



**John R. Kasich**, Governor  
**Mary Taylor**, Lt. Governor  
**Craig W. Butler**, Director

9/9/2016

Certified Mail

Reagan Mayces  
 Wadsworth Compressor Station  
 P.O. Box 1642  
 Houston, TX 77251-1642

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 1652100116  
 Permit Number: P0119280  
 Permit Type: Initial Installation  
 County: Medina

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**
- **What should you do if you notice a spill or environmental emergency?**

**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

## **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.

## **What should you do if you notice a spill or environmental emergency?**

Any spill or environmental emergency which may endanger human health or the environment should be reported to the Emergency Response 24-HOUR EMERGENCY SPILL HOTLINE toll-free at (800) 282-9378. Report non-emergency complaints to the appropriate district office or local air agency.

If you have any questions regarding your permit, please contact Akron Regional Air Quality Management District at (330)375-2480 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469.

Sincerely,



Michael E. Hopkins, P.E.  
Assistant Chief, Permitting Section, DAPC

Cc: ARAQMD



## Response to Comments

Facility ID:	1652100116
Facility Name:	Wadsworth Compressor Station
Facility Description:	Natural Gas Compressor Station
Facility Address:	Guilford Road Wadsworth, OH 44281 Medina County
Permit:	P0119280, Permit-To-Install and Operate - Initial Installation
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the Medina County Gazette on 01/14/2016. The comment period ended on 02/22/2016.	
Hearing date (if held)	02/16/2016
Hearing Public Notice Date (if different from draft public notice)	Same as draft public notice.

The following comments were received during the comment period specified. Ohio EPA reviewed and considered all comments received during the public comment period. By law, Ohio EPA has authority to consider specific issues related to protection of the environment and public health. Often, public concerns fall outside the scope of that authority. For example, concerns about zoning issues are addressed at the local level. Ohio EPA may respond to those concerns in this document by identifying another government agency with more direct authority over the issue.

In an effort to help you review this document, the questions are grouped by topic and organized in a consistent format. PDF copies of the original comments in the format submitted are available upon request.

### 1. Permit Allowable Emissions Limitations.

- a. Comment:** The Wadsworth Compressor Station cannot meet the emissions limitations in draft air permit-to-install and operate (PTIO) P0119280 as evidenced by the higher emission totals submitted by NEXUS Gas Transmission (NEXUS) in the April 2015 NEXUS & Ohio EPA Proposed Air Permitting Strategy Presentation and Table 9.2-7 of Resource Report 9 submitted with NEXUS's November 20, 2015 application to the Federal Energy Regulatory Commission (FERC) for a Certificate of Convenience and Public Necessity under Docket No. CP16-22-000 (<http://www.ferc.gov/docs-filing/elibrary.asp>). According to Ohio Administrative Code (OAC) rule 3745-15-08, *"No person shall cause or permit the installation or use of any device or any means which, without resulting in reduction in the total amount of air contaminant emitted, conceals or dilutes an emission of air contaminant which would otherwise violate Chapter 3704., 3714., 3734., 3745., 6109., or 6111. of the Revised Code or any rule adopted thereunder."* Such concealment may be found in the above-cited discrepancies.

**Response:** The emissions estimates in the above-referenced permit strategy presentation and FERC docket are facility-wide totals, calculated as the sum of the potentials to emit for every air pollution source at the proposed Wadsworth Compressor Station. The draft air permit does not

include the following emissions units (EU) that are considered exempt from the requirement to obtain a PTIO under OAC Chapter 3745-31:

EU ID	Company ID	Exemption Status	OAC Rule Citation
B001	Process Heater	De Minimis	3745-31-03(B)(4)
F001	Roadways	De Minimis	3745-31-03(B)(4)
L001	Parts Washer	De Minimis	3745-31-03(B)(4)
P002	Emergency Generator	Permit-by-rule	3745-31-03(C)(2)(a)
T001	Storage Tank #1	Permanent	3745-31-03(B)(1)(I)(iv)
T002	Storage Tank #2	De Minimis	3745-31-03(B)(4)
T003	Storage Tank #3	De Minimis	3745-31-03(B)(4)

The Total Permit Allowable Emissions Summary listed in the Permit Strategy Write-Up section of draft PTIO P0119280 only includes emissions from air contaminant sources contained in the draft permit. No facility-wide emissions limitations were established in the draft air permit for the Wadsworth Compressor Station. The permitted allowable emissions limitations are specific to individual emissions units. Ohio EPA evaluated the emissions calculations for each source during the technical review of the permit application and concluded the emissions units are capable of meeting the allowable emissions limitations established by draft PTIO P0119280.

- b. Comment:** Draft permit P0119280 states (on page 29 of 51 in PDF, labeled as page 15 of 37): *"The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM<sub>10</sub>, SO<sub>2</sub>, CO and VOC emissions from this air contaminant source since the potential to emit of each is less than 10 tons/year."* This is incorrect because the draft permit limits the station to emissions of 29.3 tons/year of volatile organic compounds (VOCs).

**Response:** The Ohio Administrative Code (OAC) rule 3745-31-05(A)(3) citation in section C.2.b)(1)b. on the above-referenced page of the draft air permit is specific to a single emissions unit, the Combustion Turbine (P001). The less than 10 tons/year BAT exemption was correctly applied to the VOC emissions from this air contaminant source, because the turbine's potential to emit for VOC is 3.32 tons/year. The 29.3 tons/year of VOC listed in the Permit Strategy Write-Up section of draft permit P0119280 is a summation of the total permit allowable VOC emissions provided for informational purposes only. BAT requirements are determined on an emissions unit basis, and not based on the combined potential emissions from all emissions units located at a facility.

- c. Comment:** Why is Ohio EPA relying on emissions estimates instead of actual emissions to establish permit limits for the Wadsworth Compressor Station, and how do you know the emissions estimates are accurate?

**Response:** An initial installation permit must be obtained before an air pollution source may be constructed in Ohio. Because of this, actual emissions data on an exact piece of equipment is typically not available at the time the permit is issued. The draft permit for the Wadsworth Compressor Station establishes emissions limitations based on each source's maximum potential to emit using the manufacturers' tests and specification sheets, U.S. EPA-developed air emission factors (<https://www3.epa.gov/ttnchie1/ap42/>), and/or data from similarly-sized, existing compressor stations. The proposed Wadsworth Compressor Station will employ established technology with documented emissions performance data. The draft air permit also

contains requirements for monitoring, record keeping, reporting and emissions testing, which will be used to verify actual emissions are below the allowable limits.

- d. **Comment:** The emissions calculations for tanker truck liquid loading operations (J001) at the Wadsworth Compressor Station do not appear to include transfer hose emissions. Is a vapor balance system employed for this process?

