C.S.R. 11.  
[45CSR§11-5.2.]

#### 3.2. Monitoring Requirements

[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 in accordance with the Secretary's delegated authority and any established equivalency determination methods which are applicable. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as 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. If a testing method is specified or approved which effectively replaces a test method specified in the permit, the permit may be revised in accordance with 45CSR§13-4 or 45CSR§13-5.4 as applicable.
- 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 sixty (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; and,
  3. A statement of compliance or noncompliance with each permit or rule condition.

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

### 3.4. Recordkeeping Requirements

- 3.4.1. **Retention of records.** The permittee shall maintain records of all information (including monitoring data, support information, reports and notifications) required by this permit recorded in a form suitable and readily available for expeditious inspection and review. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation. The files shall be maintained for at least five (5) years following the date of each occurrence, measurement, maintenance, corrective action, report, or record. At a minimum, the most recent two (2) years of data shall be maintained on site. The remaining three (3) years of data may be maintained off site, but must remain accessible within a reasonable time. Where appropriate, the permittee may maintain records electronically (on a computer, on computer floppy disks, CDs, DVDs, or magnetic tape disks), on microfilm, or on microfiche.
- 3.4.2. **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§4. *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.
- 3.5.2. **Confidential information.** A permittee may request confidential treatment for the submission of reporting required by this permit pursuant to the limitations and procedures of W.Va. Code § 22-5-10 and 45CSR31.
- 3.5.3. **Correspondence.** 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, or mailed first class 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 25304-2345

**If to the USEPA:**

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. Operating Fee.**

3.5.4.1. In accordance with 45CSR30 – Operating Permit Program, the permittee shall submit a Certified Emissions Statement (CES) and pay fees on an annual basis in accordance with the submittal requirements of the Division of Air Quality. A receipt for the appropriate fee shall be maintained on the premises for which the receipt has been issued, and shall be made immediately available for inspection by the Secretary or his/her duly authorized representative.

3.5.5. **Emission inventory.** At such time(s) as the Secretary may designate, the permittee herein shall prepare and submit an emission inventory for the previous year, addressing the emissions from the facility and/or process(es) authorized herein, in accordance with the emission inventory submittal requirements of the Division of Air Quality. After the initial submittal, the Secretary may, based upon the type and quantity of the pollutants emitted, establish a frequency other than on an annual basis.

**4.0. Source-Specific Requirements**

**4.1. Limitations and Standards**

4.1.1. Annual emissions from the two Solar Taurus 60-7800S turbines (E05 & E06) shall not exceed the following:

	NO <sub>x</sub>	CO	VOC	SO <sub>2</sub>	PM <sub>10</sub>	CH <sub>2</sub> O
	tpy	tpy	tpy	tpy	tpy	tpy
<b>E05</b>	18.79	50.5	14.15	0.21	1.96	0.21
<b>E06</b>	18.79	50.5	14.15	0.21	1.96	0.21
<b>Total</b>	37.6	101.0	28.3	0.42	3.92	0.42

4.1.2. The two Solar Taurus 60-7800S turbines (E05 & E06) shall combust only pipeline quality natural gas which contains a maximum of 20 grains of sulfur per 100 scf.  
**[40 CFR §60.4365(a)]**

4.1.3. Each of the two Solar Taurus 60-7800S turbines (E05 & E06) shall consume no more than 75,916 cubic feet of natural gas per hour nor  $6.00 \times 10^8$  scf of natural gas per year.

4.1.4. Emissions from the two Solar Taurus 60-7800S turbines (E05 & E06) shall not exceed the following:

	E05	E06
<b>NO<sub>x</sub></b>		
Full Load @≥0°F	25 ppm <sub>v</sub> @ 15% O <sub>2</sub> / 3.8 lb/hr	25 ppm <sub>v</sub> @ 15% O <sub>2</sub> / 3.8 lb/hr
Low Temp (<0 to -20°F)	11 lb/hr	11 lb/hr
Very Low Temp (<-20°F)	31.6 lb/hr	31.6 lb/hr
Startup/Shutdown	3.9 lb/hr	3.9 lb/hr
Low Load (<50%)	10.3 lb/hr	10.3 lb/hr
<b>SO<sub>x</sub></b>		
Full Load	0.5 lb/hr	0.5 lb/hr
Startup/Shutdown	0.05 lb/hr	0.05 lb/hr
Low Load (<50%)	0.3 lb/hr	0.3 lb/hr
<b>CO</b>		
Full Load @≥0°F	3.9 lb/hr	3.9 lb/hr
Low Temp (<0 to -20°F)	15.9 lb/hr	15.9 lb/hr

Very Low Temp (<-20°F)	24.1 lb/hr	24.1 lb/hr
Startup/Shutdown	72.0 lb/hr	72.0 lb/hr
Low Load (<50%)	196.5 lb/hr	196.5 lb/hr
<b>VOC</b>		
Full Load @≥0°F	0.2 lb/hr	0.2 lb/hr
Low Temp (<0 to -20°F)	0.5 lb/hr	0.5 lb/hr
Very Low Temp (<-20°F)	0.7 lb/hr	0.7 lb/hr
Startup/Shutdown	711.2 lb/hr	711.2 lb/hr
Low Load (<50%)	1.5 lb/hr	1.5 lb/hr
<b>PM<sub>10</sub></b>		
Full Load @≥0°F	0.5 lb/hr	0.5 lb/hr
Startup/Shutdown	0.3 lb/hr	0.3 lb/hr
Low Load (<50%)	0.3 lb/hr	0.3 lb/hr

4.1.5. Emissions from turbine E07, turbine E08, turbine E09, emergency generator G3, fuel gas heater H2, fuel gas heater H3, 36 combined space heaters SH1, and 23 combined space heaters SH2 shall not exceed the following:

