



State of Ohio Environmental Protection Agency

**RE: DRAFT PERMIT TO INSTALL MODIFICATION  
RICHLAND COUNTY**

**CERTIFIED MAIL**

Street Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:  
Lazarus Gov.  
Center

**Application No: 03-11165**

**DATE: 11/16/2000**

Columbia Gas Transmission Corp-Weaver  
P. Michael Hoffman  
2873 Pleasant Valley Road  
Lucas, OH 44843

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install modification for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of \$ 100 will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

Thomas G. Rigo  
Field Operations and Permit Section  
Division of Air Pollution Control

CC: USEPA

NWDO



**Permit To Install**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

**DRAFT MODIFICATION OF PERMIT TO INSTALL 03-11165**

Application Number: 03-11165  
APS Premise Number: 0370000228  
Permit Fee: **To be entered upon final issuance**  
Name of Facility: Columbia Gas Transmission Corp-Weaver  
Person to Contact: P. Michael Hoffman  
Address: 2873 Pleasant Valley Road  
Lucas, OH 44843

Location of proposed air contaminant source(s) [emissions unit(s)]:

**2873 Pleasant Valley Road**  
**Lucas, Ohio**

Description of proposed emissions unit(s):

**Administrative modification of PTI 03-11165 issued on June 10, 1998 for emission unit P001 (gas dehydrator system with reboiler and flare).**

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

**A. State and Federally Enforceable Permit To Install General Terms and Conditions**

**1. Monitoring and Related Recordkeeping and Reporting Requirements**

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
  - i. The date, place (as defined in the permit), and time of sampling or measurements.
  - ii. The date(s) analyses were performed.
  - iii. The company or entity that performed the analyses.
  - iv. The analytical techniques or methods used.
  - v. The results of such analyses.
  - vi. The operating conditions existing at the time of sampling or measurement.
- b. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
  - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
  - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.11 below if no deviations occurred during the quarter.

**Columbia Gas Transmission Corp-Weaver**  
**PTI Application: 03-11165**  
**Issued: To be entered upon final issuance**

**Facility ID: 0370000228**

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted to the appropriate Ohio EPA District Office or local air agency every six months, i.e., by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
- iv. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

## **2. Scheduled Maintenance/Malfunction Reporting**

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction, i.e., upset, of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to OAC rule 3745-15-06.

Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emission unit(s) that is (are) served by such control system(s).

## **3. Risk Management Plans**

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

## **4. Title IV Provisions**

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

## **5. Severability Clause**

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

## **6. General Requirements**

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, reopened, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

## **7. Fees**

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit To Install fees within 30 days after the issuance of this Permit To Install.

## **8. Federal and State Enforceability**

**Issued: To be entered upon final issuance**

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

**9. Compliance Requirements**

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
  - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
  - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
  - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.
  - iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
  - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance

**Columbia Gas Transmission Corp-Weaver**  
**PTI Application: 03-11165**  
**Issued: To be entered upon final issuance**  
were achieved.

**Facility ID: 0370000228**

- ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

#### **10. Permit To Operate Application**

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).
- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

**Columbia Gas Transmission Corp-Weaver**

**Facility ID: 0370000228**

**PTI Application: 03-11165**

**Issued: To be entered upon final issuance**

**B. State Only Enforceable Permit To Install General Terms and Conditions**

**1. Compliance Requirements**

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

**2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements**

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from state-only required emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

**3. Permit Transfers**

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

**4. Air Pollution Nuisance**

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

**5. Termination of Permit To Install**

This permit to install shall terminate within eighteen months of the effective date of the permit to install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

**6. Construction of New Sources(s)**

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources are inadequate or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities prove to be inadequate or cannot meet applicable standards.

