

Synthetic Minor Determination and/or **Netting Determination**

Permit To Install **03-14072**

A. Source Description

The proposed project is a modification to emissions unit P001, a natural gas dehydration unit with regeneration boiler and flare, to replace the existing flare with a somewhat larger one.

B. Facility Emissions and Attainment Status

Columbia Gas Transmission/Weaver Compressor station is a Title V facility. Richland County is attainment for all criteria pollutants.

C. Source Emissions

Columbia Gas Transmission has requested a federally enforceable 98 percent destruction efficiency for the flare. This will reduce the facility's potential benzene emissions to 0.92 ton/yr. As a result of the flare replacement, there will be a slight increase in PE, SO₂, NO_x, CO, and VOC emissions.

D. Conclusion

Obtaining a federally enforceable limit for benzene emissions will allow the company to avoid the control requirements of 40 CFR Part 63, Subpart HHH in accordance with 40 CFR Part 63.1274 (d)(2).



State of Ohio Environmental Protection Agency

Street Address:

Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

**RE: DRAFT PERMIT TO INSTALL
RICHLAND COUNTY
Application No: 03-14072**

CERTIFIED MAIL

| | |
|-------------------------------|------------------------------|
| | TOXIC REVIEW |
| | PSD |
| Y | SYNTHETIC MINOR |
| | CEMS |
| 40 CFR Part 63 Subpart HHH | MACT |
| | NSPS |
| | NESHAPS |
| | NETTING |
| | MAJOR NON-ATTAINMENT |
| Y | MODELING SUBMITTED |
| | GASOLINE DISPENSING FACILITY |

DATE: 9/25/2003

Columbia Gas Transmission Corp-Weaver
Gregory Lago
1700 MacCorkle Avenue SE
Charleston, WV 253251273

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install 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 **\$200** 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,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

NWDO

Richland County Regional Planning Commission



**Permit To Install
Terms and Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 03-14072

Application Number: 03-14072

APS Premise Number: 0370000228

Permit Fee: **To be entered upon final issuance**

Name of Facility: Columbia Gas Transmission Corp-Weaver

Person to Contact: Gregory Lago

Address: 1700 MacCorkle Avenue SE
Charleston, WV 253251273

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

**2873 Pleasant Valley Road
Lucas, Ohio**

Description of proposed emissions unit(s):

replace existing flare on dehydration system (P001).

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit 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 emissions unit(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 and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

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.9 below if no deviations occurred during the quarter.

- 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

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 were achieved.
 - 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 ninety (90) days after commencing operation of the source(s) covered by this permit.

11. Best Available Technology

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.

12. 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.

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

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. 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.

5. 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 cannot meet the requirements of this permit 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 cannot meet the requirements of this permit or cannot meet applicable standards.

6. 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.

7. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

8. 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.

9. 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 | 0.05 |
| SO2 | 1.54 |
| NOx | 2.10 |
| CO | 7.80 |
| VOC | 3.50 |
| Benzene | 0.92 |

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

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> | <u>Applicable Emissions Limitations/Control Measures</u> |
|---|--|---|
| P001 - Triethylene glycol gas dehydrator with regeneration boiler and flare (modification to PTI 03-11165 issued 3/01/01 to replace existing flare with a new flare.) | 40 CFR Part 63, Subpart HHH OAC rule 3745-21-07(G) OAC rules 3745-23-06(B) and 3745-21-08(B) OAC rule 3745-31-05 (A)(3) | See A.I.2.a See A.I.2.b See A.I.2.c emissions from the flare (FL1): 0.01 lb particulate emissions (PE)/hr, 0.04 ton PE/yr See A.I.2.e 0.25 lb sulfur dioxide (SO2)/hr, 1.10 ton SO2/yr 0.30 lb nitrogen oxides (NOx)/hr, 1.31 ton NOx/yr 1.63 lb carbon monoxide (CO)/hr, 7.14 ton CO/yr 0.79 lb volatile organic compounds (VOC)/hr, 3.46 ton VOC/yr See A.II.1 emissions from the boiler stack (stack BL2): 0.003 lb PE/hr, 0.01 ton PE/yr 0.10 lb SO2/hr, 0.44 ton SO2/yr |

