West Virginia Department of Environmental Protection
Division of Air Quality

Fact Sheet

For Final Minor Modification of General Permit Registration Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Minor Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on October 15, 2007.

Permit Number: R30-NGGP-2007-05100100
Application Received: **February 22, 2010**
Plant Identification Number: **05100100**
Permittee: **Columbia Gas Transmission**
Facility Name: **Adaline Compressor Station**
Mailing Address: **1700 MacCorkle Avenue, SE**
Charleston, WV 25314

Permit Action Number: *MM01;* Revised: *June 4, 2010*

Physical Location:	Cameron, Marshall County, West Virginia
UTM Coordinates:	530.4 km Easting • 4,401.6 km Northing • Zone 17
Directions:	Located in Liberty District, Marshall County and south of Cameron, which is 25 miles south of Wheeling on US Rt. 250. From intersection in Cameron, travel west a short distance to a "Y" intersection. Go left, cross bridge, then up a hill on a brick road. Proceed south along this road (Cameron Ridge Road) for approximately 7 miles to station that is on left side of road and partially visible.

Facility Description

Adaline Compressor 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 three (3) 880-hp & two (2) 2,000-hp natural gas fired reciprocating engines, two (2) 1,080-hp turbines, a 1 MMBtu/hr line heater, three (3) diethylene glycol (DEG) dehydrator systems with corresponding 0.55 MMBtu/hr glycol regenerators (all controlled by an enforceable NATCO SHV flare) and numerous storage tanks of various sizes. On-site support equipment includes a 440-hp emergency generator and a 3.48 MMBtu/hr heating system boiler. The facility also periodically operates a mobile glycol reclaimer to regenerate spent glycol from the facility's dehydration systems.

The Minor modification (MM01) was received on February 22, 2010 and covers changes included in Class II Administrative Update R13-2149C (issued on January 13, 2010).

The submittal was for a request to replace three (3) reboilers servicing the dehydration units at the station. This was needed because of a catastrophic event that rendered the existing reboilers inoperable.

The three (3) existing 0.5 MMBtu/hr DEG dehydrator reboilers (BLR1, BLR2, BLR3) will be replaced with three (3) 0.55 MMBtu/hr DEG dehydrator reboilers (BLR5, BLR6, BLR7). No other changes will be made to the dehydration system contact towers or to the flow of natural gas and glycol through the towers.

Additionally, there are off-permit changes which are as follows:

1. Installation of an emergency flare to combust vent gases produced during pipeline pigging operations at the station. During this temporary period, the station will be condensing liquid hydrocarbons from the station's incoming gas. These liquids will be collected in a separator vessel and then transferred to pressurized tanker trucks for transport to an existing NGL plant. Vent gas from the separator vessel will initially be routed to a temporary flare until two temporary engines are installed to re-compress the vent gas and inject it back into the station's natural gas piping. Once the re-compressors are operational, the flare will be utilized only during liquids transfer to pressurized tanker truck. The proposed re-compressor engines are 4SRB design, are equipped with three-way (non-selective) catalysts to reduce emissions of NOx, CO, VOC, and other organic compounds. The engines are not subject to federal emission standards.

2. Installation of a 3.0 MMBtu/hr Line Heater, to maintain temperature of the fuel gas being fed to the existing natural gas compressor engines.

Emissions Summary

The emission changes under this minor modification are follows:

Pollutant	Annual Emission Increase (tpy)
NO_x	4.28
CO	6.82
VOC	2.30
SO_2	0.027
PM	0.39
TSP	0.39
Formaldehyde	0.08
Total HAP	0

Title V Program Applicability Basis

This facility has the potential to emit 871.78 tons/yr of NOx, 153.52 tons of CO and 15.18 tons of Formaldehyde. Due to this facility's potential to emit over 100 tons per year of criteria pollutant and over 10 tons of individual 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.

The modification to this facility has been found to be subject to the following applicable rules:

Federal and State:	45CSR2	Indirect Heat Exchangers
	45CSR13	
	45CSR30	Operating permit requirement.
State Only:	Not applicable	

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 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, 45CSR34 and 45CSR30.

Active Permits/Consent Orders

Permit or Consent Order Number	Date of Issuance	Permit Determinations or Amendments That Affect the Permit *(if any)*
R13-2149C	January13, 2010	

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

Emission Unit table has been updated because the three (3) existing 0.5 MMBtu/hr DEG dehydrator reboilers (BLR1, BLR2, BLR3) will be replaced with three (3) 0.55 MMBtu/hr DEG dehydrator reboilers (BLR5, BLR6, BLR7).

The three (3) 0.55 MMBtu/hr DEG dehydrator reboilers (BLR5, BLR6, BLR7) are exempt from sections 4, 5, 6 and 9 because of a heat input under ten (10) million B.T.U.'s per hour According to 45CSR2-11.1.

On page 5 of the Title V General Permit Registration, the section entitled "45CSR13/14, Consent Order specific and Other Requirements not included in Title V General Permit:" has been updated as follows: 1) R13-2149B has been updated to R13-2149C; and 2) the flare requirements have been removed because these requirements are now included under R13-2149C.

Non-Applicability Determinations

None

Request for Variances or Alternatives

None

Insignificant Activities

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

Comment Period

Public comment period is not applicable for minor modifications.

Procedure for Requesting Public Hearing

N/A

Point of Contact

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Response to Comments (Statement of Basis)

N/A