**7. Public Disclosure**

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

**8. Applicability**

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

**9. Best Available Technology**

**Columbia Gas Transmission Corp-Weaver**  
**PTI Application: 03-11165**  
**Issued: To be entered upon final issuance**

**Facility ID: 0370000228**

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

**10. Construction Compliance Certification**

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit To Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

**11. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)**

If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

**C. Permit To Install Summary of Allowable Emissions**

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

**SUMMARY (for informational purposes only)**  
**TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
PE	0.13
SO <sub>2</sub>	1.18
NO <sub>x</sub>	1.65
CO	5.39
VOC	3.41
Benzene	0.92

**Columbia Gas Transmission Corp-Weaver**

**Facility ID: 0370000228**

**PTI Application: 03-11165**

**Issued: To be entered upon final issuance**

**Part II - FACILITY SPECIFIC TERMS AND CONDITIONS**

**A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions**

None

**B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions**

None

**Columbia Gas Transmission Corp-Weaver**

**Facility ID: 0370000228**

**PTI Application: 03-11165**

**Emissions Unit ID: P001**

**Issued: To be entered upon final issuance**

**Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)**

**A. State and Federally Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
		OAC rule 3745-17-11 (B)
P001 - Triethylene glycol natural gas dehydrator with regeneration boiler and flare (modification of PTI 03-11165 issued on 6/10/98). Modification involves an increase in the destruction efficiency of the flare.	OAC rule 3745-31-28	OAC rule 3745-17-07 (A)
	40 CFR Part 63, Subpart HH	
	OAC rule 3745-31-05 (A)(3)	
		OAC rule 3745-31-05 (A)(3)
	OAC rule 3745-31-05 (A)(3)	
		OAC rule 3745-17-10
		OAC rule 3745-17-07 (A)
	OAC rule 3745-31-05 (D)	

**Columbia Gas Transmission Corp-Weaver  
PTI Application: 03-11165  
Issued: To be entered upon final issuance**

**Facility ID: 0370000228  
Emissions Unit ID: P001**

Applicable Emissions Limitations/Control Measures	See A.I.2.f.
	See A.I.2.g.
MACT determination (see A.I.2.a.)	
See A.I.2.b.	<u>Stack BL2</u> (boiler)
	0.01 lb PE/hr, 0.04 ton PE/yr
See A.I.2.c.	
See Stack FL1 (flare) and stack BL2(boiler) requirements below	0.10 lb SO <sub>2</sub> /hr, 0.44 ton SO <sub>2</sub> /yr
	0.18 lb NO <sub>x</sub> /hr, 0.77 ton NO <sub>x</sub> /yr
	0.15 lb CO/hr, 0.66 ton CO/yr
<u>Stack FL1</u> (flare)	
	0.01 lb VOC/hr, 0.04 ton VOC/yr
0.02 lb PE/hour, 0.09 ton PE/yr	
See A.I.2.d.	0.02 lb PE/MMBtu,
	20 percent opacity as a six minute average except as otherwise provided by rule
0.17 lb SO <sub>2</sub> /hr, 0.74 ton SO <sub>2</sub> /yr	
0.20 lb NO <sub>x</sub> /hr, 0.88 ton NO <sub>x</sub> /yr	
1.08 lbs CO/hr, 4.73 tons CO/yr	
0.77 pound volatile organic compounds (VOC)/hr, 3.37 tons VOC/yr	
Opacity Restrictions (See A.II.1.a.)	
0.21 lb benzene/hr, 0.92 ton benzene/yr	
See A.I.2.e.	