	NO <sub>x</sub>		CO		VOC		SO <sub>2</sub>		PM/PM <sub>10</sub> /PM <sub>2.5</sub>	
	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy	lb/hr	tpy
<b>E07</b>	9.48	41.51	15.39	67.63	0.44	1.94	1.00	0.05	0.32	1.32
<b>E08</b>	6.76	31.83	6.85	63.02	0.79	3.88	7.14	0.37	2.25	9.42
<b>E09</b>	4.74	22.80	4.81	91.80	0.55	3.22	5.01	0.27	0.58	2.53
<b>G3</b>	3.88	0.97	2.52	0.63	0.08	0.02	0.39	0.01	0.07	0.02
<b>H2</b>	0.08	0.37	0.07	0.31	0.01	0.02	0.05	0.01	0.01	0.03
<b>H3</b>	0.02	0.11	0.02	0.09	0.01	0.01	0.01	0.01	0.01	0.01
<b>SH1 (36)</b>	0.25	1.11	0.21	0.93	0.02	0.06	0.15	0.01	0.02	0.08
<b>SH2 (23)</b>	0.11	0.48	0.09	0.40	0.01	0.03	0.06	0.01	0.01	0.04

Note: Maximum hourly emission rate based on 30 °F for E07 and E08  
 Maximum hourly emission rate based on 32 °F for E09

Emission Point ID	CO <sub>2</sub> e
	tpy
E07	8,576
E08	61,264
E09	44,975
G3	200
H2	436
H3	128
SH1 (36)	1,329
SH2 (23)	574

4.1.6. The Solar Mars 100-15000S turbine (E08), the Solar Saturn 10-1400 turbine (E07), the Solar Taurus 70 turbine (E09) and the Dresser-Waukesha VGF-L36GL emergency generator (G3) shall combust only pipeline quality natural gas which contains a maximum of 20 grains of sulfur per 100 scf and which contains a maximum of 0.25 grains of sulfur per 100 scf as averaged over a rolling period of twelve (12) months.

[40 CFR §60.4365(a), 45CSR§13-5.11]

4.1.7. The Solar Mars 100-15000S turbine (E08) , the Solar Saturn 10-1400 turbine (E07) and the Solar Taurus 70 turbine (E09) shall consume no more than the following amounts of natural gas:

Emission Point ID	Natural gas consumption	
	ft <sup>3</sup> /hr	scf/yr
E07	17,216	143.61 x 10 <sup>6</sup>
E08	122,525	1,025.86 x 10 <sup>6</sup>
E09	85,971	753.1 x 10 <sup>6</sup>

Note: E07 and E08 hourly natural gas consumption is based on 30 °F, E09 hourly and annual natural gas consumption is based on 32 °F and annual natural gas consumption is based on 50 °F.

4.1.8. Emissions from the Solar Mars 100-15000S turbine (E08), the Solar Saturn 10-1400 turbine (E07) and the Solar Taurus 70 turbine (E09) shall not exceed the following:

Pollutant	E08	E07
<b>NO<sub>x</sub></b>		
Full Load @ 30°F	25 ppm, @ 15% O <sub>2</sub> / 6.76 lb/hr	150 ppm, @ 15% O <sub>2</sub> / 9.48 lb/hr
Low Temp (<0 to -20°F)	20.58 lb/hr	10.36 lb/hr
Very Low Temp (<-20°F)	58.80 lb/hr	10.36 lb/hr
Startup/Shutdown	3.1 lb/cycle	1.44 lb/cycle
Low Load (<50%)	16.10 lb/hr	5.67 lb/hr
<b>SO<sub>x</sub></b> (short term emission rate based on 20 gr S/100 scf)		
Full Load	7.14 lb/hr	1.00 lb/hr
Startup/Shutdown	7.14 lb/hr	1.00 lb/hr
Low Load (<50%)	7.14 lb/hr	1.00 lb/hr
<b>CO</b>		
Full Load @30°F	6.85 lb/hr	15.39 lb/hr
Low Temp (<0 to -20°F)	29.83 lb/hr	16.82 lb/hr
Very Low Temp (<-20°F)	44.74 lb/hr	16.82 lb/hr
Startup/Shutdown	272.70 lb/cycle	4.44 lb/cycle
Low Load (<50%)	653.4 lb/hr	14.37 lb/hr
<b>VOC</b>		
Full Load @30°F	0.79 lb/hr	0.44 lb/hr
Low Temp (<0 to -20°F)	1.70 lb/hr	0.48 lb/hr
Very Low Temp (<-20°F)	1.70 lb/hr	0.48 lb/hr
Startup/Shutdown	3.12 lb/cycle	0.23 lb/cycle
Low Load (<50%)	7.47 lb/hr	0.66 lb/hr
<b>PM<sub>10</sub></b>		
Full Load @30°F	2.25 lb/hr	0.32 lb/hr
Startup/Shutdown	2.25 lb/hr	0.32 lb/hr

Low Load (<50%)	2.25 lb/hr	0.32 lb/hr
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Pollutant	E09
<b>NO<sub>x</sub></b>	
Full Load @ 32°F	15 ppm <sub>v</sub> @ 15% O <sub>2</sub> / 4.74 lb/hr
Low Temp (<0°F)	14.21 lb/hr
Low Load (<50%)	14.45 lb/hr
Startup/Shutdown	1.90 lb/cycle
<b>SO<sub>x</sub></b> (short term emission rate based on 20 gr S/100 scf)	
Full Load @32°F	5.01 lb/hr
Startup/Shutdown	5.01 lb/hr
Low Load (<50%)	5.01 lb/hr
<b>CO</b>	
Full Load @32°F	4.81 lb/hr
Low Temp (<0 °F)	20.59 lb/hr
Low Load (<50%)	586.42 lb/hr
Startup/Shutdown	166.50 lb/cycle
<b>VOC</b>	
Full Load @32°F	0.55 lb/hr
Low Temp (<0°F)	1.18 lb/hr
Low Load (<50%)	6.70 lb/hr
Startup/Shutdown	1.90 lb/cycle
<b>PM<sub>10</sub></b>	
Full Load @32°F	0.58 lb/hr
Startup/Shutdown	0.58 lb/hr
Low Load (<50%)	0.58 lb/hr

