

**NORTH CAROLINA DIVISION OF  
AIR QUALITY**

**Air Permit Review**

**Permit Issue Date:**

**Region:** Raleigh Regional Office  
**County:** Northampton  
**NC Facility ID:** 6600074  
**Inspector's Name:** Will Wike  
**Date of Last Inspection:** 05/24/2007  
**Compliance Code:** 3/In Compliance - Inspection

<b>Facility Data</b>			<b>Permit Applicability (this application only)</b>
<b>Applicant (Facility's Name):</b> Columbia Gas Transmission Corporation - Pleasant Hill Compressor Station  <b>Facility Address:</b> Pleasant Hill Compressor Station 2784 NC 48 Hwy Pleasant Hill, NC 27866  <b>SIC:</b> 4922 / Natural Gas Transmission <b>NAICS:</b> 48621 / Pipeline Transportation of Natural Gas  <b>Facility Classification: Before:</b> Title V <b>After:</b> Title V <b>Fee Classification: Before:</b> Title V <b>After:</b> Title V			<b>SIP:</b> 2D .0516 and .0521 <b>NSPS:</b> <b>NESHAP:</b> <b>PSD:</b> <b>PSD Avoidance:</b> <b>NC Toxics:</b> <b>112(r):</b> <b>Other:</b>
<b>Contact Data</b>			<b>Application Data</b>
<b>Facility Contact</b>	<b>Authorized Contact</b>	<b>Technical Contact</b>	<b>Application Number:</b> 6600074.06A <b>Date Received:</b> 03/28/2006 <b>Application Type:</b> Renewal <b>Application Schedule:</b> TV-Renewal <b>Existing Permit Data</b> <b>Existing Permit Number:</b> 09186/T00 <b>Existing Permit Issue Date:</b> 01/24/2002 <b>Existing Permit Expiration Date:</b> 12/31/2006
Steve Dugent EH&S Coordinator (804) 768-6446 1809 Coyote Drive Chester, VA 23836	Dana Debaets Operations Manager (804) 733-2471 1596 Baxter Road Petersburg, VA 23875	Kasey Gabbard EH&S Coordinator (304) 357-2079 1700 MacCorkle Ave SE Charleston, WV 25325	
<b>Review Engineer:</b> Jeff Twisdale  <b>Review Engineer's Signature:</b> _____ <b>Date:</b> _____		<b>Comments / Recommendations:</b> <b>Issue</b> 09186/T01 <b>Permit Issue Date:</b> <b>Permit Expiration Date:</b>	

**I. Purpose of Application:**

This permitting action is a renewal of an existing Title V permit pursuant to 2Q .0513. The existing Title V permit (09186T00) was issued on January 24, 2002 and expired on December 31, 2006. The renewal application was initially received on March 28, 2006 by Raleigh Regional Office (RRO) and deemed complete on April 7, 2006. The renewal application was received at least nine months prior to expiration date; therefore, the existing permit will **not** expire until the renewal permit has been issued or denied with submittal of a complete and timely application, and the terms and conditions of the existing permit will remain in effect until the renewal permit has been issued or denied pursuant to 2Q .0513.

**II. Facility Description**

Columbia Gas Transmission Corporation - Pleasant Hill Compressor Station (PHCS) is a facility that compresses natural gas for pipeline transmission utilizing three natural gas-fired reciprocating engines that are site rated at 467 horsepower (hp) or 3.625 million Btu per hour (MMBtu/hr) each, and one natural gas-fired stationary internal combustion emergency generator that is site rated at 250 hp or 150 kilowatts (kW). **The facility is subject to the Title V program because potential carbon monoxide and nitrogen dioxide emissions exceed the 100 tons per year (tpy) threshold.**

### III. History/Background/Application Chronology

**January 24, 2002** – Initial Title V permit (009186T00) issued by Kevin Godwin, RCO Permit Engineer.

**March 28, 2006** – Received application for renewal of existing Title V permit. This modification will be processed as a renewal pursuant to 2Q .0513.

