Ohio Environmental Protection Agency
John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

Certified Mail

8/19/2011

Yes	TOXIC REVIEW
No	PSD
Yes	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
Yes	SYNTHETIC MINOR TO AVOID TITLE V
Yes	FEDERALLY ENFORCABLE PTIO (FEPTIO)
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Ms. Judith Box
East Ohio Gas Company - Austintown
320 Springside Dr.
Akron, OH 44333

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0250000911
Permit Number: P0108294
Permit Type: Initial Installation
County: Mahoning

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of 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 permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, Youngstown-Vindicator. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Northeast District Office at (330)425-9171.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section, DAPC

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA-NEDO; Pennsylvania; West Virginia

Permit Strategy Write-Up

1. Check all that apply:

   _X_ Synthetic Minor Determination

   Netting Determination

2. Source Description:
   A Natural Gas Dehydrator which uses a Glycol based dessicant for drying natural gas. The emissions unit is rated at 5.8 mmBtu/hr and will operate in Mahoning County. Liquid dessicant (triethylene glycol) is used to remove water vapor from natural gas. The dessicant is brought into contact with "wet" natural gas in the contactor. The dense wetted dessicant sinks to the bottom of the contactor and is removed from the contactor. The dried natural gas flows out of the dehydrator. The wetted dessicant is heated in the 1 mmBtu/hrreboiler to evaporate the water from the dessicant. The dried dessicant returns to the contactor to be reused. Prior to the boiler, a flash tank separator-condenser reduces the pressure of the wetted dessicant to vaporize the small amounts of methane and other hydrocarbons in the wetted dessicant stream. Emissions from the reboiler and flash tank are treated in the thermal oxidizer prior to release to the atmosphere.

3. Facility Emissions and Attainment Status:

   The facility currently has 3 natural gas-fired engines. Two are rated at 1,265 HP each and the other is rated at 1,340 HP.

Facility Allowable Emission Summary

Pollutants	B001	B002	B003	P001	Totals
NOx	24.4	24.4	25.87	1.53	76.2
CO	2.32	2.32	3.1	0.93	8.67
TOC	6.1	6.1	1.86	34.26	48.66
HAPs	1.1	1.1	0.74	5.70	8.64
PE	2.59	2.59	0.52	0.19	5.89

   Mahoning County is currently in attainment for all pollutants.

4. Source Emissions:
   The uncontrolled HAP PTE (190 TPY) exceeds the major MACT threshold, and the uncontrolled VOC PTE (1,142 TPY) exceeds the Title V and PSD thresholds. The facility requested that the HAP and VOC be controlled with a thermal oxidizer to restrict their emissions below the major source thresholds. Since the PTE is based on the maximum throughput of the unit, additional recordkeeping is not required. Also, the natural gas throughput is required to be recorded by Subpart HH. Calculations were performed by the company using a GLY-Calc program, at 40 mmscfd natural gas and 97% control efficiency.

   The source's PTE is under 10 TPY for NOx, CO and PE.

5. Conclusion:
   The company has chosen to use a thermal oxidizer to reduce the HAP PTE to below threshold limits using federally enforceable restrictions.

   Making the continued use of a thermal oxidizer, as specified above, to destroy VOC and HAP emissions from the dehydration units a federally enforceable requirement in the FEPTIO should ensure potential facility emissions of VOC and HAP remain below applicable Title V and PSD emissions thresholds. Use of a thermal oxidizer as a federally enforceable control device also ensures exemption from MACT Subpart HH control, monitoring, recordkeeping

&reporting requirements in accordance with 40 CFR 63.764(e).

6. Please provide additional notes or comments as necessary:

   None

7. Total Permit Allowable Emissions Summary (for informational purposes only):

Pollutant	Tons Per Year
NOx	1.53
CO	0.93
PE	0.19
VOC	34.26
HAPs	5.70

Mahoning County

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install and Operate
East Ohio Gas Company - Austintown

Issue Date:	8/19/2011
Permit Number:	P0108294
Permit Type:	Initial Installation
Permit Description:	Initial installation of a glycol dehydration unit controlled by a 5.8 mmBtu/hr thermal oxidizer.
Facility ID:	0250000911
Facility Location:	East Ohio Gas Company - Austintown 9686 NEW ROAD, Austintown Twp., OH 44451-9708
Facility Description:	Natural Gas Distribution

The Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio has issued a draft action of an air pollution control, federally enforceable permit-to-install and operate (PTIO) for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Jana Gannon at Ohio EPA DAPC, Northeast District Office, 2110 East Aurora Road, Twinsburg, OH 44087 or (330)425-9171. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc

Ohio Environmental Protection Agency

DRAFT

Division of Air Pollution Control
Permit-to-Install and Operate
for
East Ohio Gas Company - Austintown

Facility ID:	0250000911
Permit Number:	P0108294
Permit Type:	Initial Installation
Issued:	8/19/2011
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install and Operate
for
East Ohio Gas Company - Austintown

Table of Contents

Authorization

Facility ID: 0250000911
Application Number(s): A0041907
Permit Number: P0108294
Permit Description: Initial installation of a glycol dehydration unit controlled by a 5.8 mmBtu/hr thermal oxidizer.
Permit Type: Initial Installation
Permit Fee: $200.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 8/19/2011
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

East Ohio Gas Company - Austintown
9686 NEW ROAD
Austintown Twp., OH 44451-9708

of a Permit-to-Install and Operate for the emissions unit(s) identified on the following page.

Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)425-9171

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section 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 described emissions unit(s) will operate in compliance with applicable State and Federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

Authorization (continued)

Permit Number: P0108294
Permit Description: Initial installation of a glycol dehydration unit controlled by a 5.8 mmBtu/hr thermal oxidizer.

Permits for the following Emissions Unit(s) or groups of Emissions Units are in this document as indicated below:

Emissions Unit ID:	**P001**
Company Equipment ID:	P001
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

1. What does this permit-to-install and operate ("PTIO") allow me to do?

This permit allows you to install and operate the emissions unit(s) identified in this PTIO. You must install and operate the unit(s) in accordance with the application you submitted and all the terms and conditions contained in this PTIO, including emission limits and those terms that ensure compliance with the emission limits (for example, operating, recordkeeping and monitoring requirements).

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.

The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

You must keep all records required by this permit, including monitoring data, test results, strip-chart recordings, calibration data, maintenance records, and any other record required by this permit for five years from the date the record was created. You can keep these records electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make requested records available to Ohio EPA upon request is a violation of this permit requirement.

4. What are my permit fees and when do I pay them?

There are two fees associated with permitted air contaminant sources in Ohio:

- PTIO fee. This one-time fee is based on a fee schedule in accordance with Ohio Revised Code (ORC) section 3745.11, or based on a time and materials charge for permit application review and permit processing if required by the Director.

  You will be sent an invoice for this fee after you receive this PTIO and payment is due within 30 days of the invoice date. You are required to pay the fee for this PTIO even if you do not install or modify your operations as authorized by this permit.

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. Unless otherwise specified, facilities subject to one or more synthetic minor restrictions must use Ohio EPA's "Air Services" to submit annual emissions associated with this permit requirement. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

5. When does my PTIO expire, and when do I need to submit my renewal application?

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is

very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

6. What happens to this permit if my project is delayed or I do not install or modify my source?

This PTIO expires 18 months after the issue date identified on the "Authorization" page above unless otherwise specified if you have not (1) started constructing the new or modified emission sources identified in this permit, or (2) entered into a binding contract to undertake such construction. This deadline can be extended by up to 12 months, provided you apply to Ohio EPA for this extension within a reasonable time before the 18-month period has ended and you can show good cause for any such extension.

7. What reports must I submit under this permit?

An annual permit evaluation report (PER) is required in addition to any malfunction reporting required by OAC rule 3745-15-06 or other specific rule-based reporting requirement identified in this permit. Your PER due date is identified in the Authorization section of this permit.

8. If I am required to obtain a Title V operating permit in the future, what happens to the operating provisions and PER obligations under this permit?

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).

The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

9. What are my obligations when I perform scheduled maintenance on air pollution control equipment?

You must perform scheduled maintenance of air pollution control equipment in accordance with OAC rule 3745-15-06(A). If scheduled maintenance requires shutting down or bypassing any air pollution control equipment, you must also shut down the emissions unit(s) served by the air pollution control equipment during maintenance, unless the conditions of OAC rule 3745-15-06(A)(3) are met. Any emissions that exceed permitted amount(s) under this permit (unless specifically exempted by rule) must be reported as deviations in the annual permit evaluation report (PER), including nonexempt excess emissions that occur during approved scheduled maintenance.

