West Virginia Department of Environmental Protection
Division of Air Quality

Fact Sheet

For Final Significant Modification Permitting Action Under 45CSR30 and Title V of the Clean Air Act

This Fact Sheet serves to address the changes specific to this Significant Modification, and shall be considered a supplement to the Fact Sheet corresponding with the Title V operating permit issued on October 31, 2012.

Permit Number: **R30-03900048-2012**
Application Received: **April 29, 2014**
Plant Identification Number: **03-54-03900048**
Permittee: **Columbia Gas Transmission, LLC**
Facility Name: **Clendenin Compressor Station**
Mailing Address: **1700 MacCorkle Avenue, SE**
Charleston, WV 25314

Permit Action Number: *SM01* Revised: *April 14, 2015*

Physical Location:	Clendenin, Kanawha County, West Virginia
UTM Coordinates:	472.746 km Easting • 4260.604 km Northing • Zone 17
Directions:	Traveling north on US Route 119 from Clendenin, go approximately 0.8 mile and turn right onto Thorofare Road (WV secondary Route 59). Proceed approximately 2.5 miles and turn right onto Route 59-2 and travel approximately 1.2 miles to the station.

Facility Description

The Clendenin compressor station compresses natural gas for pipeline transmission. The facility operates under SIC code 4922. This facility uses two (2) indirect-fired heaters, two (2) reciprocating engines/compressors, one (1) turbine engine/centrifugal compressor, one (1) reciprocating engine/generator, and fifty-two (52) CATCO catalytic heaters.

This modification is to increase the output of the Solar Centaur T-4500 turbine engine, remove four natural gas-fired engines, and add one Total Energy Resources fuel gas heater. Other changes have been made to the facility since the last Title V renewal and will also be incorporated into this modification.

Emissions Summary

Pollutant	Change in Potential Emissions (±TPY)
CO	-167.26
NO_x	-1,821.53
PM_{10}	-3.28
SO_2	-0.25
VOC	-44.31
Formaldehyde	-19.96

Title V Program Applicability Basis

With the proposed changes associated with this modification, this facility maintains the potential to emit 151.34 TPY of CO, 1,195.47 TPY of NO_x, and 12.7 TPY of Formaldehyde. Due to this facility's potential to emit over 100 tons per year of criteria pollutant, over 10 tons per year of a single HAP, and over 25 tons per year of aggregate HAPs, Columbia Gas Transmission, LLC 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	Particulate Air Pollution from Indirect Heat Exchangers
	45CSR13	NSR permits.
	45CSR30	Operating permit requirement.
	45CSR34	Emission Standards for Hazardous air Pollutants
	40 C.F.R. Part 63 Subpart DDDDD	National Emission Standards for Hazardous Air Pollutants for Major Sources: Industrial, Commercial, and Institutional Boilers and Process Heaters
State Only:	45CSR4	No objectionable odors.
	45CSR17	Fugitive Particulate emissions

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)*
R13-2247B	11/25/2014	
CO-R1-C-2007-4A (2005)	03/01/2007	

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," which may be downloaded from DAQ's website.

Determinations and Justifications

The following changes were made to the Title V permit for this modification:

Section 1.0 Emission Units and Listing of Applicable Requirements

- Removed Emission Unit BLR3, the unit was removed from the facility after the last renewal.
- Added 40 CFR 63 Subpart DDDDD requirements to HTR1. As an existing Gas I unit less than 5 mmbtu/hr, HTR1 is subject to tune-ups every 5 years and a onetime energy assessment with a compliance date of January 31, 2016.
- Added Emission unit HTR2. Its applicable requirements are: Sections 4.0, 17.0, 21.0, R13-2247B (Conditions 4.1.1, 7.1.1, 7.1.2, 7.1.3, 7.2.1, 7.4.1, 7.4.2, 7.5.1, 7.5.2, 7.5.3, 7.5.4.), 40 CFR 63 Subpart DDDDD (specifically, §63.7500(e); §§63.7540(a)(10)(i)-(vi), (a)(12), and (a)(13); §§63.7555(a), (i), and (j); §63.7560; §§63.7545(a) and (c); §§63.7550(b), (c), (h)). As a new Gas I unit less than 5 mmBtu/hr, HTR2 is subject to tune-ups every 5 years and the compliance date is upon start up.
- Removed Emission units 05801, 05802, 05803, 05804 (E01, E02, E03, E04) from the table. Two of the units were replaced with electric motors in November 2012, and the other two will be replaced with electric motors during this project (2015).
- Changed the design capacity of emission unit 05806 (E06) from 3,550 hp to 4,500 hp and updated the applicable requirements column with the new R13 permit number.
- Added Emission units SPACE1, SPACE2, and SPACE3 which are a total of 52 CATCO Catalytic heaters with no applicable requirements.