- 4.1.9. Emergency Generator G3 shall not operate more than 500 hours per year based on a rolling 12 month total.
- 4.1.10. The MDHI of the fuel gas heater (H2) shall not exceed 0.85 mmBtu/hr and the unit shall only be fired by natural gas. The MDHI of the fuel gas heater (H3) shall not exceed 0.25 mmBtu/hr and the unit shall only be fired by natural gas.
- 4.1.11. 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.]**
- 4.1.12. The MDHI for each of the 36 catalytic space heaters (SH1) shall not exceed 0.072 MMBTU/hr. The MDHI for each of the 23 catalytic space heaters (SH2) shall not exceed 8 units @ 0.005 MMBTU/hr and 15 units @ 0.072 MMBTU/hr.
- 4.1.13. Emissions from Emergency Generator G3 shall not exceed the following:  
**[40 CFR§ 60.4233(e)]**

	NO <sub>x</sub>	CO	VOC
Standard (g/HP-hr)	2.0	4.0	1.0

- 4.1.14. NO<sub>x</sub> emissions from the Solar Mars Turbine (E08) and Solar Taurus turbine (E09) shall not exceed 25 ppm at 15% O<sub>2</sub> (or an alternative limit of 150 ng/J of useful output).  
**[40 CFR§ 60.4320]**
- 4.1.15. NO<sub>x</sub> emissions from the Solar Saturn Turbine (E07) shall not exceed 150 ppm at 15% O<sub>2</sub> (or an alternative limit of 1,100 ng/J of useful output).  
**[40 CFR§ 60.4320]**
- 4.1.16. The Solar Mars Turbine (E08), Solar Saturn Turbine (E07) and Solar Taurus Turbine (E09) shall only burn fuel with a total potential SO<sub>2</sub> emission rate of less than 0.06 lb/MMBTU.  
**[40 CFR§ 60.4330(a)(2)]**
- 4.1.17. **Operation and Maintenance of Air Pollution Control Equipment.** The permittee shall, to the extent practicable, install, maintain, and operate all pollution control equipment listed in Section 1.0 and associated monitoring equipment in a manner consistent with safety and good air pollution control practices for minimizing emissions, or comply with any more stringent limits set forth in this permit or as set forth by any State rule, Federal regulation, or alternative control plan approved by the Secretary.  
**[45CSR§13-5.11.]**
- 4.1.18. The permittee shall install, maintain, and operate all above-ground piping, valves, pumps, etc. that service lines in the transport of potential sources of regulated air pollutants to prevent any substantive fugitive escape of regulated air pollutants. Any above-ground piping, valves, pumps, etc. that shows signs of excess wear and that have a reasonable potential for substantive fugitive emissions of regulated air pollutants shall be repaired or replaced as needed.

## 4.2. Testing Requirements

- 4.2.1. In order to show compliance with the NO<sub>x</sub> emission limits contained in 4.1.1, 4.1.4, 4.1.5 and 4.1.8 of this permit the permittee must perform an initial and annual performance tests in accordance with §60.4400 to demonstrate continuous compliance. If the NO<sub>x</sub> emission result from the performance test is less than or equal to 75 percent of the NO<sub>x</sub> emission limit contained in 4.1.4 of this permit, the permittee may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the NO<sub>x</sub> emission limit for the turbines, the permittee must resume annual performance tests. The initial performance test shall be conducted within 60 days after achieving full-load operation or within 180 of startup whichever comes first.
- 4.2.2. In order to show compliance with the CO emission limits contained in 4.1.1, 4.1.4, 4.1.5 and 4.1.8 of this permit the permittee shall perform initial and periodic performance tests on each turbine using EPA approved methods (or other alternative methods approved by the Director). Said testing shall be performed while the turbines are operating at normal conditions, within 25% of full load or at the highest achievable load (and while ambient temperatures are above 0°F). The initial performance test shall be conducted within 180 days of startup. Subsequent testing shall be conducted at least every 5 years.

## 4.3. Monitoring and Recordkeeping Requirements

- 4.3.1. **Record of Monitoring.** 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.
- 4.3.2. **Record of Malfunctions of Air Pollution Control Equipment.** For all air pollution control equipment listed in Section 1.0, the permittee shall maintain records of the occurrence and duration of any malfunction or operational shutdown of the air pollution control equipment during which excess emissions occur. For each such case, the following information shall be recorded:
- a. The equipment involved.
  - b. Steps taken to minimize emissions during the event.
  - c. The duration of the event.
  - d. The estimated increase in emissions during the event.

For each such case associated with an equipment malfunction, the additional information shall also be recorded:

- e. The cause of the malfunction.
- f. Steps taken to correct the malfunction.
- g. Any changes or modifications to equipment or procedures that would help prevent future recurrences of the malfunction.

4.3.3. In order to demonstrate compliance with conditions 4.1.3 and 4.1.7 of this permit, the permittee shall monitor and record the amount of natural gas consumed by each piece of equipment.

4.3.4. In order to demonstrate compliance with the emission limitations of condition 4.1.1, 4.1.4, 4.1.5 and 4.1.8 of this permit the permittee will monitor and record the following:

- a. Monthly operating hours of the turbines at normal dry low NO<sub>x</sub> (DLN) conditions ( $\geq 50\%$  of rated load and ambient temperatures of  $\geq 0^\circ\text{F}$ ).
- b. Monthly operating hours of the turbines at low load ( $\leq 50\%$  load).
- c. Monthly operating hours of the turbines at low ambient temperature ( $< 0$  to  $-20^\circ\text{F}$ ).
- d. Monthly operating hours of the turbines at very low temperature ( $< -20^\circ\text{F}$ ).
- e. Monthly operating hours of turbine startup and shutdown cycles.
- f. Monthly total operating hours of each turbine and emergency generator G3.