**Response:** Application #A0053902 for the Wadsworth Compressor Station did not indicate a vapor balance system would be employed for emissions unit J001, and the uncontrolled loading loss equation from AP-42, section 5.2 dated January 1995 (<https://www3.epa.gov/ttn/chief/ap42/ch05/final/c05s02.pdf>), was used to estimate emissions. Transfer hose emissions from this source would be regulated under the permitted fugitive volatile organic compound (VOC) emission limitation of 0.001 ton per month averaged over a 12-month rolling period.

- e. **Comment:** Do the emissions limitations in draft permit P0119280 account for the amount of gas from emergency pipeline evacuations?

**Response:** No, emissions due to an emergency situation would be considered a malfunction and regulated under Ohio Administrative Code (OAC) rule 3745-15-06(B) (<http://codes.ohio.gov/oac/3745-15-06v1>) as specified in section A.10. of the draft air permit.

- f. **Comment:** Is the NEXUS pipeline using unrefined gas? If so, what fracking chemicals are present and how does that change what will be emitted from the process?

**Response:** The Wadsworth Compressor Station would process pipeline-grade natural gas. The Code of Federal Regulations (CFR) Title 40, Protection of Environment, Part 72.2 defines pipeline natural gas as "a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions, and which is provided by a supplier through a pipeline. Pipeline natural gas contains 0.5 grains or less of total sulfur per 100 standard cubic feet. Additionally, pipeline natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1100 Btu per standard cubic foot." Application #A0053902, submitted on July 15, 2015, for the Wadsworth Compressor Station contains a list of natural gas chemical components and physical property estimations in Table G-2 of Appendix B.

- g. **Comment:** Will the Wadsworth Compressor Station emit radon gas and/or radioactive particulate matter, which naturally occur in gas from petroleum-bearing shale?

**Response:** Ohio EPA is not aware that the compressor station will emit radon gas and/or radioactive particulate matter. The natural gas carried in the NEXUS pipeline is residential-quality natural gas that meets the natural gas quality specification of its downstream customers. NEXUS will monitor all incoming gas into the pipeline with strict metering, regulation, and filtering methods. U.S. EPA guidelines for radon are designated specifically for indoor air exposure for gas leaking into the living spaces of residences. Outdoor radon gas quickly disperses into the atmosphere for greatly reduced exposures, similar to the average Ohio ambient air exposure. Ohio EPA has no reason to suspect any radon gas emitted from this facility will behave any differently.

- h. **Comment:** How will dust generated from construction of the Wadsworth Compressor Station be regulated? Does NEXUS have a permit for that?

**Response:** Ohio Administrative Code (OAC) rule 3745-31-33 (<http://codes.ohio.gov/oac/3745-31-33v1>) describes acceptable site preparation activities that can be undertaken prior to obtaining a final permit for a particular aircontaminant source project. The listed activities are not required to be permitted under Ohio EPA's permit-to-install and operate (PTIO) program; however, all construction activities must comply with any applicable fugitive dustrequirements contained in OAC rule 3745-17-08 (<http://codes.ohio.gov/oac/3745-17-08v1>). Since the Wadsworth Compressor Station is planned to be located in Medina County, which is an area listed in Appendix A of this rule, the reasonably available control measures in OAC rule 3745-17-08(B) would apply, and be regulated under the authority of Ohio EPA. These regulatory requirements include: 1) the use of water or other suitable dust suppression chemicalsfor the control offugitive dust from the demolition of existing buildings or structures,construction operations, the grading of roads or the clearing of land; 2) the covering, at all times, of open bodied vehicles when transporting materialslikely to become airborne; and3) the prompt removal, in such a manner as to minimize or prevent resuspension, ofearth or other material from paved streets onto which earth or other material hasbeen deposited by trucking or earth moving equipment or erosion by water orother means.

- i. **Comment:** How will Ohio EPA regulate odors emitted by the Wadsworth Compressor Station?

**Response:**Odors from the Wadsworth Compressor Station would be regulated under Ohio Administrative Code (OAC) rule 3745-15-07 (<http://codes.ohio.gov/oac/3745-15-07v1>), which prohibits air pollution nuisances. This nuisance rule is cited in draft permit P0119280 under term A.14. Note, this rule does not require there to be zero odors from an air pollution source. Also, NEXUS is not planning to add odorant to the gas processed by the Wadsworth Compressor Station (i.e., gas releases should not have a "rotten egg" odor). If odorant is not added to the NEXUS pipeline, Ohio EPA does not expect that there would be odors from gas releases, since pipeline quality natural gas does not have an odor if an odorant has not been added to it. If you smell a natural gas odor inside your home, call your natural gas utility. If you have a complaint about a gas odor outside, call your gas utility and call the Akron Regional Air Quality Management District(ARAQMD) at (330) 375-2480 during normal office hours (Monday through Friday 8:00AM – 4:00PM).

- j. **Comment:** Are the annual emissions limitations for the Wadsworth Compressor Station applicable per calendar year or rolling 12-month period?

**Response:** All annual emissions limitations established for sources in draft permit P0119280 would be regulated per calendar year. The draft permit also contains several monthly emissions limitations, which are averaged over a 12-month rolling period.

- k. **Comment:** Short-term emissions limitations are needed for the Wadsworth Compressor Station to restrict air pollution peaks or spikes from varying production phases, blow downs, gas releases, etc.

**Response:**The draft air permitfor the Wadsworth Compressor Station was written in accordance with Ohio EPA'sguidance memo,dated February 7, 2014 (<http://epa.ohio.gov/dapc/sb265.aspx>), which redefines theprocedures for establishing Best Available Technology (BAT) requirements pursuant to the amendment of Ohio Revised Code (ORC) 3704.03(F) (<http://codes.ohio.gov/orc/3704.03v1>) that became effective on August 3, 2006 as a result of Senate Bill 265 of the 126th General Assembly ([http://archives.legislature.state.oh.us/bills.cfm?ID=126\\_SB\\_265](http://archives.legislature.state.oh.us/bills.cfm?ID=126_SB_265)). The amended statute impacted the way Ohio EPA regulates smaller emitting sources in several ways, one of them being how short-term BAT emissions limitations are determined and implemented. For any air

contaminant sources installed or modified on or after August 3, 2009, BAT requirements established in rules adopted under the Division of Air Pollution Control (DAPC) can be expressed only in one of the following ways that is most appropriate for the applicable source or source categories: 1) Work practices; 2) Source design characteristics or design efficiency of applicable air contaminant control devices; 3) Raw material specifications or throughput limitations averaged over a twelve-month rolling period; or 4) Monthly allowable emissions averaged over a twelve-month rolling period. The last option (4) was used throughout the permit.