Section 17.0 Boilers and Process Heaters subject to 40 C.F.R. 63 Subpart DDDDD

- Changed Section 17.0 to read that the applicable requirements for affected emission units are given in the Emission Units Table of Section 1.0.

Section 21.0 45CSR13, 45CSR14, and Consent Order Requirements

- Updated the R13 permit listed from R13-2247A to R13-2247B.

Appendix: R13-2247A and CO-R1-C-2007-4A (2005)

- Updated the Appendix and attached scanned copy of R13-2247B.

Non-Applicability Determinations

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

40 CFR 60, Subpart KKKK—*Standards of Performance for Stationary Combustion Turbines:* This subpart is not applicable because the uprating of the existing turbine (05806) is not considered a modification according to the NSPS definitions because the modification will not include a capital investment.

40 CFR 64—*Compliance Assurance Monitoring (CAM):* The engines, turbine and heaters do not have any add-on control; therefore, in accordance with 40 CFR §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

Beginning Date: February 27, 2015
Ending Date: March 30, 2015

Point of Contact

All written comments should be addressed to the following individual and office:

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Procedure for Requesting Public Hearing

During the public comment period, any interested person may submit written comments on the draft permit and may request a public hearing, if no public hearing has already been scheduled. A request for public hearing shall be in writing and shall state the nature of the issues proposed to be raised in the hearing. The Secretary shall grant such a request for a hearing if he/she concludes that a public hearing is appropriate. Any public hearing shall be held in the general area in which the facility is located.

Response to Comments (Statement of Basis)

On March 23, 2015 we received comments from EPA Region 3's Senior Environmental Engineer Paul Wentworth. These comments did not result in any changes to the permit. The comments and our responses are provided below:

Comment #1: Regarding Table 1.0: EPA has concerns regarding wholesale incorporation by reference of applicable requirements in a Title V permit. This comment is based on petition number VI-2007-02.

Response For comment #1.

When the natural gas general permit was up for renewal in 2012, EPA determined that WV could not use the general permit process for natural gas facilities since many of them had to incorporate source specific requirements from a 45CSR13 permit. As a result, we issued the Columbia Gas Title V permits using a similar format as their previous general permits, but they underwent public and EPA review and were issued as source specific Title V permits. The changing of this previously approved format does not fall within the scope of the proposed significant modification.

Comment #2 : Regarding condition 5.1.8: All federally enforceable emissions standards and requirements cannot be bypassed during periods of startup and shutdown unless there is language in the federal requirements that permit requirements are to be bypassed. Any state language allowing emission standards compliance to be suspended during startup and shutdown must designate these as state only requirements enforceable only by the state. EPA understands that this requirement is in the SIP so it is a legal requirement, however,

Response for comment #2. Condition 5.1.8 in this permit is derived directly from 45CSR§2-9.1 of West Virginia's legislative rule 45CSR2 which is incorporated in WV's SIP. In order to change this condition, the underlying state rule would need to be revised, which is beyond the scope of this significant modification. EPA is addressing supplemental proposed rulemaking on affirmative defense provisions for SSM provisions in state regulations in a separate rulemaking. I would also note that as shown in Table 1.0 Emission Units and Listing of Applicable Requirements that the Clendenin Compressor Station is not even subject to this Rule/Condition.

Comment #3 : Regarding condition 14.1.2.b: See comment on page 23 (comment #2).

Response for comment #3. Condition 14.1.2.b in this permit is derived directly from 45CSR§6-4.4 of West Virginia's legislative rule 45CSR6 which is incorporated in WV's SIP. In order to change this condition, the underlying state rule would need to be revised, which is beyond the scope of this significant modification. I would also note that as shown in Table 1.0 Emission Units and Listing of Applicable Requirements that the Clendenin Compressor Station is not even subject to this Rule/Condition.