**May 9, 2007** – Requested technical additional information about potential carbon monoxide emissions.

**May 31, 2007** – Received technical additional information about potential carbon monoxide emissions.

**June 13, 2007** – DRAFT permit forwarded to RCO Title V Permit Coordinator (Charles Yirka) for review.

**June 13, 2007** – DRAFT permit sent to PHCS (Kasey Gabbard) and RRO (Charles McEachern and Will Wike) for review via email.

**June 13, 2007** – Minor comments from PHCS (Kasey Gabbard) and no comments from RRO (Charles McEachern) were received.

**June 18, 2007** – No comments from RCO Title V Coordinator (Charles Yirka) and minor comments from RCO Acting Permits Supervisor (Fern Paterson) were received.

### IV. Permit Modification/Changes

The following table describes the modifications to the current permit as part of the renewal process:

Old Page(s)	New Page(s)	Section	Description of Change(s)
NA	NA	Cover Letter	-Updated responsible official name and address and official company / facility name for the permit
NA	NA	Attachment	-Updated insignificant activity list to more accurately describe the sources and added a parts washer-degreaser
3	3	Part 1, Section 1 (Equipment table)	-Updated emission source description for the four reciprocating engines to more accurately reflect their manufacturer, type and size (e.g., site rated horsepower)
5-12	5-12	General Conditions	-Updated all general conditions with latest version

### V. Regulatory Review

The facility is subject to the following regulations:

15A NCAC 2D .0516: Sulfur Dioxide Emissions from Combustion Sources

15A NCAC 2D .0521: Control of Visible Emissions

No new or additional requirements have been added to this renewed permit since the Initial Title V Permit was issued. Therefore, a specific regulatory review will **not** be included in this document. The same regulations (2D .0516 and .0521) and associated specific conditions with no monitoring, recordkeeping and reporting requirements still apply. Continued compliance with the above regulations and the associated specific conditions is expected.

### VI. NSPS, NESHAP, PSD, Attainment Status, 112(r), CAM and NOx SIP Call

#### NSPS

This natural gas compressor station does **not** utilize any gas turbines (only reciprocating engines) to compress the natural gas; therefore, NSPS Subpart GG does **not** apply. Also, the engines are not expected to be subject to the NSPS for spark injection internal combustion engines (40 CFR 60 Subpart JJJJ, proposed June 12, 2006) based on the date of construction.

## NESHAP/MACT

Based on a review of the facility's current operations, the facility is **not** subject to the **National Emission Standards for Hazardous Air Pollutants (NESHAP)** for the **Natural Gas Transmission and Storage, 40 CFR Part 63 Subpart HHH)**, NESHAP for the **Reciprocating Internal Combustion Engines (RICE) (40 CFR Part 63 Subpart ZZZZ)** nor for the **Industrial, Commercial and Institutional Boilers and Process Heaters (40 CFR Part 63 Subpart DDDDD)** since the facility is considered to be a minor source of HAPs (potential to emit < 10 tpy) (Ref. Major Source definition under Section 112(a)(1) of the Clean Air Act). The facility's potential HAP emissions (mainly formaldehyde) are less than 10 tpy per individual HAP and less than 25 tpy for the aggregate HAP emissions.

## PSD/NSR

This existing facility is considered to be a minor stationary source for PSD/NSR purposes because the facility does **not** have the potential to emit more than 250 tpy of either carbon monoxide (CO) or nitrogen dioxide (NO<sub>2</sub>). The facility's potential CO emissions are **244 tpy** noting that the potential CO emissions (2.15 tpy) from the emergency generator are based on the associated AP-42 emission factor and utilization of 500 hours of operation per EPA guidance for emergency generator usage. The facility's potential NO<sub>2</sub> emissions are **145 tpy** noting that the potential NO<sub>2</sub> emissions (1.28 tpy) from the emergency generator are based on the associated AP-42 emission factor and utilization of 500 hours of operation per EPA guidance for emergency generator usage.