Although short-term limits were not established in the permit for some pollutants, the modeling to determine the down-wind impacts did use the maximum short-term emissions levels to determine the expected maximum downwind concentrations. Based on this modeling, the maximum expected down-wind concentrations of these pollutants are not expected to cause adverse health or welfare effects. The combustion turbine, however, does have voluntary short-term emission limitations for CO and VOC emissions specified in the permit.

- I. Comment:** The permit should not allow any air pollutants to be emitted from the Wadsworth Compressor Station.

**Response:** Ohio EPA appreciates that it would be a good goal to prevent more pollution being added to the environment; however, such a goal cannot realistically be met at this time. Ohio EPA regulates air emissions as mandated by the legislature. The draft air permit for the Wadsworth Compressor Station establishes allowable emission limitations in compliance with State and federal air pollution control regulations. The regulations applicable to this natural gas compressor station do not restrict sources to zero air pollution. Ohio EPA further believes that a healthy environment can be maintained through a balance of responsible regulations and enforcement, and economic growth.

- m. Comment:** Why are greenhouse gas (GHG) emission limits not included in the draft air permit for the Wadsworth Compressor Station?

**Response:** Potential GHG emissions from the proposed Wadsworth Compressor Station are estimated at 129,365 tons/year of carbon dioxide equivalents (CO<sub>2</sub>e). GHGs are not considered a regulated pollutant for which a national ambient air quality standards (NAAQS) (<https://www.epa.gov/criteria-air-pollutants/naaqs-table>) has been established. Furthermore, on June 23, 2014, the U.S. Supreme Court issued its decision in *Utility Air Regulatory Group v. EPA* ([https://www.supremecourt.gov/opinions/13pdf/12-1146\\_4g18.pdf](https://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf)) concerning the U.S. EPA's regulation of GHGs from stationary sources. The Supreme Court ruled that the EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a Prevention of Significant Deterioration (PSD) or Title V permit. The Supreme Court further clarified that the EPA could continue to require that PSD permits, otherwise required based on emissions of conventional pollutants, contain limitations on GHG emissions based on the application of Best Available Control Technology (BACT).

Subsequently, on July 24, 2014, U.S. EPA issued preliminary guidance concerning the impact of the court's decision in a memorandum discussing the next steps and preliminary views on the application of Clean Air Act permitting programs to GHGs (<https://www.epa.gov/sites/production/files/2015-07/documents/2014scotus.pdf>). Ohio EPA adopted this policy under Engineering Guide #85, titled July 2014 GHG Air Pollution Permitting Changes (<http://www.epa.state.oh.us/Portals/27/engineer/equides/guide85.pdf>). In accordance with Ohio Administrative Code (OAC) rule 3745-31-34(C)(2): "Permit to install requirements under this rule for major stationary sources and major modifications of sources

emitting GHGs shall cease to be effective upon the issuance of any opinion, ruling, judgment, order, or decree by a federal court depriving the administrator of authority, limiting the administrator's authority, or requiring the administrator to delay the exercise of authority, to regulate GHGs under the Clean Air Act (CAA)." Since the Wadsworth Compressor station is not a major source of criteria air pollutants, it cannot be permitted as a major source of GHG emissions and no evaluation of greenhouses is required by law for this permitting action.

- n. **Comment:** Why are hazardous air pollutant (HAP) and air toxic emissions not regulated by draft permit P0119280? What are the emissions estimates pertaining to the amount of potential HAPs? Ohio EPA should require Best Available Technology (BAT) emission limits per Ohio Administrative Code (OAC) rule 3745-31-05(E) and any other legally enforceable means, even if the potential to emit does not exceed 10 tons/year, or 1.0 tons/year under OAC rule 3745-114-01, to ensure spikes in HAP levels do not occur.

**Response:** The rule that governs Ohio EPA requires that every emissions unit with one ton per year or more of any air toxic emissions be modeled unless an acceptable alternative demonstration is made. An evaluation is made to ensure that the emissions of any proposed air toxic will not cause any significant adverse human health or environmental impacts. The evaluation can be done using a number of methods. These methods include the use of a risk assessment analysis, compliance with appropriate Maximum Achievable Control Technology (MACT) federal standards, limiting the emissions to less than 1.0 ton per year, methods approved by Ohio EPA on a case-by-case basis, etc.

The total calculated potential to emit for air toxics, as presented in the application submitted by NEXUS, showed that the potential to emit any air toxic does not exceed the modeling threshold level of 1.0 ton per year.

However, Ohio EPA did perform basic modeling on the Combustion Turbine (P001) for emissions of nitrogen oxides (NO<sub>x</sub>), formaldehyde, and particulate matter less than or equal to 2.5 microns in diameter (PM<sub>2.5</sub>). It was completed using worst-case scenario stack and emission characteristics for each pollutant using a model called AERSCREEN, which is conservative and over-predicts the actual concentrations in order to maximize the protection of public health. The modeling results showed that formaldehyde and PM<sub>2.5</sub> are well below our health-based screening thresholds. The NO<sub>x</sub> concentrations are slightly above health thresholds; however, our modelers concluded that if they were to use a more refined model (one that would be more precise, such as AERMOD) results would show NO<sub>x</sub> concentrations lower than any level of concern. Based on the modeling performed, maximum concentrations of all the projected pollutants are expected to comply with air quality standards.

Furthermore, Ohio EPA cannot require the applicant to meet emission limitations more stringent than allowed under State and federal rules and regulations.

- o. **Comment:** Why are thermodynamic effects, such as steam, fog or smog, not addressed in draft permit P0119280? Air pollutants will settle to contaminate soil and surface/drinking/ground water (air to water cycle).

**Response:** There is no evidence that the operation of the facility will result in adverse effects to human health or the environment. Ohio EPA is not aware of any adverse impact on soil and surface/drinking/ground water resulting from the scenario described above. It's likely that the emissions of volatile compounds will preferentially dissipate into the atmosphere rather than be transported to soil and surface/drinking/ground water.

Also, this permit, as issued, complies with all State and federal rules and regulations, which are developed and promulgated for the purpose of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for all criteria pollutants (<https://www.epa.gov/criteria-air-pollutants/naaqs-table>). The NAAQS are designed to be protective of public health and the environment.

Under the Clean Air Act (CAA), before establishing NAAQS, U.S. EPA – the agency entrusted by Congress to perform the evaluation – must conduct a detailed, thorough and highly public evaluation of the health and environmental impacts associated with various ambient levels of the air pollutant in question. U.S. EPA’s analysis must include all available scientific data, which is compiled, peer-reviewed, and provided for public review and comment. The NAAQS are then periodically reviewed and updated as necessary. In addition to this, states must develop individual State Implementation Plans (SIPs) to further regulate specific areas and sources to ensure compliance with federal NAAQS. Compliance with the applicable permit limitations means that emissions from the Wadsworth Compressor Station would not create a significant impact to human health and the environment within the specific area in which the permitted facility is located.