4.3.5. The monthly records required by condition 4.3.4 of this permit shall be used to calculate monthly emissions for each regulated pollutant ( $P_x$ ) using the following equation for turbines E05, E06, E07, E08 and E09:

$$P_T = \text{DLN } P_x * \text{DLN hours} + \text{LL } P_x * \text{LL hours} + \text{LT } P_x * \text{LT hours} + \text{VLT } P_x * \text{VLT hours} + \text{SS } P_x * \text{SS cycles}$$

Where,  $P_T$  is the total tons of emissions for the month,  $\text{DLN } P_x$ ,  $\text{LL } P_x$ ,  $\text{LT } P_x$ ,  $\text{VLT } P_x$ , and  $\text{SS } P_x$  are the unit emission rates for pollutant X during normal DLN, low-load, low temperature, very low temperature and startup/shutdown operation respectively. DLN hours, LL hours, LT hours, VLT hours, and SS hours are the unit monthly operating hours at DLN, low-load, low temperature, very low temperature and startup/shutdown conditions respectively. The unit emission rates for each pollutant are the emission limits contained in conditions 4.1.4 and 4.1.8 of this permit.

4.3.6. The monthly records required by condition 4.3.4 of this permit shall be used to calculate monthly emissions for each regulated pollutant ( $P_x$ ) using the following equation for the emergency generator (G3), fuel gas heaters (H2, H3) and catalytic heaters.

$$P_T = P_x * \text{total monthly operating hours}$$

Where,  $P_T$  is the total tons of emissions for the month, and  $P_x$  is the unit emission rate for pollutant X during normal operation. The unit emission rates for each pollutant are the emission limits contained in condition 4.1.5 of this permit.

- 4.3.7. At the end of each month, the monthly emissions will be calculated for the preceding 12 months to determine compliance with the annual emission limits.
- 4.3.8. In order to determine compliance with 4.1.9 of this permit, the permittee shall maintain certifiable monthly records of the number of hours of operation of the Emergency Generator G3.
- 4.3.9. The permittee shall keep a maintenance plan and records of conducted maintenance of the Emergency Generator G3.  
**[40 CFR §60.4243(b)(2)(i)]**
- 4.3.10. The permittee shall maintain records of all visual emission observations pursuant to the monitoring required under 4.2.3. including any corrective action taken.
- 4.3.11. In order to determine compliance with the fuel sulfur limits of 4.1.6. of this permit, the permittee shall monitor the fuel sulfur content of the natural gas combusted by E07, E08, E09 and G3 and calculate and record the rolling twelve (12) month average of sulfur content of the natural gas combusted in these sources. In lieu of on-site monitoring, the permittee may use data contained in a valid purchase contract, tariff sheet, transportation contract, or other reasonable documentation to determine the fuel sulfur content.

#### **4.4. Reporting Requirements**

- 4.4.1. The permittee shall comply with all applicable reporting requirements of 40 CFR 60 Subparts JJJJ and KKKK.
- 4.4.2. Any deviation(s) from the allowable natural gas consumption limits of conditions 4.1.3, and 4.1.7 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include at least the following information: the extent of the deviation, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
- 4.4.3. Any deviation(s) from the allowable emission limits of conditions 4.1.1, 4.1.4, 4.1.5 and 4.1.8 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include at least the following information: the extent of the deviation, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
- 4.4.4. Any deviation(s) from the allowable hours of operation limits of conditions 4.1.9 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include at least the following information: the extent of the deviation, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.
- 4.4.5. Any deviation(s) from the allowable visible emission requirement for any emission source discovered during observations using 40CFR Part 60, Appendix A, Method 9 or 22 shall be reported in writing to the Director of the Division of Air Quality as soon as practicable, but in any case within ten (10) calendar days of the occurrence and shall include at least the following information: the results of the visible determination of opacity of emissions, the cause or suspected cause of the violation(s), and any corrective measures taken or planned.

### CERTIFICATION OF DATA ACCURACY

I, the undersigned, hereby certify that, based on information and belief formed after reasonable inquiry, all information contained in the attached \_\_\_\_\_, representing the period beginning \_\_\_\_\_ and ending \_\_\_\_\_, and any supporting documents appended hereto, is true, accurate, and complete.

Signature<sup>1</sup> \_\_\_\_\_  
(please use blue ink) Responsible Official or Authorized Representative Date

Name and Title \_\_\_\_\_  
(please print or type) Name Title

Telephone No. \_\_\_\_\_ Fax No. \_\_\_\_\_

<sup>1</sup> This form shall be signed by a "Responsible Official." "Responsible Official" means one of the following:

- a. For a corporation: The president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either:
  - (i) the facilities employ more than 250 persons or have a gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars), or
  - (ii) the delegation of authority to such representative is approved in advance by the Director;
- b. For a partnership or sole proprietorship: a general partner or the proprietor, respectively;
- c. For a municipality, State, Federal, or other public entity: either a principal executive officer or ranking elected official. For the purposes of this part, a principal executive officer of a Federal agency includes the chief executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., a Regional Administrator of USEPA); or
- d. The designated representative delegated with such authority and approved in advance by the Director.

## Williams, Jerry

---

**From:** Williams, Jerry  
**Sent:** Wednesday, February 24, 2016 8:24 AM  
**To:** 'snelson@cpq.com'; 'livey@cpq.com'  
**Cc:** McKeone, Beverly D  
**Subject:** WV DAQ NSR Permit Application Complete for Columbia Gas Transmission, LLC - Seneca Compressor Station

**RE: Application Status: Complete  
Columbia Gas Transmission, LLC - Seneca Compressor Station  
Permit Application R13-2715F  
Plant ID No. 071-00008**

Mr. Nelson,

Your application for a modification permit for a natural gas compressor station was received by this Division on January 25, 2016 and assigned to the writer for review. Upon review of said application, it was determined that the application was incomplete and additional information was requested. The requested information has been received, therefore, the statutory review period commenced on February 24, 2016.

**In the case of this application, the agency believes it will take approximately 90 days to make a final permit determination.**

This determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit determination.