**Columbia Gas Transmission Corp-Weaver**

**PTI Application: 03-11165**

**Issued: To be entered upon final issuance**

**Facility ID: 0370000228**

**Emissions Unit ID: P001**

**2. Additional Terms and Conditions**

- 2.a In accordance with OAC rule 3745-31-28, MACT for this emissions unit has been determined to be the use of a flare and compliance with the terms and conditions of this permit, which includes operational requirements for the flare.
- 2.b There are no requirements pursuant to 40 CFR 63.765 (c)(3)(ii) due to benzene emissions being assigned a federally enforceable limit of less than 1 ton per year.
- 2.c The requirements of this rule include compliance with the requirements of OAC rule 3745-31-05 (D) and OAC rule 3745-31-28. The requirements of this rule, also include compliance with the requirements of OAC rule 3745-17-17 (A) for the boiler (stack BL2).
- 2.d All particulate emissions are assumed to be particulate matter less than 10  $\mu\text{m}$  in size ( $\text{PM}_{10}$ ).
- 2.e The permittee has requested a federally enforceable limitation of 0.92 ton benzene per year based on a 98 percent destruction efficiency of the flare for purposes of avoiding the control requirements of 40 CFR Part 63 Subpart HH in accordance with §63.765 (c)(3)(ii).
- 2.f The uncontrolled mass rate of particulate emission (PE)\* from Stack FL1 are less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11 (A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply because the process weight rate is equal to zero. "Process weight" is defined in OAC rule 3745-17-01 (B)(14).
- \* The burning of natural gas is the only source of PE from this emissions unit.
- 2.g The emissions from Stack FL1 are exempt from the visible PE limitations specified in OAC rule 3745-17-07 (A) pursuant to OAC rule 3745-17-07 (A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

**II. Operational Restrictions**

1. The flare shall be operated and maintained in accordance with the following:
- a. the flare shall be designed for and operated with no visible emissions as determined by "Method 22, 40 CFR, Part 60, Appendix A," except for periods not to exceed a total of five minutes during any 120 consecutive minutes;

**Emissions Unit ID: P001**

- b. the flare shall be operated with either an electric arc ignition system or a pilot flame. If a pilot flame is employed, the flame shall be present at all times. If an electric arc ignition system is employed, the arcing shall pulse continually;
  - c. the flare shall be steam-assisted;
  - d. the net heating value of the gas being controlled in the flare, as determined by the method specified in Paragraph (P) (2) of Rule 3745-21-10 of the Administrative Code, shall be 300 Btu/scf or greater;
  - e. the flare shall be designed and operated with an actual exit velocity , as determined by the method specified in Paragraph (P) (3) of Rule 3745-21-10 of the Administrative Code, less than 60 feet per second; and
  - f. the permittee shall ensure the flare is operated and maintained in conformance with its design.
2. The permittee shall burn only natural gas in this emissions unit.

**III. Monitoring and/or Recordkeeping Requirements**

1. For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
2. The flare shall be monitored with a thermocouple or any other equivalent device to detect the presence of a pilot flame. If an electric arc ignition system is employed, the arcing shall be monitored to detect any failure.
3. The permittee shall properly install, operate, and maintain a device to continuously monitor the pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall record the following information each day:

- a. All periods during which there was no pilot flame.
  - b. The operating times for the flare, monitoring equipment, and the associated emissions unit.
4. The permittee shall collect and record the following information each month:
    - a. benzene emissions in pounds per month, calculated using GRI's GLYCalc version 3.0 computer program; and
    - b. the annual, year to date benzene emissions (summation of a. for each calendar month to

**Columbia Gas Transmission Corp-Weaver**  
**PTI Application: 03-11165**  
**Issued: To be entered upon final issuance**

**Facility ID: 0370000228**  
**Emissions Unit ID: P001**

date from January to December).

#### **IV. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify all periods during which the pilot flame was not functioning properly. The reports shall include the date, time, and duration of each such occurrence.
2. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
3. The permittee shall submit annual written reports of any deviations from the annual emission limitation in section A.I. The reports shall be submitted annually by January 31 of each year and shall cover the previous calendar year. These reports shall include the actual benzene emissions for the year and shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.

#### **V. Testing Requirements**

1. Compliance with the allowable emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

##### Stack FL1

- a. Emission Limitation:  
0.02 lb PE/hr

##### Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by multiplying the maximum firing capacity (2.92 MMBtu/hr) by the appropriate emission factors from AP-42 Chapter 1.4.3, 7/98 (0.0054 lb PE/MMBtu). The emission limitation accounts for combustion from the natural gas pilot flame.