If you have an air quality complaint, telephone the Akron Regional Air Quality Management District (ARAQMD) at (330) 375-2480 Monday – Friday, 8 a.m. to 4 p.m.

If you have a water quality complaint, contact Ohio EPA’s Northeast District Office (Twinsburg, OH) at (800) 686-6330.

## 2. Air Pollution Controls.

- a. **Comment:** Blowdowns, gas releases and pigging operations at the Wadsworth Compressor Station should not be vented to the atmosphere. The air permit should require a gas capture system, storage or flare control for emissions.

**Response:** The State and/or federal air regulations applicable to the Wadsworth Compressor Station do not mandate that complete capture and control of such gas releases be implemented. Ohio EPA’s February 2014 guidance memo (<http://epa.ohio.gov/dapc/sb265.aspx>) defines the procedures for establishing Best Available Technology (BAT) requirements for air contaminant sources in the State of Ohio.

Using a flare or combustion device unnecessarily also would generate secondary emissions of combustion pollutants and could cause visual and auditory disturbances. Flares are not included in the typical design for natural gas transmission stations given the inherently low volatile organic compound (VOC) content of the gas. Therefore, flares and combustion devices, in this case, are considered to be technically infeasible.

Capture and storage would require temporary compression that would be necessary to divert the blowdown gases to a storage vessel during each event. These temporary compressors would generate additional secondary emissions. Also, the compressors necessary to route intermittent gas releases to a receiving vessel would often require shutdown as part of the same maintenance event that necessitated the gas release. The cost of adding temporary compression for these events would be prohibitive. Such a project would involve significant capital costs with little return on investment considering the current price of natural gas. However, the permit will be revised to require that the permittee implement the following work practices for purposes of minimizing emissions from each release as follows:

- Annual emergency shutdown (ESD) system tests required by existing DOT regulations shall be conducted to the extent practical as “capped” tests (i.e. with a minimal discharge of natural gas to the atmosphere.);
- Manage station equipment during periods of system maintenance to minimize the quantity of natural gas vented to the extent practical;
- Develop and follow a standby pressurized hold plan for gas compressor shutdowns in order to minimize standby gas releases and maintain safe operation; and
- Schedule multiple maintenance activities concurrently to the extent possible to minimize blowdowns.

- b. Comment:** The air permit for the Wadsworth Compressor Station must establish operational restrictions for blowdowns and gas releases to limit the number, frequency, duration, volume of gas and time of day.

**Response:** The majority of emissions from gas release events are associated with routine planned operations such as startup and shutdown, reduced pressure demand events or maintenance activities. The permit requirements/emission limitations were established based on a maximum number of shutdowns and startups of 260 per year.

The number of startup, shutdown and blowdown events provided in the application for the Wadsworth Compressor Station represent a theoretical worst-case scenario used to satisfy the regulatory definition of potential to emit. Note that turbine start and stop events are minor events and are not associated with full station yard or pipeline blowdowns. It is not anticipated that these events will occur at this rate in actual practice. Also, the quantity and type of potential emissions is calculated and provided in application #A0053902 for the Wadsworth Compressor Station.

Furthermore, the volume of natural gas released from blowdowns will be reduced by the following measures:

- Annual emergency shutdown (ESD) system tests required by existing DOT regulations shall be conducted to the extent practical as “capped” tests (i.e. with a minimal discharge of natural gas to the atmosphere.);
- Manage station equipment during periods of system maintenance to minimize the quantity of natural gas vented to the extent practical;
- Develop and follow a standby pressurized hold plan for gas compressor shutdowns in order to minimize standby gas releases and maintain safe operation; and
- Schedule multiple maintenance activities concurrently to the extent possible to minimize blowdowns.

- c. Comment:** The combustion turbine should have stricter emission control requirements, such as exhaust scrubbers and/or secondary combustion stage, or use electric compressor engine.

**Response:** The turbine will be equipped with a catalytic oxidizer for control of carbon monoxide (CO) and volatile organic compound (VOC) emissions. Scrubbers and secondary combustion

devices are not conventional control techniques for natural gas-fired turbines and are not identified as required control technologies by applicable State or federal regulations.

Ohio EPA continually encourages companies to adopt programs to minimize or eliminate air emissions. However, Ohio EPA cannot require a specific type of source to be installed or a specific type of fuel to be used; however, the Agency will require that the sources proposed to be installed meet specific emissions limitations and/or control techniques/measures. The permittee has proposed the installation of a natural gas-fired combustion turbine to power the natural gas compressor, and Ohio EPA does not have authority to require the installation of an electric-powered natural gas compressor since it is outside the scope of Ohio EPA's air permit review process.

Additionally, the permittee evaluated the use of electric-powered turbines (see NEXUS's November 2015 application to FERC for a Certificate of Convenience and Public Necessity). This evaluation concluded that the use of gas-powered turbines over electric-powered turbines is preferred from both a reliability standpoint and an environmental impact standpoint. (This discussion is found in section 10.7.1.5 of Resource Report 10 submitted with the FERC certificate application. NEXUS also provided additional information regarding the use of electric-power in its March 18, 2016 Response to Data Request submittal to FERC [Docket No. CP16-22-000] (FERC filing date 3/21/2016).

To view the information contained in Resource Report 10, do the following.

- Go to <https://www.ferc.gov/docs-filing/elibrary.asp>
- Select "General Search"
- At Date Range, Select Filed Date, From 3/21/2016 to 3/21/2016
- At Docket Number, enter CP16-22
- Click on Submit at the bottom of the page.
- Go to the following Description, "Response to Data Request of NEXUS Gas Transmission, LLC under CP16-22."
- Click on "More Files – See List" on the right side of the screen below the list of PDF files.
- Then click on the file titled "NEXUS\_FERC-Data-Responses\_March-2016-1\_OF\_3.PDF"

The discussion begins on page 93 of the document.

### 3. Compliance Monitoring.

- a. **Comment:** How will it be verified that actual emissions from the Wadsworth Compressor Station are below permitted allowable emissions limitations?

**Response:** The air permit contains emissions testing, monitoring and record keeping, and reporting requirements to verify that the company is meeting its regulatory obligations and to ensure on-going compliance. The company is obligated, by law, to comply with all the requirements contained in the air permit.

The Testing Requirements sections of the emissions units permit terms and conditions cite the applicable compliance methods that will be used by Ohio EPA to determine compliance with each allowable emissions limitation. The compliance methods vary by pollutant/source and include: emissions testing, visible emissions observations, record keeping requirements and/or emissions calculations.