Should you have any questions, please contact Jerry Williams at (304) 926-0499 ext. 1223 or reply to this email.

Jerry Williams, P.E.  
Engineer  
WVDEP – Division of Air Quality  
601 57<sup>th</sup> Street, SE  
Charleston, WV 25304  
(304) 926-0499 ext. 1223  
[jerry.williams@wv.gov](mailto:jerry.williams@wv.gov)



 Please consider the environment before printing this email.

**NON-CONFIDENTIAL**

Affidavit of Publication for Attachment P of Application for  
Seneca Compressor Station (Facility ID #071-00008)  
Application submitted January 25, 2016

ID # 071-10008  
Reg R13-2915P  
Company COLUMBIA GAS  
Facility SENECA Initials J

**NON-CONFIDENTIAL**

Certificate of Publication

I, John McCoy, Publisher of



do hereby certify that the attached

legal advertisement

was published in the aforesaid Pendleton Times, a weekly newspaper published at Franklin, Pendleton County, West Virginia for one successive weeks, beginning with the issue of Jan. 21,

2016.

John McCoy, Publisher

Cost of Publication..... \$ 49<sup>34</sup>  
Other ..... \$ \_\_\_\_\_  
Total Amount Due paid ..... \$ 49<sup>34</sup>

**AIR QUALITY PERMIT NOTICE**  
**Notice of Application**  
Notice is given that Columbia Gas Transmission LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Permit Modification for its existing natural gas compression station located on Route 28 North, Seneca Rocks, in Pendleton County, West Virginia. The latitude and longitude coordinates are: 38° 50.917' N and 79° 22.564' W.

The applicant estimates the increases in, if modification application is approved, potential to discharge the following Regulated Air Pollutants will be: Carbon Monoxide by 92.29 tons per year, Nitrogen Oxides by 28.39 tons per year, PM10 and PM2.5 by 2.58 tons per year, Sulfur Dioxide by 0.28 tons per year, Volatile Organic Compounds (VOC) by 16.90 tons per year, Carbon Dioxide Equivalents (CO2e) by 54,515 tons per year, and Formaldehyde by 0.27 tons per year.

Startup of operation is planned to begin on or about the 1st day of November, 2017. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 601 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-0499, extension 1227, during normal business hours.

Dated this the 13th day of January, 2016.

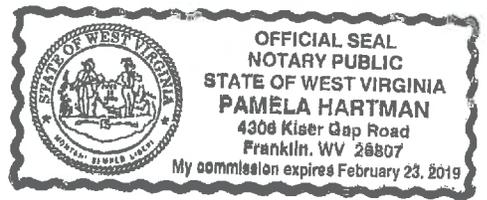
By: Columbia Gas Transmission LLC  
Steven A. Nelson  
Manager of Operations  
107 Spencer Road  
Bldg #1  
Clendenin, WV 25045

NOTARY'S CERTIFICATE

Sworn to and subscribed before me this 21<sup>st</sup> day of January, 2016

Pamela Hartman  
Notary Public.

My commission expires Feb. 23, 2019



NOTE: Do not misplace this certificate; it will be needed in settling the estate.

**Williams, Jerry**

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**From:** livey@cpg.com  
**Sent:** Friday, February 19, 2016 10:09 AM  
**To:** Williams, Jerry  
**Subject:** columbia permit application information Part 2  
**Attachments:** Affidavit of Publication - Files Creek Compressor Station.pdf; Affidavit of Publication - Cleveland Compressor Station.pdf; Affidavit of Publication - Seneca Compressor Station.pdf; Affidavit of Publication - Lost River Compressor Station.pdf; Solar Data - Cleveland - Mars 100\_2080 ft\_15 ppm\_150226.pdf

Jerry,

This should be all of the information you requested. If there is anything else you need, please do not hesitate to ask.

We will be sending the hard copies of the affidavit once we receive the last one. We spoke to the paper last week, so hopefully we should have it next week.

Thank you,

Lacey A. Ivey  
Principal Air  
Columbia Pipeline Group  
337-241-0686



ID # 071-0008  
Reg 213-2715F  
Company COLUMBIA CAS  
Facility SENECA Initials JW

# Solar Turbines

A Caterpillar Company

## PREDICTED ENGINE PERFORMANCE

Customer  <b>Columbia Pipeline Group</b>	
Job ID <b>Permitting</b>	
Run By <b>Nima Bahrami</b>	Date Run <b>21-Apr-15</b>
Engine Performance Code <b>REV. 4.15.1.17.10</b>	Engine Performance Data <b>REV. 2.0</b>

Model <b>TAURUS 70-10802S</b>
Package Type <b>CS/MD</b>
Match <b>STANDARD</b>
Fuel System <b>GAS</b>
Fuel Type <b>CHOICE GAS</b>

### DATA FOR MINIMUM PERFORMANCE

Elevation	feet	1580	
Inlet Loss	in H2O	4.5	
Exhaust Loss	in H2O	10.0	
Accessory on GP Shaft	HP	23.8	
		1	2
Engine Inlet Temperature	deg F	-20.0	-20.0
Relative Humidity	%	60.0	60.0
Driven Equipment Speed	RPM	9683	11908
Specified Load	HP	50.0%	FULL
Net Output Power	HP	5399	10798
Fuel Flow	mmBtu/hr	64.74	84.45
Heat Rate	Btu/HP-hr	11990	7820
Therm Eff	%	21.220	32.536
Engine Exhaust Flow	lbm/hr	197222	230248
PT Exit Temperature	deg F	1007	895
Exhaust Temperature	deg F	884	883

Fuel Gas Composition (Volume Percent)	Methane (CH4)	93.26
	Ethane (C2H6)	3.68
	Propane (C3H8)	0.88
	I-Butane (C4H10)	0.07
	N-Butane (C4H10)	0.19
	I-Pentane (C5H12)	0.03
	N-Pentane (C5H12)	0.03
	Hexane (C6H14)	0.0100
	Carbon Dioxide (CO2)	0.99
	Nitrogen (N2)	0.86
	Sulfur Dioxide (SO2)	0.0001

Fuel Gas Properties	LHV (Btu/Scf)	938.5	Specific Gravity	0.5985	Wobbe Index at 60F	1213.1
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This performance was calculated with a basic inlet and exhaust system. Special equipment such as low noise silencers, special filters, heat recovery systems or cooling devices will affect engine performance. Performance shown is "Expected" performance at the pressure drops stated, not guaranteed.