- b. Emission Limitation:  
0.09 ton PE/yr

##### Applicable Compliance Method:

The ton per year emission limitation was developed by multiplying the pound per hour limitation by the maximum operating schedule 8,760 hours/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance

will also be shown with the annual limitation.

- b. Emission Limitation:  
0.17 lb SO<sub>2</sub>/hr

**Applicable Compliance Method:**

The permittee shall demonstrate compliance with this emission limitation by multiplying the maximum firing capacity (2.92 MMBtu/hr) by a company supplied emission factor of 0.0571 lb SO<sub>2</sub>/MMBtu. The emission limitation accounts for combustion from the natural gas pilot flame.

- d. Emission Limitation:  
0.74 ton SO<sub>2</sub>/yr

**Applicable Compliance Method:**

The ton per year emission limitation was developed by multiplying the pound per hour limitation by the maximum operating schedule 8,760 hours/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- e. Emission Limitation:  
0.20 lb NO<sub>x</sub>/hr

**Applicable Compliance Method:**

The permittee shall demonstrate compliance with this emission limitation by multiplying the maximum firing capacity (2.92 MMBtu/hr) by the appropriate emission factors from AP-42 Chapter 13.5, 1/95 (0.068 lb NO<sub>x</sub>/MMBtu). The emission limitation accounts for combustion from the natural gas pilot flame.

- f. Emission Limitation:  
0.88 ton NO<sub>x</sub>/yr

**Applicable Compliance Method:**

The ton per year emission limitation was developed by multiplying the pound per hour limitation by the maximum operating schedule 8,760 hours/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- g. Emission Limitation:  
1.08 lbs CO/hr

**Applicable Compliance Method:**

The permittee shall demonstrate compliance with this emission limitation by multiplying

**Columbia Gas Transmission Corp-Weaver**

**PTI Application: 03-11165**

**Issued: To be entered upon final issuance**

**Facility ID: 0370000228**

**Emissions Unit ID: P001**

the maximum firing capacity (2.92 MMBtu/hr) by the appropriate emission factor from AP-42 Chapter 13.5, 1/95 (0.37 lb CO/MMBtu). The emission limitation accounts for combustion from the natural gas pilot flame.

- h. Emission Limitation:  
4.73 tons CO/yr

Applicable Compliance Method:

The ton per year emission limitation was developed by multiplying the pound per hour limitation by the maximum operating schedule 8,760 hours/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- i. Emission Limitation:  
0.77 lb VOC/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by combining the controlled VOC emissions from the flare and the VOC emissions from the pilot flame combustion. The emissions were developed by applying a 98 percent reduction efficiency for controlled VOC. Controlled VOC emissions shall be determined by employing the GRI's GLYCalc version 3 computer program with an applied flare control efficiency of 98 percent and at the maximum operating schedule of 8,760 hours/yr. Flare pilot flame VOC emissions shall be determined by multiplying the maximum firing capacity (2.92 MMBtu/hr) by the appropriate emission factor from AP-42 Chapter 13.5, 1/95 (0.014 lb VOC/MMBtu).

Compliance shall also be demonstrated by ensuring the flare operates at the proper efficiency through the monitoring and recordkeeping specified in section A.III.2. - A.III.3. and testing specified in section A.V.2.c.

- j. Emission Limitation:  
3.37 tons VOC/yr

Applicable Compliance Method:

The ton per year emission limitation was developed by multiplying the pound per hour limitation by the maximum operating schedule 8,760 hours/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- k. Emission Limitation:  
0.21 lb benzene/hr

Applicable Compliance Method:

Compliance will be determined by employing the GRI's GLYCalc version 3 computer program with an applied flare control efficiency of 98 percent and at the maximum operating schedule of 8,760 hours/yr.

Compliance shall also be demonstrated by ensuring the flare operates at the proper efficiency through the monitoring and recordkeeping specified in section A.III.2. - A.III.3. and testing specified in section A.V.2.c.