For gas releases and pipeline pigging, the permittee is required to maintain monthly records of volatile organic compound (VOC) content, volume and density, of natural gas released and calculate the VOC emissions. VOC emissions are based on the permittee's calculated volume of natural gas released, and are not based on emissions testing. In order to comply with the monthly record-keeping requirement, it will be necessary for the permittee to monitor for the presence of each gas release 24 hours per day, seven days per week so that the emissions from all gas releases during the month can be calculated. Deviations from the allowable emissions must be submitted to Ohio EPA annually and will be reviewed by the Akron Regional Air Quality Management District (ARAQMD).

For equipment leaks, the permittee is required to conduct initial monitoring for leaks within 180 days of startup followed by monitoring for leaks every six months using either an analyzer that detects the concentration of organics according to EPA Method 21 or using a forward-looking infrared camera (FLIR) to detect the presence of leaks. A FLIR camera is a very effective tool that can be used to detect the presence of natural gas leaks. Looking at the display of a FLIR camera will show the presence of natural gas leaks that are not visible to the naked eye.

On June 3, 2016, U.S. EPA issued a final rule under 40 CFR Part 60 Subpart OOOOa titled "Standards of Performance for Crude Oil and Natural Gas Facilities for which Construction, Modification, or Reconstruction Commenced after September 18, 2015" (<http://www.ecfr.gov>). This new rule regulates equipment leaks from natural gas compressor stations, and the final permit for Wadsworth Compressor Station has been revised to incorporate the requirements of this rule. For equipment leaks, the permittee is required to monitor all fugitive emissions components regulated under 40 CFR Part 60, Subpart OOOOa, and repair all sources of fugitive emissions components in accordance with the rule. For purposes of complying with the applicable standards, fugitive emissions are defined as any visible emission from a fugitive emissions component observed using optical gas imaging or an instrument reading of 500 ppm or greater using U.S. EPA Method 21.

The permittee is required to develop an emissions monitoring plan that covers collecting fugitive emissions components that includes the following elements:

- Frequency for conducting surveys. An initial monitoring survey must be conducted within 60 days of startup of production. After the initial monitoring survey, ongoing monitoring surveys are required to be conducted at least quarterly;
- Identifying whether U.S. EPA Method 21 or optical gas imaging will be used to determine fugitive emissions;
- Manufacturer and model number of the monitoring equipment used to determine fugitive emissions;
- Procedures and timeframes for identifying and repairing fugitive emissions components from which fugitive emissions are detected;
- Procedures and timeframes for verifying fugitive emission component repairs;
- Records that will be kept and the timeframe that records will be kept;
- If optical gas imaging is used, the plan must include verification that the equipment meets the specifications for the optical gas imaging equipment contained in NSPS Subpart OOOOa;
- If Method 21 is used to determine fugitive emissions, the plan must include verification that the equipment meets the specifications contained in NSPS Subpart OOOOa;
- Site map and a defined observation path to ensure fugitive emissions are within sight of the path. If using Method 21, the plan must include a list of equipment to be monitored and the method for determining the location of fugitive emissions; and

- A list of all fugitive emissions components that are difficult to monitor or unsafe-to-monitor. A written plan for difficult or unsafe-to-monitor components must be developed and shall include:
  - the identification and location of each component;
  - an explanation of why a component is difficult to monitor, or designated as unsafe to monitor; and
  - schedule for monitoring these components.

NSPS Subpart OOOOa contains equipment component repair deadlines, and requires that a repaired or replaced fugitive emissions component be re-surveyed as soon as practicable, but no later than 30 days after being repaired to ensure that there are no fugitive emissions. If a component cannot be repaired during a monitoring survey when the fugitive emissions are found, a digital photograph must be taken of the component or a tag must be affixed to it for identification purposes. The digital photograph must clearly identify the location within the compressor station. Annual reports are required to be submitted to both Ohio EPA and U.S. EPA that contain the following information:

- date of the survey;
- beginning and end time of survey;
- name of operator performing the survey;
- ambient temperature, sky conditions, and maximum wind speed at the time of the survey;
- monitoring instrument used;
- any deviations from the above-described monitoring plan;
- number and type of components for which fugitive emissions were detected;
- number and type of fugitive emissions components that were not repaired by the required deadlines;
- number and type of difficult-to-monitor and unsafe-to-monitor fugitive emissions components monitored;
- date of successful repair of fugitive emissions component;
- number and type of fugitive emissions component placed on delay of repair and explanation for each delay of repair; and
- type of instrument used to re-survey a repaired fugitive emissions component that could not be repaired during the initial fugitive emissions finding.

Annual permit evaluation reports (PERs) must be submitted to Ohio EPA and will be reviewed by the Akron Regional Air Quality Management District (ARAQMD) for evaluation of compliance. If a non-compliance issue is found, it will be handled in accordance with our response concerning non-compliance in section 3.f. of this Response to Comments document.

There will also be periodic facility inspection(s) (as a result of complaints received) conducted by the Ohio EPA or the Akron Regional Air Quality Management District (ARAQMD).

- b. Comment:** What happens after the initial emissions testing required for the Wadsworth Compressor Station?

**Response:** Initial testing for nitrogen oxides (NO<sub>x</sub>), carbon monoxide (CO), and volatile organic compounds (VOCs) emitted from the Combustion Turbine (P001) must be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup. Pursuant to 40 CFR 60.4400(a), subsequent

NO<sub>x</sub> performance tests will be conducted on an annual basis with no more than 14 calendar months following the previous performance test. If the NO<sub>x</sub> emission result from the performance test is less than or equal to 75 percent of the NO<sub>x</sub> emission limit for the turbine, then the frequency of subsequent performance tests may be reduced to once every two years (no more than 26 calendar months following the previous performance test), pursuant to 40 CFR 60.4340(a) for sources that do not use water or steam injection to control NO<sub>x</sub> emissions. Future stack testing requirements for CO and VOC emissions will be determined based on the results of the initial stack test. A comprehensive written report of the results of the stack test must be submitted to Ohio EPA within 30 days of completion of the testing, and the data contained in the test report is reviewed by Ohio EPA DAPC's contractual agent for Medina County, the Akron Regional Air Quality Management District (ARAQMD).

- c. **Comment:** Who conducts emissions tests at the Wadsworth Compressor Station? Where are emission samples taken? What prevents NEXUS from changing production during the test to get more favorable results? Are blowdown emissions tested?

**Response:** The emissions testing may be performed by the permittee or any qualified testing company. Emission samples are taken by a probe inserted through a test port in the turbine's exhaust stack. Representatives from Ohio EPA and/or the Akron Regional Air Quality Management District (ARAQMD) would be on site to witness the testing and ensure it is conducted in accordance with the applicable federal test method(s) and procedures cited in the permit, which specifies that testing shall be done under worst-case conditions expected during the life of the permit. The air permit does not contain any emissions testing requirements specific to blowdowns.