| | |
|---------------------------|---|
| | 0.18 lb NOx/hr, 0.79 ton NOx/yr |
| | 0.15 lb CO/hr, 0.66 ton CO/yr |
| OAC rule 3745-17-10(B)(1) | 0.01 lb VOC/hr, 0.04 ton VOC/yr |
| | See A.I.2.d |
| OAC rule 3745-17-07 (A) | 0.020 lb PE/MMBTU actual heat input (for stack BL2) |
| | Visible emissions shall not exceed 20 percent opacity, as a six minute average except as otherwise provide by rule (for stack BL2). |
| | See A.I.2.f (for stack BL2) |
| OAC rule 3745-18-06(A) | See A.I.2.g (for flare FL1) |
| OAC rule 3745-18-06(E) | See A.I.2.h (for flare FL1) |
| OAC rule 3745-17-11 (B) | See A.I.2.i (for flare FL1) |
| OAC rule 3745-17-07(A) | 0.21 lb benzene/hr, 0.92 ton benzene/yr (See A.I.2.a) |
| OAC rule 3745-31-05 (D) | |

2. Additional Terms and Conditions

- 2.a** The permittee has requested a federally enforceable limitation of 0.92 ton benzene per rolling, 12-month summation, based on a 98 percent destruction efficiency of the flare, for purposes of avoiding the control requirements of 40 CFR, Part 63, Subpart HHH in accordance with 40 CFR 63.1274 (d)(2). Hence, there are no requirements established pursuant to 40 CFR 63.1274 (d)(2) because the benzene emissions from this emissions unit are limited to less than 1 ton per year.
- 2.b** The emissions unit is designed to use only glycol, which is not a photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5).
- 2.c** The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (B) and the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05 (A)(3) in this permit to install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

- 2.d** The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(D), 3745-17-10(B) and 3745-17-07(A), and 40 CFR, Part 63, Subpart HHH.
- 2.e** All of the PE are assumed to be particulate matter less than 10 microns in size (PM10).
- 2.f** OAC rule 3745-18-06(A) does not establish sulfur dioxide emission limitations for this emissions unit because the emissions unit only employs natural gas as fuel. However, OAC rule 3745-18-06(A) requires that the natural gas being combusted meet certain fuel quality restrictions (a heat content greater than 950 Btu per standard cubic foot and a sulfur content less than 0.6 pound per million standard cubic feet). Because the natural gas being burned in this emissions unit is the standard, pipeline quality natural gas supplied to industrial, commercial, and residential users throughout the state, it is assumed that it meets the fuel quality restrictions; and no monitoring, recordkeeping or reporting requirements are necessary to ensure ongoing compliance with OAC rule 3745-18-06(A).
- 2.g** There are no sulfur dioxide emission limitations established by OAC Chapter 3745-18 for equipment associated with this emissions unit that are not considered "fuel burning equipment" because the process weight rate is less than 1,000 pounds/hour.
- 2.h** The uncontrolled mass rate of PE* from flare 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.i** The emissions from flare 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 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.

- 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 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 200 Btu/scf or greater.
 - d. 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.
 - e. the permittee shall ensure the flare is operated and maintained in conformance with its design.
2. The permittee shall burn natural gas as the singular fuel supplement for this emissions unit.

III. Monitoring and/or Recordkeeping Requirements

1. For each day during which the permittee burns a supplemental 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 each day:

- a. All periods of time during which there was no pilot flame.
 - b. A log of the downtime for the flare and monitoring equipment when the associated emissions unit was in operation.
4. The permittee shall collect and record the following information each month for this emissions unit:
 - a. the benzene emissions, in pounds, calculated using GRI's GLYCalc, version 3.0 computer program; and
 - b. the rolling, 12-month summation of the monthly benzene emission rates, in tons.
 5. The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from all the stacks serving

this emissions unit, including the flare. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the location and color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emission incident; and
- e. any corrective actions taken to eliminate the visible emissions.

At any time the permittee observes visible emissions from the flare, the permittee shall monitor the visible emissions for a minimum period of 30 minutes in accordance with 40 CFR, Part 60, Appendix A, Method 22 and record the results in an operations log.

IV. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify the following:
 - a. all periods of time during which there was no pilot flame (the reports shall include the date, time, and duration of each such occurrence); and
 - b. all exceedances of the rolling, 12-month benzene emission limitation of 0.92 ton.

The quarterly deviation reports shall be submitted in accordance with paragraph the General Terms and Conditions of this permit.

2. The permittee shall submit deviation (excursion) reports that identify each day when a supplemental 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 that summarize the actual annual OC (benzene) emissions. The reports shall be submitted by January 31 of each year, shall include the calculations, and shall cover the previous calendar year.
4. The permittee shall submit quarterly summaries that include a log of the downtime for the flare and monitoring equipment when the associated emissions unit was in operation.
5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from any stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the appropriate Ohio EPA District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

6. The permittee shall submit quarterly reports that include all visible emission readings conducted pursuant to 40 CFR, Part 60, Appendix A, Method 22 as a result of the presence of visible emissions from the flare. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall address the data obtained during the previous calendar quarter.