- l. Emission Limitation:  
0.92 ton benzene/yr

Applicable Compliance Method:

Compliance shall be determined based upon the recordkeeping requirements specified in section A.III.4.

Stack BL2

- m. Emission Limitation:  
0.02 lb PE/MMBtu heat input

Applicable Compliance Method:

Compliance with this emission limitation shall be determined using calculations based on emission factors for natural gas combustion from AP-42 Chapter 1.4.3 (7/98) and a minimum firing capacity of 1.8 MMBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with 40 CFR Part 60 - Appendix A, Method 5.

- n. Emission Limitation:  
0.01 lb PE/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by multiplying the maximum firing capacity (1.8 MMBtu/hr) by the appropriate emission factor from AP-42 Chapter 1.4.3, 7/98 (0.0054 lb PE/MMBtu). If required, the permittee shall demonstrate compliance by testing in accordance with 40 CFR Part 60 - Appendix A, Method 5.

- o. Emission Limitation:  
0.04 ton PE/yr

**Columbia Gas Transmission Corp-Weaver**  
**PTI Application: 03-11165**

**Facility ID: 0370000228**  
**Emissions Unit ID: P001**

**Issued: To be entered upon final issuance**

Applicable Compliance Method:

The ton per year emission limitation was developed by multiplying the pound per hour limitation by the maximum operating schedule 8,760 hours/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- p. Emission Limitation:  
0.10 lb SO<sub>2</sub>/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by multiplying the maximum firing capacity (1.8 MMBtu/hr) by a company supplied emission factor of 0.0571 lbs SO<sub>2</sub>. If required, the permittee shall demonstrate compliance by testing in accordance with 40 CFR Part 60 - Appendix A, Method 6.

- q. Emission Limitation:  
0.44 ton SO<sub>2</sub>/yr

Applicable Compliance Method:

The ton per year emission limitation was developed by multiplying the pound per hour limitation by the maximum operating schedule 8,760 hours/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- r. Emission Limitation:  
0.18 lb NO<sub>x</sub>/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by multiplying the maximum firing capacity (1.8 MMBtu/hr) by the appropriate emission factor from AP-42 Chapter 1.4.3, 7/98 (0.098 lb NO<sub>x</sub>/MMBtu). If required, the permittee shall demonstrate compliance by testing in accordance with 40 CFR Part 60 - Appendix A, Method 7.

- s. Emission Limitation:  
0.77 tons NO<sub>x</sub>/yr

Applicable Compliance Method:

The ton per year emission limitation was developed by multiplying the pound per hour limitation by the maximum operating schedule 8,760 hours/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance

**Columbia Gas Transmission Corp-Weaver**

**PTI Application: 03-11165**

**Issued: To be entered upon final issuance**

**Facility ID: 0370000228**

**Emissions Unit ID: P001**

will also be shown with the annual limitation.

- t. Emission Limitation:  
0.15 lb CO/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by multiplying the maximum throughput (1.8 MMBtu/hr) by the appropriate emission factor from AP-42 Chapter 1.4.3, 7/98 (0.0824 lb CO/MMBtu). If required, the permittee shall demonstrate compliance by testing in accordance with 40 CFR Part 60 - Appendix A, Method 10.

- u. Emission Limitation:  
0.66 ton CO/yr

Applicable Compliance Method:

The ton per year emission limitation was developed by multiplying the pound per hour limitation by the maximum operating schedule 8,760 hours/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- v. Emission Limitation:  
0.01 lb VOC/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance with this emission limitation by multiplying the maximum throughput (1.8 MMBtu/hr) by the appropriate emission factor from AP-42 Chapter 1.4.3, 7/98 (0.0054 lb VOC/MMBtu). If required, the permittee shall demonstrate compliance by testing in accordance with 40 CFR Part 60 - Appendix A, Method 25.