- d. **Comment:** There is inherent conflict of interest in allowing any facility to self-monitor/self-report emissions exceedances. Permit regulations can be easily undermined with little agency oversight. Continuous emissions monitoring systems (CEMS) must be required for all equipment and natural gas sensors installed along the fence line. Ohio EPA should conduct frequent unannounced inspections and emissions tests.

**Response:** Ohio Revised Code (ORC) 3704.03(I) specifies that the director of environmental protection may require the owner or operator of an air contaminant source to maintain records and file periodic reports with the director containing information as to location, size and height of emission outlets, rate, duration and composition of emissions, and any other pertinent information the director prescribes. Air permits issued by Ohio EPA follow State law by incorporating these same monitoring and reporting requirements.

There are no air pollution control regulations applicable to the Wadsworth Compressor Station that mandate the use of CEMS. Pursuant to 40 CFR 60.4340(b), the facility may install, calibrate, maintain and operate CEMS for nitrogen oxide (NO<sub>x</sub>) emissions from the combustion turbine as an alternative to periodic performance testing, but NEXUS has elected to demonstrate continuous compliance for NO<sub>x</sub> using the performance testing option as allowed under 40 CFR 60.4340(a).

NEXUS will install combustible gas monitors throughout the Wadsworth Compressor Station for safety purposes, however, these monitors are not required by Ohio EPA. The Federal Energy Regulatory Commission (FERC) and/or the U.S. Department of Transportation Pipeline and Hazardous Materials Safety Administration may have a role in auditing the combustible gas monitors, but this is outside the scope of Ohio EPA's air permit review process.

Section A.11. of draft permit P0119280 explains Ohio EPA's authority under Ohio Revised Code (ORC) 3704.03(L) to inspect the facility, take samples, conduct tests and examine records or reports when necessary to determine compliance with air pollution laws and regulations and permit terms and conditions. Any person who falsifies records required by an air permit would be subject to criminal penalties. Announced and unannounced air compliance inspections for the Wadsworth Compressor Station would typically be conducted by the Akron Regional Air Quality Management District (ARAQMD) to witness stack tests or in response to malfunctions, complaints or reported non-compliance.

- e. **Comment:**What is the mandatory record retention period for the Wadsworth Compressor Station?

**Response:**Record retention is addressed under section A.3. of draft permit P0119280. The permittee 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. Records can be kept electronically, provided they can be made available to Ohio EPA during an inspection at the facility. Failure to make records available to Ohio EPA upon request is a violation of this permit requirement.

- f. **Comment:** What actions will be taken if the Wadsworth Compressor Station exceeds the permitted emission limits? Will NEXUS be fined and forced to shut down until the issue is corrected?

**Response:** An exceedance of a permitted allowable emission limitation would be handled in accordance with Ohio EPA's effective enforcement program and may, at minimum, result in the issuance of a Notice of Violation (NOV) to the permittee. Depending on the severity of the exceedance and the facility's corrective action response, the violation could be resolved or escalated to enforcement through the Ohio Attorney General's Office (AGO). Typically, this would result in Ohio EPA's Director issuing Final Findings and Orders, which may include a financial penalty, contributions to a Supplemental Environmental Project (SEP), installation of additional controls, etc. In certain instances, the violation may be escalated to the federal level with the enforcement case managed by U.S. EPA. A shutdown order could be issued to the facility if necessary to protect public health or the environment.

- g. **Comment:** If air regulations are updated, will the facility's permit be changed or will the Wadsworth Compressor Station remain grandfathered under the initial permit?What kind of policies are in place regarding new best technology updates for facilities?

**Response:** The Wadsworth Compressor Station must comply with any new air regulations, or updates to existing regulations, by the compliance date identified in the applicable rule or standard, regardless of whether or not the requirements are contained in the facility's permit. Rule changes are typically addressed during permit renewal, but may be initiated at any time through a permit modification.

Also, once Best Available Technology (BAT) has been established in an air permit, Ohio EPA does not have the authority to require existing facilities to upgrade to newer control technology that is available in the future, unless one of the following occurs: 1) there is a change to an applicable State or federal regulation that requires control technology upgrades or 2) the facility makes a change that qualifies as a modification under Ohio Administrative Code (OAC) rule 3745-31-01(SSS) and the changes are significant enough to require upgraded control technology through a permit modification.

**4. Permitting Status.**

- a. **Comment:** Why is the Wadsworth Compressor Station permitted as a minor source? Aggregating emissions from the five compressor stations in Ohio for the NEXUS pipeline project would be that of a major source and subject to Title V regulations:

Pollutant	Aggregated Emissions (tons per year)
Carbon Monoxide (CO)	71.11
Nitrogen Oxide (NO <sub>x</sub> )	200.88
Sulfur Dioxide (SO <sub>2</sub> )	18.77
Volatile Organic Compounds (VOC)	170.28
Particulate Matter (PM)	36.38

EPA 315-R-99-002, May 1999 states: *“the combined incremental effects of human activity referred to as cumulative impacts pose a serious threat to the environment. While they may be insignificant by themselves, cumulative impacts accumulate over time from one or more sources and can result in a degradation of important resources. Because federal projects cause or are affected by cumulative impacts, this type of impact must be assessed and documents prepared under the national environment policy act, NEPA.”*

**Response:** The Wadsworth Compressor Station is permitted as a minor source because it does not meet the definition of a major source under Ohio Administrative Code (OAC) rule 3745-77-01(X). This definition specifies three criteria necessary for sources to be considered as a single facility for Title V permitting purposes, and all three criteria must be met in order to have one facility, *“Major source means any stationary source or any group of stationary sources that are [1] located on one or more contiguous or adjacent properties and [2] under common control of the same person (or persons under common control) [3] belonging to a single major industry grouping. ...”*

Ohio EPA Engineering Guide #58 (<http://www.epa.state.oh.us/Portals/27/engineer/eguides/guide58.pdf>) further qualifies criterion 1 requirements for contiguous or adjacent properties, stating that entities located in different counties with property boundaries more than five miles apart are not considered adjacent based on geographic distance and logistics. Since none of the NEXUS compressor stations in Ohio are located on contiguous or adjacent properties, air contaminant emissions cannot be combined to trigger Title V major source regulations.

Additionally, in accordance with federal guidance, each compressor station constitutes a separate facility and; therefore, the applicability of federal rules and regulations are evaluated for each facility individually and not combined.

On Aug. 7, 2012, the Sixth Circuit Court issued a seminal decision in Summit Petroleum Corp. v. EPA (<http://www.opn.ca6.uscourts.gov/opinions.pdf/12a0248p-06.pdf>) holding that the Environmental Protection Agency (EPA) should only determine whether sources are “contiguous” or “adjacent” based on physical proximity and not based on functional interrelatedness. This means that the compressor stations’ emissions cannot be aggregated (considered a single facility) for purposes of determining permitting requirements based on their functions (which in this case is the same and that is to push natural gas through a pipeline). The facilities would have to be adjacent per the dictionary definition.

