

# Fact Sheet



## *For General Permit Registration Under 45CSR30 and Title V of the Clean Air Act*

Permit Number: R30-NGGP-2007-07700017

Application Received: December 06, 2001

Plant Identification Number: 07700017

Permittee: **Columbia Gas Transmission**

Facility Name: Terra Alta Compressor Station

Mailing Address: 1700 MacCorkle Avenue, SE

Charleston, WV 25314

Issued: August 14, 2007

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Physical Location:	Star Route Box 10, Terra Alta, Preston County, West Virginia
UTM Coordinates:	625.13 km Easting • 4364.38 km Northing • Zone 17
Directions:	From I-79 take State Route 7 east to Terra Alta. Traveling East on State Route 7 to the town of Terra Alta, turn right onto Secondary Route 53. Proceed approximately 2 miles to the station which is located on the right.

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### **Facility Description**

The Terra Alta Station is a natural gas transmission facility covered by Standard Industrial Classification (SIC) 4922. The station has the potential to operate seven (7) days per week, twenty-four (24) hours per day. The station consists of five (5) 1,100-hp, two (2) 300-hp and one (1) 238-hp natural gas fired reciprocating engines, one (1) boiler, six (6) small heaters, one (1) mercaptan tank and multiple storage tanks of various sizes.

**Emissions Summary**

<b>Plantwide Emissions Summary [Tons per Year]</b>		
<b>Criteria Pollutants</b>	<b>Potential Emissions</b>	<b>2005 Actual Emissions</b>
Carbon Monoxide (CO)	171.1	21.9
Nitrogen Oxides (NO <sub>x</sub> )	652.0	210.4
Particulate Matter (PM <sub>10</sub> )	8.3	2.9
Total Particulate Matter (TSP)	8.3	2.9
Sulfur Dioxide (SO <sub>2</sub> )	0.3	0.1
Volatile Organic Compounds (VOC)	34.6	17.0
<i>PM<sub>10</sub> is a component of TSP.</i>		
<b>Hazardous Air Pollutants</b>	<b>Potential Emissions</b>	<b>2005 Actual Emissions</b>
Formaldehyde	11.8	4.0
Other HAPs	2.5	0.4
Total HAPs	14.3	4.4
<i>Some of the above HAPs may be counted as PM or VOCs.</i>		

**Title V Program Applicability Basis**

This facility has the potential to emit 652.0 tons/yr of NO<sub>x</sub>, 171.1 tons of CO and 11.80 tons/yr of Formaldehyde. Due to this facility's potential to emit over 100 tons per year of criteria pollutant and over 10 tons per year of a single HAP, Columbia Gas Transmission Corporation is required to have an operating permit pursuant to Title V of the Federal Clean Air Act as amended and 45CSR30.

**Legal and Factual Basis for Permit Conditions**

The State and Federally-enforceable conditions of the Title V Operating Permits are based upon the requirements of the State of West Virginia Operating Permit Rule 45CSR30 for the purposes of Title V of the Federal Clean Air Act and the underlying applicable requirements in other state and federal rules.

This facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2 45CSR6 45CSR10 45CSR11 45CSR13 WV Code § 22-5-4 (a) (14)  45CSR30 40 C.F.R. Part 61 40 C.F.R. Part 82, Subpart F 40 C.F.R. Part 60, Subpart Kb	Indirect Heat Exchangers Open burning prohibited. Sulfur Oxides emissions Standby plans for emergency episodes.  The Secretary can request any pertinent information such as annual emission inventory reporting. Operating permit requirement. Asbestos inspection and removal Ozone depleting substances Tank NSPS
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State Only:                   45CSR4   No objectionable odors.  
                                   45CSR17   Particulate Fugitive

Each State and Federally-enforceable condition of the Title V Operating Permit references the specific relevant requirements of 45CSR30 or the applicable requirement upon which it is based. Any condition of the Title V permit that is enforceable by the State but is not Federally-enforceable is identified in the draft Title V permit as such.

The Secretary's authority to require standards under 40 C.F.R. Part 60 (NSPS), 40 C.F.R. Part 61 (NESHAPs), and 40 C.F.R. Part 63 (NESHAPs MACT) is provided in West Virginia Code §§ 22-5-1 *et seq.*, 45CSR16, 45CSR15, 45CSR34 and 45CSR30.

