



12/16/2014

Reagan Mayces
Texas Eastern Transmission LP - Colerain
P.O. Box 1642
Houston, TX 77251-1642

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0607005013
Permit Number: P0115712
Permit Type: Initial Installation
County: Belmont

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA) Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. In this letter you will find the information on the following topics:

- How to appeal this permit
• How to save money, reduce pollution and reduce energy consumption
• How to give us feedback on your permitting experience
• How to get an electronic copy of your permit

How to appeal this permit

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00, made payable to "Ohio Treasurer Josh Mandel," which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
77 South High Street, 17th Floor
Columbus, OH 43215

Certified Mail

Table with 2 columns: Yes/No and various permit categories like TOXIC REVIEW, SYNTHETIC MINOR TO AVOID MAJOR NSR, CEMS, MACT/GACT, NSPS, NESHAPS, NETTING, MODELING SUBMITTED, SYNTHETIC MINOR TO AVOID TITLE V, FEDERALLY ENFORCABLE PTIO (FEPTIO), SYNTHETIC MINOR TO AVOID MAJOR GHG.

## **How to save money, reduce pollution and reduce energy consumption**

The Ohio EPA is encouraging 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 Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: [www.ohioairquality.org/clean\\_air](http://www.ohioairquality.org/clean_air)

## **How to give us feedback on your permitting experience**

Please complete a survey at [www.epa.ohio.gov/survey.aspx](http://www.epa.ohio.gov/survey.aspx) and give us feedback on your permitting experience. We value your opinion.

## **How to get an electronic copy of your permit**

This permit can be accessed electronically via the eBusiness Center: Air Services in Microsoft Word format or in Adobe PDF on the Division of Air Pollution Control (DAPC) Web page, [www.epa.ohio.gov/dapc](http://www.epa.ohio.gov/dapc) by clicking the "Search for Permits" link under the Permitting topic on the Programs tab.

If you have any questions, please contact Ohio EPA DAPC, Southeast District Office at (740)385-8501 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Erica R. Engel-Ishida, Manager  
Permit Issuance and Data Management Section, DAPC

Cc: Ohio EPA-SEDO



**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Texas Eastern Transmission LP - Colerain**

Facility ID:	0607005013
Permit Number:	P0115712
Permit Type:	Initial Installation
Issued:	12/16/2014
Effective:	12/16/2014
Expiration:	12/16/2024





**Division of Air Pollution Control**  
**Permit-to-Install and Operate**  
for  
Texas Eastern Transmission LP - Colerain

**Table of Contents**

Authorization .....	1
A. Standard Terms and Conditions .....	3
1. What does this permit-to-install and operate ("PTIO") allow me to do?.....	4
2. Who is responsible for complying with this permit? .....	4
3. What records must I keep under this permit? .....	4
4. What are my permit fees and when do I pay them?.....	4
5. When does my PTIO expire, and when do I need to submit my renewal application? .....	4
6. What happens to this permit if my project is delayed or I do not install or modify my source? .....	5
7. What reports must I submit under this permit? .....	5
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? .....	5
9. What are my obligations when I perform scheduled maintenance on air pollution control equipment? ...	5
10. Do I have to report malfunctions of emissions units or air pollution control equipment? If so, how must I report? .....	6
11. Can Ohio EPA or my local air agency inspect the facility where the emission unit(s) is/are located? .....	6
12. What happens if one or more emissions units operated under this permit is/are shut down permanently? .....	6
13. Can I transfer this permit to a new owner or operator?.....	7
14. Does compliance with this permit constitute compliance with OAC rule 3745-15-07, "air pollution nuisance"? .....	7
15. What happens if a portion of this permit is determined to be invalid? .....	7
B. Facility-Wide Terms and Conditions.....	8
C. Emissions Unit Terms and Conditions .....	11
1. J001 Loading Rack .....	12
2. P009 Gas Releases .....	14
3. P801 Equipment Leaks .....	16
4. T001 Storage Tanks.....	18
5. Emissions Unit Group: P001-P002, Turbines .....	20