V. Testing Requirements

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

- a. Emission Limitation:
flare FL1 - 0.01 lb PE/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly PE emission limitation by multiplying the AP-42 emission factor from Table 1.4-2, (revised 7/98) of 1.9 lb PE (filterable)/mm cu. ft. by the maximum natural gas consumption rate of 0.0044 mm cu. ft./hr.

- b. Emission Limitation:
flare FL1 - 0.04 ton PE/yr

Applicable Compliance Method:

Compliance with the annual allowable PE limitation shall be assumed as long as compliance with the hourly allowable PE limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760 and dividing by 2000).

- c. Emission Limitation:
flare FL1 - 0.25 lb SO₂/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable SO₂ emission limitation by multiplying the maximum firing capacity (4.40 mmBtu/hr) by a company - supplied emission factor of 0.0571 lb SO₂/mmBtu. [The emission limitation accounts for combustion from the natural gas pilot flame].

- d. Emission Limitation:
flare FL1 - 1.10 ton SO₂/yr

Applicable Compliance Method:

Compliance with the annual allowable SO₂ limitation shall be assumed as long as compliance with the hourly allowable SO₂ emission limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760 and dividing by 2000).

- e. **Emission Limitation:**
flare FL1 - 0.30 lb NO_x/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable NO_x emission limitation by multiplying the maximum firing capacity (4.40 mmBtu/hr) by the AP-42 emission factor from Table 13.5-1 (revised 1/95) of 0.068 lb NO_x/mmBtu.

- f. **Emission Limitation:**
flare FL1 - 1.31 ton NO_x/yr

Applicable Compliance Method:

Compliance with the annual allowable NO_x limitation shall be assumed as long as compliance with the hourly allowable NO_x emission limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760 and dividing by 2000).

- g. **Emission Limitation:**
flare FL1 - 1.63 lbs CO/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable CO emission limitation by multiplying the maximum firing capacity (4.40 mmBtu/hr) by the AP-42 emission factor from Table 13.5-1(revised 1/95) of 0.37 lb CO/mmBtu.

- h. **Emission Limitation:**
flare FL1 - 7.14 tons CO/yr

Applicable Compliance Method:

Compliance with the annual allowable CO limitation shall be assumed as long as compliance with the hourly allowable CO emission limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760 and dividing by 2000).

- i. **Emission Limitation:**
flare FL1 - 0.79 lb VOC/hr

Applicable Compliance Method:

The permittee may demonstrate compliance with the hourly allowable VOC emission limitation by employing the GRI's GLYCalc, version 3 computer program and a flare control efficiency of 98 percent, by weight.

The permittee may also demonstrate compliance by multiplying the AP-42 emission factor from Table 13.5-1 (revised 1/95), of 0.014 lb VOC/mmBtu by the maximum firing capacity (4.40 mmBtu/hr).

- j. **Emission Limitation:**
flare FL1 - 3.46 tons VOC/yr

Applicable Compliance Method:

Compliance with the annual allowable VOC limitation shall be assumed as long as compliance with the hourly allowable VOC emission limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760 and dividing by 2000).

- k. **Emission Limitation:**
flare FL1 - 0.21 lb benzene/hr

Applicable Compliance Method:

The permittee may determine compliance with the hourly allowable benzene emission limitation by employing the GRI's GLYCalc, version 3 computer program and a flare control efficiency of 98 percent, by weight.

- l. **Emission Limitation:**
flare FL1 - 0.92 ton benzene/rolling, 12-month period

Applicable Compliance Method:

Compliance with the annual allowable benzene emission limitation may be determined based upon the recordkeeping requirements specified in section A.III.4 of the terms and conditions of this permit.

- m. **Emission Limitation:**
Stack BL2 - 0.02 lb PE/mmBtu actual heat input

Applicable Compliance Method:

The permittee may determine compliance by multiplying the AP-42 emission factor from Table 1.4-2 (revised 7/98) of 1.9 lbs PE(filterable)/mm cu. ft. and a heat content of c.u. ft./1020 Btu.

If required, the permittee shall demonstrate compliance with the PE limitation above pursuant to OAC rule 3745-17-03(B)(9).