10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report?

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Northeast District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.

If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located?

Yes. Under Ohio law, the Director or his authorized representative may inspect the facility, conduct tests, examine records or reports to determine compliance with air pollution laws and regulations and the terms and conditions of this permit. You must provide, within a reasonable time, any information Ohio EPA requests either verbally or in writing.

12. What happens if one or more emissions units operated under this permit is/are shut down permanently?

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting[1] a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, for at least five years from the date the record was generated.

Again, you cannot resume operation of any emissions unit certified by the authorized official as being permanently shut down without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31.

[1]Permittees that use Ohio EPA's "Air Services" can mark the affected emissions unit(s) as "permanently shutdown" in the facility profile along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update will constitute notifying of the permanent shutdown of the affected emissions unit(s).

13. Can I transfer this permit to a new owner or operator?

You can transfer this permit to a new owner or operator. If you transfer the permit, you must follow the procedures in OAC Chapter 3745-31, including notifying Ohio EPA or the local air agency of the change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"?

This permit and OAC rule 3745-15-07 prohibit operation of the air contaminant source(s) regulated under this permit in a manner that causes a nuisance. Ohio EPA can require additional controls or modification of the requirements of this permit through enforcement orders or judicial enforcement action if, upon investigation, Ohio EPA determines existing operations are causing a nuisance.

15. What happens if a portion of this permit is determined to be invalid?

If a portion of this permit is determined to be invalid, the remainder of the terms and conditions remain valid and enforceable. The exception is where the enforceability of terms and conditions are dependent on the term or condition that was declared invalid.

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

   a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

      (1) None.

   b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

      (1) None.

2. The emissions unit contained in this permit is subject to 40 CFR Part 63, Subpart HH: National Emission Standards for Hazardous Air Pollutants from Oil and Natural Gas Production Facilities. The complete MACT requirements may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA Northeast District Office.

C. Emissions Unit Terms and Conditions

1. Dehydration Unit, P001

Operations, Property and/or Equipment Description:

Natural gas glycol dehydration system including a 1.5 mmBtu/hrreboiler (which is exempt from permitting per OAC rule 3745-31-03(A)(1)(a)) andcontrolled by a 5.8 mmBtu/hr thermal oxidizer

a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).

(1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.

a. d)(6), d)(7), d)(8),d)(9) and e)(5).

(2) For the purpose of a permit-to-operate document, the emissions unit terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	Nitrogen oxide (NO_x) emissions shall not exceed 0.35 lb/hr and 1.53tpy. Carbon monoxide (CO) emissions shall not exceed 0.21 lb/hr and 0.93 tpy. Particulate emissions (PE) shall not exceed 0.04 lb/hr and 0.19 tpy. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/01/06	See b)(2)b.
c.	ORC 3704.03(T)	Volatile organic compounds (VOC) emissions shall not exceed 7.82 lbs/hr. Hazardous air pollutant (HAP) emissions shall not exceed 1.30 lbs/hr.
d.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD, Title	VOC emissions shall not exceed 34.26 tons as a rolling, 12-month summation.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	V and major MACT permitting)	HAP emissions shall not exceed 5.70 tons as a rolling, 12-month summation. See b)(2)c and c)(1).
e.	OAC rule 3745-17-10(B)(1)	The emission limitation required by this applicable rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
f.	OAC rule 3745-17-07(A)(1)	Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
g.	40 CFR Part 63, Subpart HH, National Emission Standards for HAP from Oil and Natural Gas Production Facilities, 40 CFR 63.760(b)(2)	A triethylene glycol (TEG) dehydration unit is an affected source subject to 40 CFR Part 63, Subpart HH for oil and natural gas production facilities.
h.	40 CFR 63.764(e)	Exemption from control requirements.
i.	ORC 3704.03(F)(4)(d)	See d)(6), d)(7), d)(8),d)(9) and e)(5).