#### Notes

T70 - 1580 Ft. Elevation -20 deg F

# Solar Turbines

A Caterpillar Company

## PREDICTED EMISSION PERFORMANCE

Customer <b>Columbia Pipeline Group</b>		Engine Model <b>TAURUS 70-10802S CS/MD STANDARD</b>	
Job ID		Fuel Type <b>CHOICE GAS</b>	
Inquiry Number		Water Injection <b>NO</b>	
Run By <b>Nima Bahrami</b>	Date Run <b>21-Apr-15</b>	Engine Emissions Data <b>REV. 0.1</b>	

<b>NOx EMISSIONS</b>	<b>CO EMISSIONS</b>	<b>UHC EMISSIONS</b>
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<b>1</b>	<b>5374 HP</b>	<b>50.0% Load</b>	<b>Elev. 1580 ft</b>	<b>Rel. Humidity 60.0%</b>	<b>Temperature 0 Deg. F</b>
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PPMvd at 15% O2	15.00	25.00	25.00
ton/yr	15.79	16.02	9.18
lbm/MMBtu (Fuel LHV)	0.060	0.061	0.035
lbm/(MW-hr)	0.90	0.91	0.52
(gas turbine shaft pwr) lbm/hr	3.60	3.66	2.09

<b>2</b>	<b>10749 HP</b>	<b>100.0% Load</b>	<b>Elev. 1580 ft</b>	<b>Rel. Humidity 60.0%</b>	<b>Temperature 0 Deg. F</b>
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PPMvd at 15% O2	15.00	25.00	25.00
ton/yr	21.67	21.98	12.59
lbm/MMBtu (Fuel LHV)	0.060	0.061	0.035
lbm/(MW-hr)	0.62	0.63	0.36
(gas turbine shaft pwr) lbm/hr	4.95	5.02	2.87

<b>3</b>	<b>5307 HP</b>	<b>50.0% Load</b>	<b>Elev. 1580 ft</b>	<b>Rel. Humidity 60.0%</b>	<b>Temperature 32.0 Deg. F</b>
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PPMvd at 15% O2	15.00	25.00	25.00
ton/yr	15.10	15.33	8.78
lbm/MMBtu (Fuel LHV)	0.060	0.061	0.035
lbm/(MW-hr)	0.87	0.88	0.51
(gas turbine shaft pwr) lbm/hr	3.45	3.50	2.00

### Notes

- For short-term emission limits such as lbs/hr., Solar recommends using "worst case" anticipated operating conditions specific to the application and the site conditions. Worst case for one pollutant is not necessarily the same for another.
- Solar's typical SoLoNOx warranty, for ppm values, is available for greater than 0 deg F or -20 deg C, and between 50% and 100% load for gas, fuel, and between 65% and 100% load for liquid fuel (except for the Centaur 40). An emission warranty for non-SoLoNOx equipment is available for greater than 0 deg F or -20 deg C and between
- Fuel must meet Solar standard fuel specification ES 9-98. Emissions are based on the attached fuel composition, or, San Diego natural gas or equivalent.
- If needed, Solar can provide Product Information Letters to address turbine operation outside typical warranty ranges, as well as non-warranted emissions of SO2, PM10/2.5, VOC, and formaldehyde.
- Solar can provide factory testing in San Diego to ensure the actual unit(s) meet the above values within the tolerances quoted. Pricing and schedule impact will be provided upon request.
- Any emissions warranty is applicable only for steady-state conditions and does not apply during start-up, shut-down, malfunction, or transient event.

# Solar Turbines

A Caterpillar Company

## PREDICTED EMISSION PERFORMANCE

Customer <b>Columbia Pipeline Group</b>		Engine Model <b>TAURUS 70-10802S CS/MD STANDARD</b>	
Job ID		Fuel Type <b>CHOICE GAS</b>	
Inquiry Number		Water Injection <b>NO</b>	
Run By <b>Nima Bahrami</b>	Date Run <b>21-Apr-15</b>	Engine Emissions Data <b>REV. 0.1</b>	

### NOx EMISSIONS

### CO EMISSIONS

### UHC EMISSIONS

4	10613 HP	100.0% Load	Elev. 1580 ft	Rel. Humidity 60.0%	Temperature 32.0 Deg. F
PPMvd at 15% O2	15.00	25.00	25.00		
ton/yr	20.77	21.07	12.07		
lbm/MMBtu (Fuel LHV)	0.060	0.061	0.035		
lbm/(MW-hr)	0.60	0.61	0.35		
(gas turbine shaft pwr) lbm/hr	4.74	4.81	2.76		

5	4906 HP	50.0% Load	Elev. 1580 ft	Rel. Humidity 60.0%	Temperature 59.0 Deg. F
PPMvd at 15% O2	15.00	25.00	25.00		
ton/yr	14.06	14.27	8.17		
lbm/MMBtu (Fuel LHV)	0.060	0.061	0.035		
lbm/(MW-hr)	0.88	0.89	0.51		
(gas turbine shaft pwr) lbm/hr	3.21	3.26	1.87		

6	9812 HP	100.0% Load	Elev. 1580 ft	Rel. Humidity 60.0%	Temperature 59.0 Deg. F
PPMvd at 15% O2	15.00	25.00	25.00		
ton/yr	19.55	19.84	11.36		
lbm/MMBtu (Fuel LHV)	0.060	0.061	0.035		
lbm/(MW-hr)	0.61	0.62	0.35		
(gas turbine shaft pwr) lbm/hr	4.46	4.53	2.59		