## Authorization

Facility ID: 0607005013  
Application Number(s): A0049118, A0050389, A0050456, A0050614  
Permit Number: P0115712  
Permit Description: Initial installation permit for a compressor station including: truck loading, equipment blowdowns, equipment leaks, storage tanks and turbines.  
Permit Type: Initial Installation  
Permit Fee: \$1,400.00  
Issue Date: 12/16/2014  
Effective Date: 12/16/2014  
Expiration Date: 12/16/2024  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Texas Eastern Transmission LP - Colerain  
Vickers Road  
Colerain Twp., OH 43916

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

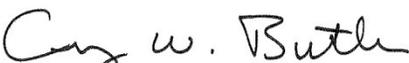
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Southeast District Office  
2195 Front Street  
Logan, OH 43138  
(740)385-8501

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

  
Craig W. Butler  
Director



## Authorization (continued)

Permit Number: P0115712

Permit Description: Initial installation permit for a compressor station including: truck loading, equipment blowdowns, equipment leaks, storage tanks and turbines.

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

- Emissions Unit ID: J001**  
 Company Equipment ID: TL-PL and TL-TK1  
 Superseded Permit Number:  
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: P009**  
 Company Equipment ID: COLE-GR  
 Superseded Permit Number:  
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: P801**  
 Company Equipment ID: piping  
 Superseded Permit Number:  
 General Permit Category and Type: Not Applicable
- Emissions Unit ID: T001**  
 Company Equipment ID: see above  
 Superseded Permit Number:  
 General Permit Category and Type: Not Applicable

**Group Name: turbines**

<b>Emissions Unit ID:</b>	<b>P001</b>
Company Equipment ID:	COLE-TBC-01
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P002</b>
Company Equipment ID:	COLE-TBC-02
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install and Operate**  
Texas Eastern Transmission LP - Colerain  
**Permit Number:** P0115712  
**Facility ID:** 0607005013  
**Effective Date:** 12/16/2014

## **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. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. 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 of this permit 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 [DO/LAA] 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 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 emission 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.



**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.



**Final Permit-to-Install and Operate**  
Texas Eastern Transmission LP - Colerain  
**Permit Number:** P0115712  
**Facility ID:** 0607005013  
**Effective Date:** 12/16/2014

## **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) B.2.
2. Modeling to demonstrate compliance with the "Toxic Air Contaminant Statute," ORC 3704.03(F)(4)(b), for this project was not necessary because for the emissions units not exempted from modeling per Ohio EPA Engineering Guide #69, maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year when controlled. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition n of the materials or use of new materials that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.
3. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subpart KKKK: P001 and P002. The complete NSPS requirements, including the NSPS General Provisions, may be accessed via the internet from the e-CFR website <http://ecfr.gopaccess.gov> or by contacting the appropriate Ohio EPA district office or local air agency.
4. The Compressor Station must comply with the Used Oil Management Standards of OAC Chapter 3745-279.
5. The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
6. The permittee shall submit an annual PER to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than 12 months for each air contaminant source identified in this permit.
7. Abbreviations throughout are as follows:

Pollutants

NO <sub>x</sub>	nitrogen oxides
CO	carbon monoxide
VOC	volatile organic carbon
PE	particulate emissions
PM <sub>10</sub>	particulate matter ≤ 10 microns

Units

TPY	tons per year
lb	pound
gal	gallon
MM	million
Btu	British thermal units



ppmvd parts per million volumetric dry  
hp horsepower  
bhp brake horsepower  
hr hour  
m month  
yr year

**Regulations**

OAC Ohio Administrative Code  
ORC Ohio Revised Code  
CFR Code of Federal Regulations  
e-CFR Electronic Code of Federal Regulation  
BAT Best Available Technology  
NSPS New Source Performance Standards