- w. Emission Limitation:  
0.04 ton VOC/yr

Applicable Compliance Method:

The ton per year emission limitation was developed by multiplying the pound per hour limitation by the maximum operating schedule 8,760 hours/yr and dividing by 2,000 lbs/ton. Therefore, provided compliance is shown with the hourly limitation, compliance will also be shown with the annual limitation.

- x. Emission Limitation:

20 percent opacity as a six-minute average, except as otherwise provided by rule

Applicable Compliance Method:  
 OAC rule 3745-17-03 (B)(1)

2. Emission testing requirements: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

- a. the emission testing shall be conducted to demonstrate compliance with a minimum BTU value and a maximum velocity for purposes of ensuring a 98% destruction efficiency.
- b. The permittee shall determine within 3 months after the start-up of this emissions unit, the net heating value of the gas being combusted in the flare controlling emissions unit P001 using the following equation:

$$HT = K \sum_{i=1}^n C_i H_i$$

where,

$H_T$  = Net heating value of the sample, MJ/scm; where the net enthalpy per mole of gas is based on combustion at 25 degrees Celsius and 760 mm Hg, but the standard temperature for determining the volume corresponding to one mole is 20 degrees Celsius;

$C_i$  = Concentration of sample component I in ppm on a wet basis, as measured for organics by Reference Method 18 and measured for hydrogen and carbon monoxide by ASTM D1946-77;

$H_i$  = Net heat of combustion of sample component I, kcal/g mole at 25 degrees Celsius and 760 mm Hg. The heats of combustion may be determined using ASTM D2382-76 if published values are not available or cannot be calculated; and,

$K$  = Constant,  $1.740 \times 10^{-7}$  (1/ppm) (g mole/scm) (MJ/kcal) where the standard temperature for (g mol/scm) is 20 degrees Celsius.

- c. The permittee shall determine within 3 months after the start-up of this emissions unit, the actual exit velocity of the flare controlling emissions unit P001 by dividing the volumetric flowrate (in units of standard temperature and pressure), as determined by Reference Methods 2, 2A, 2C, or 2D as appropriate; by the unobstructed (free) cross sectional area of the flare tip.
3. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to

**Columbia Gas Transmission Corp-Weaver**

**PTI Application: 03-11165**

**Issued: To be entered upon final issuance**

**Facility ID: 0370000228**

**Emissions Unit ID: P001**

Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

## **VI. Miscellaneous Requirements**

1. None.

**B. State Only Enforceable Section**

**I. Applicable Emissions Limitations and/or Control Requirements**

1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
P001 - Triethylene glycol natural gas dehydrator with regeneration boiler and flare (modification). Modification involves an increase in the destruction efficiency of the flare.	None	See B.III.1.

**2. Additional Terms and Conditions**

- 2.a None

**II. Operational Restrictions**

None

**III. Monitoring and/or Recordkeeping Requirements**

1. The permit to install for this emissions unit (P001) was evaluated based on the Gas Research Institute's GRI GLYCalc software, Version 3.0 and the design parameters of the emissions unit's exhaust system, as specified in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the Screen 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for each pollutant:

Pollutant: Benzene

TLV (ug/m3): 32,000

**Columbia Gas Transmission Corp-Weaver**

**PTI Application: 03-11165**

**Issued: To be entered upon final issuance**

**Facility ID: 0370000228**

**Emissions Unit ID: P001**

Maximum Hourly Emission Rate (lbs/hr): 0.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3.03

MAGLC (ug/m3): 762

Pollutant: Toluene

TLV (ug/m3): 188,000

Maximum Hourly Emission Rate (lbs/hr): 0.6

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 3.5

MAGLC (ug/m3): 4,476

Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification

**Columbia Gas Transmission Corp-Weaver  
PTI Application: 03-11165**

**Facility ID: 0370000228  
Emissions Unit ID: P001**

**Issued: To be entered upon final issuance**

definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- c. where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

**IV. Reporting Requirements**

None

**V. Testing Requirements**

None

**VI. Miscellaneous Requirements**

None