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (S.B. 265 changes), such that BAT is no longer required by State regulation for NAAQS pollutant less than ten tons per year. However, that rule revision has not yet been approved by 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 revision to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally–approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of 3745-31-05, then these emission limits/control measures no longer apply.

b. These rule paragraphs apply once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

i. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO_x, COand PEfrom this air contaminant source since the controlled potentials to emit for NO_x, CO and PEare less than ten tons per year.

c. Maintenance of the operating temperature of the thermal oxidizer used to control VOC and HAPs will assure compliance with the rolling, 12-month summations. Additional monthly record keeping is not required since the annual limits are

based on the emissions unit's potential to emit (at a throughput of 40 mmscf of natural gas/day and 97% destruction efficiency).

d. The estimated emissions of HAPs, calculated from the designed maximum natural gas and hydrocarbon liquid throughput to the glycol dehydration units and losses from the storage vessels with the potential for flash emissions, demonstrate this facility to be an "area source" of HAP.

e. The glycol dehydration unit is exempt from the control requirements of §63.764(d) because the actual average emissions of benzene from the glycol dehydration unit process vent are less than 0.90megagram/year, with federally enforceable controls in place.

c) Operational Restrictions

(1) All of the emissions from this emissions unit shall be captured and directed to athermal oxidizer that shall meet the operational, monitoring, and record keeping requirements of this permit whenever the emissions unit is in operation.

(2) The permittee shall burn only natural gas in this emissions unit.

(3) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit(s) controlled by the thermal oxidizer is/are in operation, shall not be more than 50 degrees Fahrenheit below 1400 degrees Fahrenheit (as determined by the manufacturer).

(4) The permittee shall operate and maintain the thermal oxidizer in accordance with the manufacturer's recommendations and specifications and maintain records of all maintenance performed on the thermal oxidizer.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal oxidizer when the emissions unit(s) is/are in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within $\pm$ 1 percent of the temperature being measured or $\pm$ 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The permittee shall collect and record the following information each day the emissions unit(s) is/are in operation:

a. all 3-hour blocks of time, when the emissions unit(s) controlled by the thermal oxidizer was/were in operation, during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below 1400 degrees Fahrenheit; and

b. a log (date and total time) of the downtime or bypass of the capture (collection) system and thermal oxidizer, and/or downtime of the monitoring equipment, when the associated emissions unit(s) was/were in operation.

These records shall be maintained at the facility for a period of 5 years.

(2) Whenever the monitored average combustion temperature within the thermal oxidizer deviates from the range or limit established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range/limit specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the temperature readings immediately after the corrective action was implemented; and

f. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature range/limit is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Ohio EPA Northeast District Office. The permittee may request revisions to the permitted temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rate(s) for the controlled pollutant(s). In addition, approved revisions to the temperature range/limit will not

constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

(3) The permittee shall maintain records of each day a fuel other than natural gas is burned in this emissions unit and/or the thermal oxidizer.

(4) The permittee shall maintain records of the annual facility natural gas or hydrocarbon liquid throughput for each year, in accordance with 40 CFR 63.760(a)(1)(ii).

(5) The permittee shall maintain the following records for the actual average emissions of benzene from the glycol dehydration unit process vent in accordance with 63.772(b)(2), determined either uncontrolled or with federally enforceable controls in place:

a. The permittee shall determine actual average benzene emissions using the model GRI-GLY Calc™, Version 3.0 or higher, and the procedures presented in the associated GRI-GLY Calc™Technical Reference Manual. Inputs to the model shall be representative of actual operating conditions of the glycol dehydration unit and may be determined using the procedures documented in the Gas Research Institute (GRI) report entitled "Atmospheric Rich/Lean Method for Determining Glycol Dehydrator Emissions" (GRI-95/0368.1); or

b. The permittee shall determine an average mass rate of benzene emissions in kilograms per hour through direct measurement using the methods in 63.772(a)(1)(i) or (ii), or an alternative method according to 63.7(f). Annual emissions in kilograms per year shall be determined by multiplying the mass rate by the number of hours the unit is operated per year. This result shall be converted to megagrams per year.