**General**

PTE Potential to Emit  
PTIO Permit-to-Install-and-Operate  
BAT Best Available Technology  
SIP State Implementation Plan  
EF Emissions Factor  
PER Permit Evaluation Report  
SIP State Implementation Plan  
NAAQS National Ambient Air Quality Standards  
SEDO Southeast District Office



**Final Permit-to-Install and Operate**  
Texas Eastern Transmission LP - Colerain  
**Permit Number:** P0115712  
**Facility ID:** 0607005013  
**Effective Date:** 12/16/2014

## **C. Emissions Unit Terms and Conditions**



**1. J001 Loading Rack**

**Operations, Property and/or Equipment Description:**

Combined oil and gas tanker truck loading (maximum 13,680 g/yr pipeline liquids; 8,832 g/yr oil)

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. None.

(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 02/20/2013	Fugitive VOC emissions shall not exceed 0.0018 ton/m as a rolling, 12-month average.  See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 02/20/2013	See b)(2)b. below.

(2) Additional Terms and Conditions

a. This BAT emission limit applies until US EPA approves OAC paragraph 3745-31-05(A)(3)(a) (the less than 10 TPY BAT exemption) into the Ohio SIP.

b. These requirements apply once US EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 TPY BAT exemption) as part of the Ohio SIP.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM2.5 emissions from this air contaminant source since the PTE is less than 10 TPY.



- c) Operational Restrictions
  - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) The permittee shall maintain records of the throughput of the emissions unit, in gallons.
- e) Reporting Requirements
  - (1) See Section B.
- 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. Emissions Limitation:

Fugitive VOC emissions shall not exceed 0.0018 ton/m as a rolling, 12-month average.

Applicable Compliance Method:

The VOC emissions limitation was derived by the calculation below using the inputs provided in the permittee's application. Compliance with the VOC emissions limitation shall be determined by the calculation below:

$$\frac{E \text{ lb}}{\text{Mgal}} * VOC * \frac{\text{Mgal}}{1,000 \text{ gal}} * \frac{V \text{ gal}}{\text{yr}} * \frac{\text{ton}}{2,000 \text{ lb}} * \frac{\text{yr}}{12 \text{ m rolling}} \leq 0.0018 \frac{\text{ton}}{\text{m rolling 12}}$$

Where:

E = emissions factor, AP-42 5.2, as provided in the permittee's application

VOC = VOC fraction, as provided in the permittee's application

V = maximum annual loading rate, as provided in the permittee's application

- g) Miscellaneous Requirements
  - (1) None.



**2. P009 Gas Releases**

**Operations, Property and/or Equipment Description:**

Fugitive gas releases through pipeline evacuation during maintenance activities and blowdowns (maximum 30,195,000 scf/yr)

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. None.

(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 06/30/2008	Fugitive VOC emissions shall not exceed 2.70 tons/m as a rolling, 12-month average.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain the following records on a monthly basis:

a. The date, number, and type of each maintenance and blowdown event;



- b. Percent VOC fraction in the gas stream obtained by representative sampling and analysis (e.g., gas chromatography);
- c. Total VOC emissions per month as a rolling, 12-month average;
- d. Total volume of gas emitted from each maintenance and blowdown event;
- e. Total volume of gas emitted from all maintenance and blowdown events as a rolling, 12-month average; and
- f. Gas density derived using actual stream sampling data (e.g., gas chromatography).

e) Reporting Requirements

- (1) See Section B.

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. Emissions Limitation:

Fugitive VOC emissions shall not exceed 2.70 tons/m as a rolling, 12-month average.