**Active Permits/Consent Orders**

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit ( <i>if any</i> )
None		

Conditions from this facility's Rule 13 permit(s) governing construction-related specifications and timing requirements will not be included in the Title V Operating Permit but will remain independently enforceable under the applicable Rule 13 permit(s). All other conditions from this facility's Rule 13 permit(s) governing the source's operation and compliance have been incorporated into this Title V permit in accordance with the General Requirement Comparison Table B which may be downloaded from DAQ's website.

**Determinations and Justifications**

1. The two previously listed mercaptan tanks A20 & B03 (including flare) were removed from service around mid-2005. They were replaced with a new pressurized above-ground tank that is filled via trucks equipped w/ a vapor recovery system.
2. According to 40 C.F.R § 60.110b(b), five 30,000 gallon tanks at this facility are exempt from 40 C.F.R 60 Subpart Kb because they are less than 151 m<sup>3</sup> storing a liquid with vapor pressure less than 15.0 kPa. The facility has to monitor and keep records according to 40 C.F.R § 60.116b to show that the vapor pressure is less than 15.0 kPa.
3. The boiler and heaters at the facility are < 10 mmBtu/hr and gas fired; hence Section 4.0 of the Title V General Permit is applicable to these indirect-fired boiler and heaters.

**Non-Applicability Determinations**

This facility is a major source of HAPs. However, according to sections e and g below no MACT is applicable to this facility.

The following requirements have been determined not to be applicable to the subject facility due to the following:

- a. 40 C.F.R. 60 Subparts K,Ka; *Standards of Performance for Storage Vessels for Petroleum Liquids* - All tanks at Terra Alta station are below 40,000 gallons in capacity.
- b. 40 C.F.R. 60 Subpart KKK; *Standards of Performance for Equipment Leaks of VOC From Onshore Natural Gas Processing Plant* - Terra Alta station is not engaged in the extraction or fractionation of natural gas liquids from field gas, the fractionation of mixed natural gas liquids to natural gas products, or both.

- c. 45CSR21; *To Prevent and Control Air Pollution from the Emission of Volatile Organic Compounds*: Terra Alta station is not located in Cabell, Kanawha, Putnam, Wayne, nor Wood county.
- d. 45CSR27; *To Prevent and Control the Emissions of Toxic Air Pollutants*: Natural gas is included as a petroleum product and contains less than 5% benzene by weight. 45CSR§27-2.4 exempts equipment “used in the production and distribution of petroleum products providing that such equipment does not produce or contact materials containing more than 5% benzene by weight.”
- e. 40 C.F.R. 63 Subpart ZZZZ; *RICE MACT* - All the engines are 2-cycle, lean burn or not greater than 500 HP; Hence Rice MACT is not applicable to this facility.
- f. 40 C.F.R. 60 Subpart Dc; *Boiler NSPS* – All the boilers and heaters are less than 10 MMBtu/hr; hence they are exempt.
- g. 40 C.F.R. 63 Subpart DDDDD; *Boiler MACT* – All the boilers and heaters are less than 10 MMBtu/hr and constructed before Jan 13, 2003; therefore they are classified as “Existing small gaseous fuel boilers and process heaters”; hence they are exempt.

Since the last Title V modification WVDEP has determined that 45CSR10 does not apply to gas fired engines. Also 45CSR10 is not applicable to the facility boiler and heaters because they are less than 10 MMBtu/hr.

40 CFR 64 – Engines, boilers and process heaters do not have any add-on control; therefore, in accordance with 40 C.F.R § 64.2(a), CAM is not applicable to this facility.

#### **Request for Variances or Alternatives**

None

#### **Insignificant Activities**

Insignificant emission unit(s) and activities are identified in the Title V application.

#### **Comment Period**

Title V general Permit has already been advertised and finalized. This fact sheet for facility registration is written for the file. This fact sheet states which rules are applicable to the particular facility and which rules are not applicable.

#### **Procedure for Requesting Public Hearing**

N/A

#### **Point of Contact**

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Division of Air Quality  
601 57<sup>th</sup> Street SE  
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#### **Response to Comments (Statement of Basis)**

N/A