- n. Emission Limitation:
Stack BL2 - 0.003 lb PE/hr

Applicable Compliance Method:

The permittee may determine compliance by multiplying an emission factor from AP-42, Table 1.4-2 (revised 7/98), of 1.9 lbs PE (filterable)/mm cu. ft. by the maximum natural gas consumption rate of 0.0018 mm cu. ft./hr.

If required, the permittee shall demonstrate compliance with the PE limitation above pursuant to Methods 1-5 of 40 CFR, Part 60, Appendix A.

- o. Emission Limitation:
Stack BL2 - 0.01 ton PE/yr

Applicable Compliance Method:

Compliance with the annual allowable PE limitation shall be assumed as long as compliance with the hourly allowable PE emission limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760 and dividing by 2000).

- p. Emission Limitation:
Stack BL2 - 0.10 lb SO₂/hr

Applicable Compliance Method:

The permittee shall demonstrate compliance by multiplying the maximum firing capacity (1.8 mmBtu/hr) by a company supplied emission factor of 0.0571 lbs SO₂/mmBtu.

If required, the permittee shall demonstrate compliance by testing in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 6.

- q. Emission Limitation:
Stack BL2 - 0.44 ton SO₂/yr

Applicable Compliance Method:

Compliance with the annual allowable SO₂ limitation shall be assumed as long as compliance with the hourly allowable SO₂ emission limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760 and dividing by 2000).

- r. Emission Limitation:
Stack BL2 - 0.18 lb NO_x/hr

Applicable Compliance Method:

The permittee may determine compliance by multiplying an emission factor from AP-42, Table 1.4-1 (revised 7/98) of 100 lbs NO_x/mm cu. ft. by the maximum natural gas consumption rate of 0.0018 mm cu. ft./hr.

If required, the permittee shall demonstrate compliance by testing in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 7.

- s. Emission Limitation:
Stack BL2 - 0.79 tons NOx/yr

Applicable Compliance Method:

Compliance with the annual allowable NOx limitation shall be assumed as long as compliance with the hourly allowable NOx emission limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760 and dividing by 2000).

- t. Emission Limitation:
Stack BL2 - 0.15 lb CO/hr

Applicable Compliance Method:

The permittee may determine compliance by multiplying an emission factor from AP-42, Table 1.4-1 (Revised 7/98) of 84 lb CO/mm cu. ft. by the maximum natural gas consumption rate of 0.0018 mm cu. ft./hr.

If required, the permittee shall demonstrate compliance by testing in accordance with 40 CFR Part 60, Appendix A, Methods 1-5 and 10.

- u. Emission Limitation:
Stack BL2 - 0.66 ton CO/yr

Applicable Compliance Method:

Compliance with the annual allowable CO limitation shall be assumed as long as compliance with the hourly allowable CO emission limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760 and dividing by 2000).

- v. Emission Limitation:
Stack BL2 - 0.01 lb VOC/hr

Applicable Compliance Method:

The permittee may determine compliance by multiplying an emission factor from AP-42, Table 1.4-2 (revised 7/98) of 5.5 lbs VOC/mm cu. ft. by the maximum natural gas consumption rate of 0.0018 mm cu. ft./hr.

If required, the permittee shall demonstrate compliance by testing in accordance with 40 CFR Part 60, Appendix A, Methods 18, 25, or 25A, as appropriate.

- w. Emission Limitation:
Stack BL2 - 0.04 ton VOC/yr

Applicable Compliance Method:

Compliance with the annual allowable VOC limitation shall be assumed as long as compliance with the hourly allowable VOC emission limitation is maintained (the annual limitation was calculated by multiplying the hourly limitation by 8760 and dividing by 2000).

x. Emission Limitation:

Visible PE emissions shall not exceed 20 percent opacity, as a six-minute average, except as otherwise provided by rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with the visible PE limitation in accordance with the methods specified in OAC rule 3745-17-03(B)(1).

VI. Miscellaneous Requirements

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 gas dehydrator with regeneration boiler and flare (modification to PTI 03-11165 issued 3/01/01 to replace existing flare with a new flare.) | See B.III.1 | 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 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 the "worst case" pollutant(s):

Pollutant: Benzene
 TLV (mg/m3): 1.60
 Maximum Hourly Emission Rate (lbs/hr): 0.21
 Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.041
 MAGLC (ug/m3): 38.10

Pollutant: Toluene:

TLV (mg/m3): 188.40

Maximum Hourly Emission Rate (lbs/hr): 0.21

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 6.041

MAGLC (ug/m3): 4486

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 compositions 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 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 evaluation 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