Applicable Compliance Method:

The VOC emissions limitation was derived by the calculation below using the inputs provided in the permittee's application. Ongoing compliance with the VOC emissions limitation shall be determined by the calculation below and the records as required in d)(1) of this permit:

$$\frac{V \text{ scf}}{\text{yr}} * \frac{D \text{ lb}}{\text{scf}} * VOC * \frac{\text{ton}}{2,000 \text{ lb}} * \frac{\text{yr}}{12 \text{ m rolling}} \leq 2.70 \frac{\text{ton}}{\text{m rolling 12}}$$

Where:

- V = annual gas release
- D = gas density, derived from gas sampling
- VOC = VOC fraction

g) Miscellaneous Requirements

- (1) None.



**3. P801 Equipment Leaks**

**Operations, Property and/or Equipment Description:**

Equipment leaks from various piping components, including valves, connectors, flanges, open-ended lines, and pump seals (13.9824 TPY maximum)

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. None.

(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 06/30/2008	Fugitive VOC emissions shall not exceed 1.17 tons/m as a rolling, 12-month average.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.



e) Reporting Requirements

(1) See Section B.

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. Emissions Limitation:

Fugitive VOC emissions shall not exceed 1.17 tons/m as a rolling, 12-month average.

Applicable Compliance Method:

Compliance with the fugitive VOC emissions limitation shall be demonstrated by the following calculation based on the emissions factors provided in Table 2-4 of US EPA's Protocol for Equipment Leak Emission Estimates (11/95) for components in gas, light oil, and water/oil service and the information provided in the permittee's application:

$$\sum \left( \text{component count} * \text{max leak rates} * \text{VOC fraction} * \frac{8,760 \text{ hr}}{\text{yr}} * \frac{1 \text{ ton}}{2,000 \text{ lb}} * \frac{1 \text{ yr}}{12 \text{ m rolling}} \right) \leq 1.17 \text{ ton/m rolling 12}$$

Where component counts, max leak rates, and VOC fractions are based on the data provided in the permittee's application.

g) Miscellaneous Requirements

(1) None.



**4. T001 Storage Tanks**

**Operations, Property and/or Equipment Description:**

Standing and working losses of separators (six pipeline liquids tanks, 9,241 gal/yr maximum) and storage tanks (one pipeline liquids tank, 8,800 gal/yr, two oil tanks, 416,100 gal/yr maximum) with flash accounted for in COLE-VSL-2

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. None.

(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 06/30/2008	VOC emissions shall not exceed 0.21 ton/m as a rolling, 12-month average.  See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(b), as effective 06/30/2008	See b)(2)b. below.

(2) **Additional Terms and Conditions**

a. This BAT emission limit applies until US EPA approves OAC paragraph 3745-31-05(A)(3)(a) (the less than 10 TPY BAT exemption) into the Ohio SIP.

b. These requirements apply once US EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 TPY BAT exemption) as part of the Ohio SIP.



The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM2.5 emissions from this air contaminant source since the PTE is less than 10 TPY.

- c) Operational Restrictions
  - (1) None.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) None.
- e) Reporting Requirements
  - (1) See Section B.
- 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. Emissions Limitation:

VOC emissions shall not exceed 0.21 ton/m as a rolling, 12-month average.

Applicable Compliance Method:

The VOC emissions limitation was derived by the calculation below using the inputs provided in the permittee's application.

$$\left\{ \sum_{i=1}^n \left( EF \frac{lb}{hr} * \frac{8,760 hr}{yr} * \frac{ton}{2,000 lb} \right) \right\} \frac{yr}{12 m rolling} = 0.21 \frac{ton}{m rolling 12}$$

- g) Miscellaneous Requirements
  - (1) None.



**5. Emissions Unit Group: P001-P002, Turbines**

EU ID	Operations, Property and/or Equipment Description
P001	Natural gas-fired non-emergency turbines (not manufactured as of 5/16/2014), 10,915 bhp, 748,709,141 scf/yr and 763,534 MMBtu/yr maximum, oxidation catalysts for CO and VOC with control efficiencies of 95% and 50%, respectively
P002	Natural gas-fired non-emergency turbines (not manufactured as of 5/16/2014), 10,915 bhp, 748,709,141 scf/yr and 763,534 MMBtu/yr maximum, oxidation catalysts for CO and VOC with control efficiencies of 95% and 50%, respectively

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. None.