#### Notes

- For short-term emission limits such as lbs/hr., Solar recommends using "worst case" anticipated operating conditions specific to the application and the site conditions. Worst case for one pollutant is not necessarily the same for another.
- Solar's typical SoLoNOx warranty, for ppm values, is available for greater than 0 deg F or -20 deg C, and between 50% and 100% load for gas, fuel, and between 65% and 100% load for liquid fuel (except for the Centaur 40). An emission warranty for non-SoLoNOx equipment is available for greater than 0 deg F or -20 deg C and between
- Fuel must meet Solar standard fuel specification ES 9-98. Emissions are based on the attached fuel composition, or, San Diego natural gas or equivalent.
- If needed, Solar can provide Product Information Letters to address turbine operation outside typical warranty ranges, as well as non-warranted emissions of SO2, PM10/2.5, VOC, and formaldehyde.
- Solar can provide factory testing in San Diego to ensure the actual unit(s) meet the above values within the tolerances quoted. Pricing and schedule impact will be provided upon request.
- Any emissions warranty is applicable only for steady-state conditions and does not apply during start-up, shut-down, malfunction, or transient event.

# Solar Turbines

A Caterpillar Company

## PREDICTED ENGINE PERFORMANCE

Customer <b>Columbia Pipeline Group</b>	
Job ID	
Run By <b>Nima Bahrami</b>	Date Run <b>21-Apr-15</b>
Engine Performance Code <b>REV. 4.15.1.17.10</b>	Engine Performance Data <b>REV. 2.0</b>

Model <b>TAURUS 70-10802S</b>
Package Type <b>CS/MD</b>
Match <b>STANDARD</b>
Fuel System <b>GAS</b>
Fuel Type <b>CHOICE GAS</b>

### DATA FOR MINIMUM PERFORMANCE

Elevation	feet	<b>1580</b>
Inlet Loss	in H2O	<b>4.5</b>
Exhaust Loss	in H2O	<b>10.0</b>
Accessory on GP Shaft	HP	<b>23.8</b>

		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>
Engine Inlet Temperature	deg F	<b>0</b>	<b>0</b>	<b>32.0</b>	<b>32.0</b>	<b>59.0</b>	<b>59.0</b>
Relative Humidity	%	<b>60.0</b>	<b>60.0</b>	<b>60.0</b>	<b>60.0</b>	<b>60.0</b>	<b>60.0</b>
Driven Equipment Speed	RPM	<b>9625</b>	<b>11880</b>	<b>9504</b>	<b>11738</b>	<b>9166</b>	<b>11465</b>
Specified Load	HP	<b>50.0%</b>	<b>FULL</b>	<b>50.0%</b>	<b>FULL</b>	<b>50.0%</b>	<b>FULL</b>
Net Output Power	HP	<b>5374</b>	<b>10749</b>	<b>5307</b>	<b>10613</b>	<b>4906</b>	<b>9812</b>
Fuel Flow	mmBtu/hr	<b>63.13</b>	<b>82.29</b>	<b>60.48</b>	<b>79.00</b>	<b>56.55</b>	<b>74.70</b>
Heat Rate	Btu/HP-hr	<b>11747</b>	<b>7656</b>	<b>11398</b>	<b>7444</b>	<b>11526</b>	<b>7613</b>
Therm Eff	%	<b>21.659</b>	<b>33.236</b>	<b>22.324</b>	<b>34.180</b>	<b>22.076</b>	<b>33.422</b>
Engine Exhaust Flow	lbm/hr	<b>188178</b>	<b>223925</b>	<b>174965</b>	<b>213754</b>	<b>160695</b>	<b>200994</b>
PT Exit Temperature	deg F	<b>1015</b>	<b>898</b>	<b>1028</b>	<b>910</b>	<b>1051</b>	<b>946</b>
Exhaust Temperature	deg F	<b>914</b>	<b>892</b>	<b>957</b>	<b>910</b>	<b>996</b>	<b>946</b>

Fuel Gas Composition (Volume Percent)	<b>Methane (CH4)</b>	<b>93.26</b>
	<b>Ethane (C2H6)</b>	<b>3.68</b>
	<b>Propane (C3H8)</b>	<b>0.88</b>
	<b>I-Butane (C4H10)</b>	<b>0.07</b>
	<b>N-Butane (C4H10)</b>	<b>0.19</b>
	<b>I-Pentane (C5H12)</b>	<b>0.03</b>
	<b>N-Pentane (C5H12)</b>	<b>0.03</b>
	<b>Hexane (C6H14)</b>	<b>0.0100</b>
	<b>Carbon Dioxide (CO2)</b>	<b>0.99</b>
	<b>Nitrogen (N2)</b>	<b>0.86</b>
	<b>Sulfur Dioxide (SO2)</b>	<b>0.0001</b>

Fuel Gas Properties	<b>LHV (Btu/Scf)</b>	<b>938.5</b>	<b>Specific Gravity</b>	<b>0.5985</b>	<b>Wobbe Index at 60F</b>	<b>1213.1</b>
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This performance was calculated with a basic inlet and exhaust system. Special equipment such as low noise silencers, special filters, heat recovery systems or cooling devices will affect engine performance. Performance shown is "Expected" performance at the pressure drops stated, not guaranteed.

Notes	<b>T70 - 1580 ft Elevation</b>
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Affidavit of Publication for Attachment P of Application for  
Seneca Compressor Station (Facility ID #071-00008)  
Application submitted January 25, 2016

Certificate of Publication

I, John McCoy, Publisher of

THE PENDLETON TIMES

do hereby certify that the attached

legal advertisement

was published in the aforesaid Pendleton Times, a weekly newspaper published at Franklin, Pendleton County, West Virginia for 022 successive weeks, beginning with the issue of Jan 21, 2016

John McCoy, Publisher

Cost of Publication..... \$ 49.34
Other ..... \$
Total Amount Due... paid..... \$ 49.34

AIR QUALITY PERMIT NOTICE

Notice of Application

Notice is given that Columbia Gas Transmission LLC has applied to the West Virginia Department of Environmental Protection, Division of Air Quality, for a Permit Modification for its existing natural gas compression station located on Route 28 North, Seneca Rocks, in Pendleton County, West Virginia. The latitude and longitude coordinates are: 38° 56.917' N and 79° 22.564' W.