(6) The federally enforceable permit-to-install and operate (FEPTIO) application for this/these emissions unit(s), P001, was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for

Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/24 x 5/7 = 4 TLV/168 = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: xylene

TLV (mg/m3): 435

Maximum Hourly Emission Rate (lbs/hr): 54.7

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 286.1

MAGLC (ug/m3): 10,350

Toxic Contaminant: toluene

TLV (mg/m3): 188

Maximum Hourly Emission Rate (lbs/hr): 17.2

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 89.97

MAGLC (ug/m3): 4,470

The permittee, has demonstrated that emissions of xylene and toluene, from emissions unit(s) P001, is calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

(7) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the “Toxic Air Contaminant Statute” 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 solely due to a non-restrictive change to a parameter or process operation, where compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a “modification”, the permittee shall apply for and obtain a final FEPTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the “Toxic Air Contaminant Statute”, ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

(9) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

e) Reporting Requirements

(1) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. 7.82 lbs VOC/hr and 34.26 tons VOC/year based on a rolling, 12-month summation;

ii. 1.30 lbs total HAPs/hour and 5.70 tons HAPs/year based on a rolling, 12-month summation; and

iii. use of natural gas only as a fuel in the dehydrator and the thermal oxidizer;

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

If no deviations (excursions) occurred during a calendar quarter, thepermittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

The quarterly reports shall be submitted (postmarked) each year by the thirty-first of January (covering October to December), the thirtieth of April (covering January to March), the thirty-first of July (covering April to June), and the thirty-first of October (covering July to September), unless an alternative schedule has been established and approved by the Director (the Ohio EPA Northeast District Office).

(2) The permittee shall submit quarterly summaries of the following records:

a. all 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below 1400 degrees Fahrenheit; and

b. any records of downtime (date and length of time) for the capture (collection) system, the thermal oxidizer, and/or the monitoring equipment when the emissions unit(s) was/were in operation.

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

(3) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than 12-months for each air contaminant source identified in this permit.

(4) The permittee shall identify in the annual PER the following information concerning the operations of the thermal oxidizer during the 12-month reporting period for this/these emissions unit(s):

a. each period of time (start time and date, and end time and date)when the average combustion temperature within the thermal oxidizer was outside of the range specified by the manufacturer and/or outside of the acceptable range following any required compliance demonstration;

b. any period of time (start time and date, and end time and date)when the emissions unit(s) was/were in operation and the process emissions were not vented to the thermal oxidizer;

c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;

d. each incident of deviation described in “a”or “b” where prompt corrective action, that would bring the emissions unit(s) into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and

e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s).

(5) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

(6) Unless other arrangements have been approved by the Director, all notifications and reports shall be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal.

f) Testing Requirements

(1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

NO_x emissions shall not exceed 0.35 lb/hr and 1.53tpy.

Applicable Compliance Method:

The hourly emission rate specified above was established using the manufacturer's emission guarantee, based on the use of the 5.8 mmBtu/hr thermal oxidizer.

The tpy emission limitation was developed by multiplying the short-term allowable NO_x emission limitation (0.35lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

If required, compliance with the hourlyNO_xemission limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 7.

b. Emission Limitation:

CO emissions shall not exceed 0.21 lb/hr and 0.93 tpy.

Applicable Compliance Method:

The hourly emission rate specified above was established using the manufacturer's emission guarantee, based on the use of the 5.8 mmBtu/hr thermal oxidizer.

The tpy emission limitation was developed by multiplying the short-term allowable CO emission limitation (0.21lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

If required, compliance with the hourlyCO emission limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 10.

c. Emission Limitation:

PE shall not exceed 0.04 lb/hr and 0.19 tpy.

Applicable Compliance Method:

The hourly emission rate specified above was determined by multiplying the emission factor, specified in the U.S. EPA reference document AP-42, Compilation of Air Pollutant Emission Factors, Section 1.4, Table 1.4-2 (7/98), (0.00745 lb/mmBtu) by the maximum heat input of the thermal oxidizer (5.8 mmBtu/hr).

The tpy emission limitation was developed by multiplying the short-term allowable particulate emission limitation (0.04lb/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. Therefore, if compliance is shown with the short-term allowable emission limitation, compliance shall also be shown with the annual emission limitation.