(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 02/20/2013	Install a turbine capable of meeting 15 ppmvd NO <sub>x</sub> at 15% oxygen.  Install turbines capable of meeting 25 ppmvd CO at 15% oxygen.
b.	OAC rule 3745-31-05(A)(3), as effective 02/20/2013	Install a turbine capable of meeting 25 ppmvd VOC at 15% oxygen.  PM <sub>10</sub> emissions shall not exceed 0.22 ton/m as a rolling, 12-month average.  SO <sub>2</sub> emissions shall not exceed 0.11 ton/m as a rolling, 12-month average.  See b)(2)a. below.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 02/20/2013	See b)(2)b. below.
d.	OAC rule 3745-17-07(A)(1)	Visible PE from the stack serving this emissions unit shall not exceed 20% opacity as a six-minute average, except as provided by the rule.
e.	OAC rule 3745-17-11(B)(4)	PE from the turbine shall not exceed 0.040 pound per MMBtu of actual heat input.
f.	40 CFR 60, Subpart KKKK (40 CFR 60.4300 – 4420)  [In accordance with 40 CFR 60.4305(a), 60.4320, and 60.4330 this emissions unit is a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu/hr located in a continental area subject to the emissions limitations/control measures specified in this section.]	NO <sub>x</sub> emissions shall not exceed 25 ppmv at 15% oxygen.  [40 CFR 60.4320 and Table 1 of 40 CFR Part 60, Subpart KKKK]  The combustion turbine shall not utilize any fuel which contains total potential sulfur emissions in excess of 0.060 lb SO <sub>2</sub> /MMBtu heat input.
g.	40 CFR 60.1 – 19	Subpart A of 40 CFR Part 60, General Provisions

(2) Additional Terms and Conditions

- a. This BAT emission limit applies until US EPA approves OAC paragraph 3745-31-05(A)(3)(a) (the less than 10 TPY BAT exemption) into the Ohio SIP.
- b. These requirements apply once US EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 TPY BAT exemption) as part of the Ohio SIP.

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM<sub>2.5</sub> emissions from this air contaminant source since the PTE is less than 10 TPY.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.
- (2) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (3) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subpart KKKK, including the following sections:



60.4320(a)	Emission limits for NO <sub>x</sub>
60.4320(b)	Emission limits for NO <sub>x</sub> for two or more turbines
60.4330(a)(2)	Total potential sulfur emissions
60.4333(a)	Good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction

d) Monitoring and/or Recordkeeping Requirements

- (1) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.
- (2) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subpart KKKK, including the following sections:

60.4340(a)	Annual performance tests without water or steam injections
60.4365	Exemption from monitoring the total sulfur content of fuel
60.4365(a)	Maximum total sulfur content for fuel
60.4400(a)	Initial performance test
60.4400(b)	Performance test loading conditions
60.4400(b)(1)	Separate performance testing for separate fuels
60.4400(b)(4)	Performance test load levels
60.4400(b)(6)	Performance test temperatures
60.4415(a)	Initial performance test for sulfur
60.4415(a)(2)	Initial performance test for sulfur methodology

e) Reporting Requirements

- (1) See Section B.
- (2) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subpart KKKK, including the following sections:



60.4375(b)	Written report of the results of each performance test
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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. Emissions Limitation:

Install a turbine capable of meeting 15 ppmvdNO<sub>x</sub> at 15% oxygen.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emissions testing requirements specified in f)(2).

b. Emissions Limitation:

Install a turbine capable of meeting 25 ppmvd CO at 15% oxygen.

Applicable Compliance Method:

Compliance is demonstrated by the turbine manufacturer's emissions specifications.

c. Emissions Limitation:

Install a turbine capable of meeting 25 ppmvd VOC at 15% oxygen.