The applicant estimates the increases in, if modification application is approved, potential to discharge the following Regulated Air Pollutants will be: Carbon Monoxide by 92.28 tons per year, Nitrogen Oxides by 28.38 tons per year, PM10 and PM2.5 by 2.58 tons per year, Sulfur Dioxide by 0.23 tons per year, Volatile Organic Compounds (VOC) by 16.90 tons per year, Carbon Dioxide Equivalents (CO2e) by 54,518 tons per year, and Formaldehyde by 0.27 tons per year.

Startup of operation is planned to begin on or about the 1st day of November, 2017. Written comments will be received by the West Virginia Department of Environmental Protection, Division of Air Quality, 301 57th Street, SE, Charleston, WV 25304, for at least 30 calendar days from the date of publication of this notice.

Any questions regarding this permit application should be directed to the DAQ at (304) 926-9499, extension 1227, during normal business hours.

Dated this the 13th day of January, 2016.

By: Columbia Gas Transmission LLC
Steven A. Nelson
Manager of Operations
107 Spencer Road
Bldg #1
Clendenin, WV 26045

NOTARY'S CERTIFICATE

Sworn to and subscribed before me this 21st day of January, 2016

Pamela Hartman
Notary Public.

My commission expires Feb. 23, 2019



NOTE: Do not misplace this certificate; it will be needed in settling the estate.

**Williams, Jerry**

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**From:** Ward, Beth A  
**Sent:** Wednesday, January 27, 2016 10:01 AM  
**To:** Williams, Jerry  
**Subject:** COLUMBIA GAS TRANSMISSIONS LLC, SENECA & LOST RIVER PERMIT APPLICATION FEES

This is the receipt for payment received from:

COLUMBIA GAS TRANSMISSION LLC, SENECA, CHECK NUMBER 0351152544, CHECK DATE 01/08/2016, \$2,000.00  
R13-2715F ID# 071-00008

COLUMBIA GAS TRANSMISSION LLC, LOST RIVER, CHECK NUMBER 0351152542, CHECK DATE 01/08/2016, \$2,000.00  
R14-0013E ID# 031-00002

OASIS Deposit CR 1600080429

Thank You!

*Beth Ward*

**WV DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BTO FISCAL  
601 57<sup>TH</sup> STREET SE  
CHARLESTON, WV 25304  
(304) 926-0499 EXT 1846  
[beth.a.ward@wv.gov](mailto:beth.a.ward@wv.gov)**

**NON-CONFIDENTIAL**

**Adkins, Sandra K**

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**From:** Adkins, Sandra K  
**Sent:** Tuesday, January 26, 2016 4:13 PM  
**To:** 'snelson@cpq.com'; 'livey@cpq.com'  
**Cc:** McKeone, Beverly D; Williams, Jerry  
**Subject:** WV DAQ Permit Application Status for Columbia Gas Transmission, LLC; Seneca

**RE: Application Status  
Columbia Gas Transmission, LLC  
Seneca  
Plant ID No. 071-00008  
Application No. R13-2715F**

Mr. Nelson,

Your application for a modification permit for the Seneca Compressor Station was received by this Division on January 25, 2016, and was assigned to Jerry Williams. The following item was not included in the initial application submittal:

**Original affidavit for Class I legal advertisement not submitted.**

*This item is necessary for the assigned permit writer to continue the 30-day completeness review.*

Within 30 days, you should receive a letter from Jerry stating the status of the permit application and, if complete, given an estimated time frame for the agency's final action on the permit.

Any determination of completeness shall not relieve the permit applicant of the requirement to subsequently submit, in a timely manner, any additional or corrected information deemed necessary for a final permit decision.

Should you have any questions, please contact the assigned engineer, Jerry Williams, at 304-926-0499, extension 1223.

*Title ✓  
Attachments*

*071-00008  
R13-2715F*

*Jerry*

**45CSR13 Administrative Update, Construction, Modification, Relocation, Temporary Permit or General Permit Registration Incomplete Application**

A complete application is demonstrated when all of the information required below is properly prepared, completed and attached. The items listed below are required information which must be submitted with a 45CSR13 permit application. Any submittal will be considered incomplete if the required information is not included. The applicant must submit a complete application in order to receive a 45CSR13 permit.

- Class I legal advertisement not published in a newspaper certified to accept legal advertisements and original affidavit submitted.
- Application fee AND/OR additional application fees not included:
  - \$250 Class I General Permit
  - \$300 Class II Administrative Update
  - \$1,000 Construction, Modification, Relocation or Temporary Permit
  - \$500 Class II General Permit
  - \$1,000 NSPS
  - \$2,500 NESHAP
  - \$2,500 45CSR27 Pollutant
  - \$5,000 Major Modification
  - \$10,000 Major Construction
- Original and two (2) copies of the application not submitted.
- File organization – application pages are not numbered or in correct order, application is not bound in some way, etc.
- Confidential Business Information is not properly identified.
- General application forms not completed and signed by a responsible official.
- Authority of Corporation form not included – required if application is signed by someone other than a responsible official.
- Applicant is not registered with the West Virginia Secretary of State's Office.
- Copy of current Business Registration Certificate not included.
- Process description, including equipment and emission point identification numbers, not submitted.
- Process flow diagram, including equipment and emission point identification numbers, not submitted.
- Plot plan, including equipment and emission point identification numbers, not submitted.
- Applicable technical forms not completed and submitted:
  - Emission Point Data Summary Sheets
  - Air Pollution Control Device Sheets
  - Emission Unit Data Sheets
  - Equipment List Form
- Emission calculations not included – emission factors, references, source identification numbers, etc.
- Electronic submittal diskette not included.