The minor source baseline date has been triggered for North Hampton County for PM-10, SO<sub>2</sub> and NO<sub>2</sub>. Therefore, PSD increment will need to be tracked for PM-10, SO<sub>2</sub> and NO<sub>2</sub> in the future. No increase in any emissions is expected during the renewal process.

## Attainment Status

This facility is located in North Hampton County that is currently in attainment for all pollutants. No increase in emissions is expected during the renewal process.

## 112(r)

This facility is **not** subject to Section 112(r) of the Clean Air Act requirements because it does **not** store any of the regulated substances in quantities above the thresholds in the Rule.

## CAM

40 CFR 64 requires that a continuous assurance monitoring plan be developed for all equipment located at a major facility that have pre-controlled emissions above the major source threshold and use a control device to meet an applicable standard. This facility does **not** utilize any control devices to reduce potential CO and NO<sub>2</sub> emissions to less than 250 tpy from the three RICE and one emergency generator; therefore, CAM does **not** apply.

## NOx SIP Call

The reciprocating engines / compressors (**ID Nos. ES-15301 – ES-15303**) are stationary internal combustion engines that would normally be subject to 2D .1418(c) and .1423 which apply statewide since the initial Title V permit was issued after October 31, 2000 (although the application for these existing (since 1990) sources was submitted on February 26, 1996); however, these rich burn stationary internal combustion engines have a site rated capacity of 467 hp each that is much less than 2400 brake horsepower threshold. In lieu of 2D .1418 and .1423, the engines would normally be subject to 2D .1409(a); however, these sources have site rating of less than 650 horsepower each and are **not** located in the specified areas listed in 2D .1402(d). Therefore, the engines are **not** subject to the 2D .1400 requirements. Also, the emergency generator (**ID No. ES-EG1**) is exempt from the 2D .1400 requirements per 2D .1402(g)(3).

## VII. Facility-wide Air Toxics

The facility has **not** triggered the state-only toxics regulations (2Q .0700). Therefore, the facility is **not** subject to a facility-wide air toxics review at this time. Also, the facility does **not** have to submit a facility-wide air toxics review required by the compliance date of the last applicable MACT pursuant to 2Q .0705 since the facility is **not** subject to a MACT (see Section VI above).

## VIII. Statement of Compliance

The DAQ has reviewed the compliance status of this facility. Based on visual observations and review of records at the time of the inspection (05/24/2007 by Will Wike of RRO), this facility appeared to be operating in compliance with Air Quality standards and regulations.

## IX. Facility Emissions Review

There is no change in emissions for this renewal. The following table represents facility-wide actual emissions as submitted by the facility in its latest (2005) emissions inventory:

Pollutant	2005 Emissions (tons per year)
Nitrogen Oxides	4.58
Carbon Monoxide	7.66
Particulate Matter	0.02
Sulfur Dioxide	0.00
Volatile Organic Compounds	0.06
(all other HAPs/TAPs)	0.04

## X. Stipulation Review

The permit modification/changes (where needed) were incorporated into the permit (see table of changes in Section IV of this document).

## XI. Public Notice / EPA and Affected State Review

Pursuant to 2Q .0521, a notice of the draft Title V Permit will be placed in a newspaper of general circulation in the area where the facility is located. The notice will provide for a 30-day comment period, with an opportunity for a public hearing. Copies of the public notice will be sent to persons on the Title V mailing list and EPA. Pursuant to 2Q .0522, a copy of each permit application, each proposed permit and each final permit pursuant will be provided to EPA. Also pursuant to 2Q .0522, a notice of the draft Title V Permit will be provided to each affected State at or before the time notice provided to the public under 2Q .0521 above.

## XII. Conclusions, Comments, and Recommendations

- A. A professional engineer's seal was **not** required for this renewal.
- B. A consistency determination was **not** required for this renewal.
- C. DAQ recommends permit issuance once the public notice and EPA review periods have been completed.