If required, compliance with the hourlyPE limitation shall be demonstrated in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Methods 1 through 5.

d. Emission Limitation:

Visible PE from any stack shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance through visible particulate emission observations performed in accordance with the methods and procedures specified in40 CFR Part 60, Appendix A, Method 9.

e. Emission Limitation:

VOC emissions shall not exceed 7.82 lbs/hr and 34.26 tons as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the short term VOCemission limitation shall be demonstrated by the emission testing requirements specified in f)(2).

The rolling, 12-month emission limitation was developed by multiplying the short-term allowable VOC emission limitation (7.82lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. The short term VOC emission limitationis based on the controlled potential to emit, therefore, compliance with each month's rolling, 12-month summation is assumed.

f. Emission Limitation:

HAP emissions shall not exceed 1.30 lbs/hr and 5.70 tons as a rolling, 12-month summation.

Applicable Compliance Method:

Compliance with the short term HAP emission limitation shall be demonstrated by the emission testing requirements specified in f)(2).

The rolling, 12-month emission limitation was developed by multiplying the short-term allowable HAP emission limitation (1.30lbs/hr) by the maximum annual hours of operation (8,760 hours), and then dividing by 2,000 lbs per ton. The short term HAP emission limitationis based on the controlled potential to emit, therefore, compliance with each month's rolling, 12-month summation is assumed.

(2) The permittee shall conduct, or have conducted, emission testing for VOC emissions and total HAP emissions in accordance with the following requirements:

a. Performance testing shall be conducted no later than 180 days following the startup of this emission unit and at approximately2.5 years following the date of issuance of this permit.

b. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rates:

Method 1, Appendix A, Part 60 to select the sampling port locations and number of traverse points;

Method 2, 2F, or 2G, Appendix A, Part 60 to determine the velocity and volumetric flow-rate of the stack gases or an approved alternative;

Method 3A or 3B, Appendix A, Part 60, or an approved alternative method to determine the oxygen, excess air, and dry molecular weight of the stack gases;

Method 4, Appendix A, Part 60 or an approved alternative method to measure the moisture content of the stack gases;

Method 18, Appendix A, Part 60 or an approved alternative for total HAPs; and

Method 25 or 25A, Appendix A, Part 60 or an approved alternative for VOC emissions.

c. Each performance test shall consist of three separate runs using the applicable test method. Each run shall last at least one hour and shall be conducted under the conditions specified in the Method. The arithmetic mean of the results of the three runs shall be used for the purpose of determining compliance with the limitations in this permit.

d. The test(s) shall be conducted while the dehydrator is operating at its maximum normal operating load, and the thermal oxidizer shall be maintained within 50 degrees of the manufacturer's recommended operating temperature of 1,400 degrees Fahrenheit as a 3-hour average. Operations during periods of startup, shutdown and malfunction shall not constitute representative conditions for the purpose of the performance test. The permittee shall make available to the Ohio

EPA Northeast District Office, upon request, any records that may be necessary to determine the conditions of the performance tests.

e. The permittee shall notify the Ohio EPA Northeast District Office in writing and at least 30 calendar days before a performance test is initially scheduled to begin, of plans to conduct a performance test ("Intent to Test (ITT)). The ITT notification shall describe in detail the proposed test methods and procedures, the monitored operating parameters, the time(s) and date(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 Northeast District Office's refusal to accept the results of the emission test(s).

f. Personnel from the Ohio EPA Northeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of each emissions unit and the testing procedures provide a valid characterization of the emissions from each emissions unit.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and shall be submitted to the Ohio EPA Northeast District Office within 30 days following completion of the test(s).

h. In the event the permittee is unable to conduct the performance test on the date specified in the notification requirement due to unforeseeable circumstances beyond control, the permittee shall notify the Ohio EPA Northeast District Office as soon as practicable and without delay prior to the scheduled performance test date and specify the date when the performance test is rescheduled. This notification of delay in conducting the performance test shall not relieve the permittee of legal responsibility for compliance with any other applicable provisions of this part or with any other applicable federal, State, or local requirement.

i. The permittee shall maintain performance test results and any other data needed to determine emissions from each emissions unit for a minimum of 5 years after the testing is conducted or after the data is collected. These records shall bemade available for inspection by the Ohio EPA Northeast District Office, upon request.

g) Miscellaneous Requirements

(1) None.