west virginia department of environmental protection

Division of Air Quality
601 57th 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_{10} and SO_2 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-l36GL (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_x (DLN) combustion system (known as SoLoNOx) limits formation of NO_x, CO, and VOC by pre-mixing air and fuel prior to combustion. When operating a Solar Taurus 70 turbine at ambient temperatures $\geq 0^o$ F and at loads $\geq$ 50%, this DLN system is able to limit the exhaust gas concentration of these pollutants (corrected to 15% O_2) to 15 ppm NOx, 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^o F, additional pilot fuel is required by the turbine to maintain flame stability, which increases estimated emission concentrations to 42 ppm NO_x, 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_x, 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_x, 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:

Pollutant	Emission Factor	Source	Hourly (lb/hr)[1]	Annual (ton/yr)[2]
NO_X	0.060 lb/MMBTU LHV	Vendor Data	4.74	22.80
CO	0.061 lb/MMBTU LHV	Vendor Data	4.81	91.80
$PM_{2.5}$	0.0066 lb/MMBTU HHV[4]	AP-42 Table 3.1-2a (4/00)	0.58	2.53
PM_{10}	0.0066 lb/MMBTU HHV[4]	AP-42 Table 3.1-2a (4/00)	0.58	2.53
SO_2	0.0571 lb/MMBTU HHV[4] (hourly) 0.000714 lb/MMBTU HHV[4] (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)[3]	0.55	3.22
Formaldehyde	0.00071 lb/MMBTU HHV[4]	AP-42, Table 3.1-3 (4/00)	0.06	0.27

Pollutant	Emission Factor	Source	Hourly (lb/hr)[1]	Annual (ton/yr)[2]
Total HAPs	0.00103 lb/MMBTU HHV[4]	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 NOx, 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)[1]	Annual (ton/yr)[2]
	lb/MMscf	lb/MMBTU			
NO_X	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
$PM_{2.5}$	7.6	0.007	AP-42, Table 1.4-2 (7/98)	<0.01	0.01
PM_{10}	7.6	0.007	AP-42, Table 1.4-2 (7/98)	<0.01	0.01
SO_2	-	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_X	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
$PM_{2.5}$	7.6	0.007	AP-42, Table 1.4-2 (7/98)	0.01	0.04
PM_{10}	7.6	0.007	AP-42, Table 1.4-2 (7/98)	0.01	0.04
SO_2	-	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_x	PM[1]	SO_2	VOCs	CO_2e	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
Facility Wide Total	**371.6**	**314.3**	**21.0**	**1.54**	**63.7**	**268,499**	**2.35**

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_x	PM[1]	SO_2	VOCs	CO_2e	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
Change in Emissions ➔	**92.52**	**23.42**	**2.53**	**0.29**	**15.96**	**59,030**	**0.40**

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_x 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_x 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_x limit of 25 ppm at 15% O_2 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_x 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_2 emissions from the turbines. §60.4330(a)(2) allows the facility to meet this limit by burning fuel with a total potential SO_2 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_2e (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_x	CO	$PM_{10/2.5}$	VOC	SO_2
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_x), Ozone, Particulate Matter (PM), Particulate Matter less than 10 microns (PM_{10}), Particulate Matter less than 2.5 microns ($PM_{2.5}$), and Sulfur Dioxide (SO_2). 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*.

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_x emissions.
4.1.16 – Added E09 to NSPS requirement for SO_2.

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

Date