Applicable Compliance Method:

Compliance is demonstrated by the turbine manufacturer's emissions specifications.

d. Emissions Limitation:

PM<sub>10</sub> emissions shall not exceed 0.22 ton/m as a rolling, 12-month average.

Applicable Compliance Method:

$$\frac{0.6055 \text{ lb}}{\text{hr}} * \frac{8,760 \text{ hr}}{\text{yr}} * \frac{\text{ton}}{2,000 \text{ lb}} * \frac{\text{yr}}{12 \text{ m rolling}} = 0.22 \frac{\text{ton}}{\text{m rolling 12}}$$

Where:

0.6055 = EF for combined operations, i.e., normal, startup, shutdown, and low temperatures (AP-42, Section 3.1, revised 4/2000)



e. Emissions Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 20% opacity as a six-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, visible particulate emissions shall be determined according to USEPA Method 9.

f. Emissions Limitation:

PE from the turbine shall not exceed 0.040 pound per MMBtu of actual heat input.

Applicable Compliance Method:

If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

g. Emissions Limitation:

NO<sub>x</sub> emissions shall not exceed 25 ppmv at 15% oxygen.

Applicable Compliance Method:

Compliance shall be demonstrated based upon the emissions testing requirements specified in f)(2).

h. Emissions Limitation:

SO<sub>2</sub> emissions shall not exceed 0.11 ton/m as a rolling, 12-month average.

Applicable Compliance Method:

$$\frac{0.3119 \text{ lb}}{\text{hr}} * \frac{8,760 \text{ hr}}{\text{yr}} * \frac{\text{ton}}{2,000 \text{ lb}} * \frac{\text{yr}}{12 \text{ m rolling}} = 0.11 \frac{\text{ton}}{\text{m rolling 12}}$$

Where:

0.3119 = EF for combined operations, i.e., normal, startup, shutdown, and low temperatures (AP-42, Section 3.1, revised 4/2000)

i. Emissions Limitation:

The combustion turbine shall not utilize any fuel which contains total potential sulfur emissions in excess of 0.060 lb SO<sub>2</sub>/MMBtu heat input.



Applicable Compliance Method:

Compliance shall be demonstrated by records as required in 40 CFR 60.4365.

- (2) Pursuant to 40 CFR 60.4340(a) and 60.4400, OAC rule 3745-31-05(A)(3), and ORC 3704.03(T), the permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and on annual bases (no more than 14 calendar months following the previous performance test).
  - b. The emissions testing shall be conducted to demonstrate compliance with the NO<sub>x</sub> emissions limitation identified in 40 CFR 60.4320.
  - c. Pursuant to Table 1 of 40 CFR Part 60, Subpart KKKK and OAC rule 3745-31-05(A)(3) the following test methods shall be employed to demonstrate compliance with the allowable NO<sub>x</sub> emissions rate and design standard for CO:  

Methods 7, 7a, 7c, 7d, or 7e of 40 CFR Part 60, Appendix A for NO<sub>x</sub>
  - d. The test(s) shall be conducted under those representative conditions that challenge to the fullest extent possible a facility's ability to meet the applicable emissions limits and/or control requirements, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency or as required by 40 CFR 60.4400(b). Although this generally consists of operating the emissions unit at its maximum material input/production rates and results in the highest emission rate of the tested pollutant, there may be circumstances where a lower emissions loading is deemed the most challenging control scenario. Failure to test under these conditions is justification for not accepting the test results as a demonstration of compliance.
  - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) 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 District Office's or local air agency's refusal to accept the results of the emission test(s).
  - f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
  - 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 submitted to the



**Final Permit-to-Install and Operate**  
Texas Eastern Transmission LP - Colerain  
**Permit Number:** P0115712  
**Facility ID:** 0607005013  
**Effective Date:** 12/16/2014

appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.

g) Miscellaneous Requirements

- (1) None.