In *Summit Petroleum Corp. v. EPA*, the court vacated EPA's determination that Summit Petroleum Corporation's natural gas sweetening plant and sour gas production wells spread over forty-three square miles constituted a single stationary source for Clean Air Act (CAA) permitting purposes. Whether New Source Review (NSR) air permitting requirements apply to a particular project sometimes depends on whether multiple emission sources must be combined or "aggregated" and treated as a single source.

- b. Comment:** Ohio EPA should calculate methane emissions before permitting the NEXUS compressor stations and others that are planned, including Rover, for its impact on the state's air quality overall as well as greenhouse gas (GHG) effect.

**Response:** Methane, which is a GHG, is not considered a criteria air pollutant. The facility is a minor source and, therefore, is not subject to major New Source Review (NSR)/Prevention of Significant Deterioration (PSD) for GHGs, and no evaluation of greenhouse gases is required.

Ohio EPA permits GHGs based on permitting guidance from U.S. EPA on greenhouse gases. U.S. EPA has not established a National Ambient Air Quality Standard (NAAQS) (<https://www.epa.gov/criteria-air-pollutants/naaqs-table>) for GHGs, and U.S. EPA would only require establishment of an emissions standard for the proposed compressor station if: the projects triggered PSD of air quality requirements (<https://www.epa.gov/nsr/prevention-significant-deterioration-basic-information>); and potential GHGs from the Wadsworth Compressor Station exceed 75,000 tons per year. The potential emissions of GHG emissions from the Wadsworth Compressor Station do exceed 75,000 tons per year, but the project does not trigger PSD of air quality requirements for any pollutant, so Ohio EPA has not established a GHG emission limitation in the final air permit.

Furthermore, on June 23, 2014, the U.S. Supreme Court issued its decision in *Utility Air Regulatory Group v. EPA* ([https://www.supremecourt.gov/opinions/13pdf/12-1146\\_4g18.pdf](https://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf)) concerning the U.S. EPA's regulation of GHGs from stationary sources. The Supreme Court ruled that the EPA may not treat GHGs as an air pollutant for purposes of determining whether a source is a major source required to obtain a Prevention of Significant Deterioration (PSD) or Title V permit. The Supreme Court further clarified that the EPA could continue to require that PSD permits, otherwise required based on emissions of conventional pollutants, contain limitations on GHG emissions based on the application of Best Available Control Technology (BACT).

Subsequently, on July 24, 2014, U.S. EPA issued preliminary guidance concerning the impact of the court's decision in a memorandum discussing the next steps and preliminary views on the application of Clean Air Act permitting programs to GHGs (<https://www.epa.gov/sites/production/files/2015-07/documents/2014scotus.pdf>). Ohio EPA adopted this policy under Engineering Guide #85, titled July 2014 GHG Air Pollution Permitting Changes (<http://www.epa.state.oh.us/Portals/27/engineer/equides/guide85.pdf>). In accordance with Ohio Administrative Code (OAC) rule 3745-31-34(C)(2): "Permit to install requirements under this rule for major stationary sources and major modifications of sources emitting GHGs shall cease to be effective upon the issuance of any opinion, ruling, judgment, order, or decree by a federal court depriving the administrator of authority, limiting the administrator's authority, or requiring the administrator to delay the exercise of authority, to regulate GHGs under the Clean Air Act (CAA)." Since the Wadsworth Compressor station is not a major source of criteria air pollutants, it cannot be permitted as a major source of GHG emissions and no evaluation of greenhouses is required by law for this permitting action.

The Rover and NEXUS compressor stations do not constitute a single facility, or a single source, for purposes of permitting in accordance with the definition of a major source under Ohio Administrative Code (OAC) rule 3745-77-01(X). This definition specifies three criteria necessary for sources to be considered as a single facility, and all three criteria must be met in order to have one facility: "Major source means any stationary source or any group of stationary sources that are [1] located on one or more contiguous or adjacent properties and [2] under common control of the same person (or persons under common control) [3] belonging to a single major industry grouping. ..." The Rover and NEXUS compressor stations are not under common control and are not contiguous, and; therefore, cannot be considered a single facility for purpose of permitting.

Please see also response to Comment 4.a above.

- c. **Comment:** E-check 2014 Annual Report: *"The nonattainment designation means that the Ohio EPA will need to find additional emission reductions of volatile organic compounds [VOCs] and nitrogen oxides [NO<sub>x</sub>] in order to attain the .075 part per million standard."* Ohio Administrative Code (OAC) 3745-31-05 lays out the criteria for permit decisions by the director which states that a permit shall be issued if the new source will *"[n]ot prevent or interfere with the attainment or maintenance of applicable ambient air quality standards."* How can Ohio EPA justify allowing more of these pollutants to be emitted by the Wadsworth Compressor Station in an area of nonattainment?

**Response:** The Clean Air Act (CAA) allows for economic development, even in nonattainment areas. Since this permit does not result in a major increase of nitrogen oxides (NO<sub>x</sub>) or volatile organic compounds (VOC) emissions above major threshold levels, non-attainment area new source review is not triggered. Modeling results of potential emissions from the facility indicate that the emissions from the proposed facility will be within National Ambient Air Quality Standards (NAAQS) (<https://www.epa.gov/criteria-air-pollutants/naaqs-table>) and Ohio's Air Toxics Policy (<http://codes.ohio.gov/oac/3745-114>). These standards are set to be protective of public health and the environment. In addition, Ohio EPA has established restrictive emissions limits for the pollutants this facility will emit, and believes that if the facility complies with the final permit, public health and the environment will be protected.

Please also refer to response to Comment 6.c.

- d. **Comment:** Please provide the types and quantities of pollutants emitted by traffic on I-71 and I-76 in the Medina area?

**Response:** The 2014 mobile emissions in Medina County are as follows:

Pollutant	Emissions (tons per year)
Carbon Monoxide (CO)	10530
Nitrogen Oxides (NO <sub>x</sub> )	2021
Sulfur Dioxide (SO <sub>2</sub> )	16
Volatile Organic Compounds (VOC)	908
Particulate Matter less than or equal to 10 microns in diameter (PM <sub>10</sub> )	137
Particulate Matter less than or equal to 2.5 microns in diameter (PM <sub>2.5</sub> )	67

## 5. Public Information

- a. **Comment:** The legal notice of draft permit issuance/public hearing for the Wadsworth Compressor Station published on Jan. 14, 2016, did not contain all of the information required pursuant to Ohio Administrative Code (OAC) 3745-49-08. In addition, the facility name and permittee were not identified as being connected with NEXUS, and the email address to receive written comments was incorrectly listed as kkanzoa@schd.org. People were unaware of or unable to attend the February 16 public hearing at Cloverleaf Elementary School, or felt questions were insufficiently addressed during the public hearing, and request Ohio EPA conduct a second public hearing for draft permit P0119280.

**Response:** Ohio EPA believes that the content of the public notice as published on Jan. 14, 2016, met the Agency's legal obligations. The public notice as published included instructions of how and where additional information may be obtained.

Also, NEXUS permit application #A0053902 received on July 15, 2015, identifies Wadsworth Compressor Station as the legal facility name and Reagan Mayces as the primary contact. Ohio EPA issued draft PTIO P0119280 to the facility name and primary contact as listed in the permit application.

On Jan. 19, 2016, Ohio EPA reissued a citizen advisory with a corrected email address for comments on the draft air permit for the Wadsworth Compressor Station. In light of the original error, a secondary email address (kkanzoa@schd.org) was established, so that comments arriving at either email address were received and considered. Written comments were given the same consideration as oral testimonies received during the public hearing. During the public hearing, Ohio EPA advised anyone who felt questions were not properly addressed to submit additional comments in writing. Ohio EPA concluded a second public hearing for draft permit P0119280 is unwarranted.

Ohio EPA places public notice ads (usually in the legal notices section) in the newspaper of largest general circulation for the county in which the facility is proposed to be located. In Medina County, public notices are published in the Medina Gazette. Public notices are also listed on Ohio EPA's website: <http://www.epa.state.oh.us/Actions.aspx>.

- b. **Comment:** How will local residents and fire departments be notified of leaks, blowdowns or emission exceedances from the Wadsworth Compressor Station? The burden of a safety response falls on volunteer fire departments not trained or equipped to deal with the magnitude of such events.

**Response:** Routine blowdowns are part of normal compressor station operations and external notifications of such events are not generally required. With respect to non-routine emergency events, NEXUS will comply with its internal operating procedures and all applicable governmental requirements to notify local first responders as well as State Emergency Response Commission (SERC) and the Local Emergency Planning Committee (LEPC) in the event of any release exceeding a reportable quantity threshold. In addition, as part of a public awareness program, and in accordance with U.S. Department of Transportation regulations, NEXUS will establish a working relationship early on with emergency responders, including local volunteer fire departments, to ensure effective communication, education and training. NEXUS employees and local emergency response personnel will meet periodically for emergency drills to test staff readiness and identify improvement opportunities. NEXUS's focus with these organizations will be to review firefighting methods and techniques for natural gas fires and to conduct periodic emergency drills and exercises.

NEXUS is developing notification guidelines in the event of a station shutdown, which will include the following as applicable/appropriate:

- state/provincial permitting agencies;
- appropriate law enforcement agencies within a ten-mile radius of the release site or as required by state/provincial agencies (sheriff departments, state police and local police as applicable);
- county/parish/local emergency coordinators located within a ten-mile radius of the release site or as required by state/provincial agencies;
- local fire officials (city and county/parish fire departments);
- other public officials (mayors of towns, etc.) as appropriate;
- residents and businesses located within close proximity to the release site (minimum of 660 ft.);
- area management may elect to increase notification radius when an environmental impact warrants (e.g. wind); and
- Federal Aviation Administration, if the blowdown is to take place in a known air traffic corridor.

Please also note that blowdowns are monitored by compressor station and centralized Supervisory Control and Data Acquisition (SCADA) facility personnel. SCADA is a system for remote monitoring and control that operates with coded signals over communication channels.

- c. **Comment:** What type of air monitoring, record keeping, reporting, emissions testing and inspection results pertaining to the Wadsworth Compressor Station will be made available to the public?

**Response:** Information obtained by Ohio EPA that is not classified as confidential (e.g., trade-secret, attorney-client privilege, etc.) is available within a reasonable time period upon request by any entity under the Freedom of Information Act. Requests for records pertaining to the Wadsworth Compressor Station can be made in writing to the Akron Regional Air Quality Management District (ARAQMD) at 1867 W. Market St., Akron, OH 44313 or by email to [araqmd@schd.org](mailto:araqmd@schd.org) or by telephone at (330) 375-2480.

- d. **Comment:** Reagan Mayces (addressed permittee for the Wadsworth Compressor Station) did not respond to public requests for information.

**Response:** The air permit for the Wadsworth Compressor Station does not include terms and conditions for the company's public communication policy because that is outside Ohio EPA's regulatory authority.

## 6. Environmental and Public Health Effects

- a. **Comment:** Environmental testing on air, water and soil samples, both immediately surrounding and farther downwind of the proposed Wadsworth Compressor Station should be conducted by the EPA or an independent 3<sup>rd</sup> party before and on an on-going basis after the compressor station is built. Will there be a complete environmental impact study before permitting?

**Response:** Ohio EPA's Division of Air Pollution Control (DAPC) has an established air quality monitoring network that is operated and maintained by Ohio EPA and local air agencies throughout the state. The annual monitoring network plan describes how monitoring sites are selected. Air quality information is retrieved from air monitors located at each site. Monitors have instruments to measure air quality/meteorological parameters 24 hours a day and provide

real-time monitoring of air pollution episodes to determine compliance with ambient air quality standards. Ohio EPA does not install ambient air monitoring equipment to specifically monitor compressor stations or pipelines. The closest existing monitoring site to the Wadsworth Compressor Station is located off Ballash Road in Chippewa Lake. The air pollutants monitored there are ozone (O<sub>3</sub>) and particulate matter less than or equal to 2.5 microns in diameter (PM<sub>2.5</sub>). Monitoring sites downwind of the Wadsworth Compressor Station are located at Patterson Park in North Akron, which monitors for O<sub>3</sub> and carbon monoxide (CO), Akron's East High School, which monitors for PM<sub>2.5</sub> and sulfur dioxide (SO<sub>2</sub>), and Five Points in West Akron, which monitors for PM<sub>2.5</sub>.

An Environmental Impact Statement (EIS) for the NEXUS project (Docket No. CP16-22-000) is being prepared by the Federal Energy Regulatory Commission (FERC). The draft EIS was issued on 7/8/2016 and may be accessed at [http://elibrary.ferc.gov/idmws/file\\_list.asp?accession\\_num=20160708-3008](http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20160708-3008). Comments received by FERC on or before August 29, 2016 will be used to revise the draft EIS for a final EIS, which is planned for issuance in late November 2016.

In order to receive notification of the issuance of the EIS and track all formal issuances and submittals in specific dockets, FERC offers a free service called eSubscription (<http://www.ferc.gov/docs-filing/esubscription.asp>). Additional information about the NEXUS project is available from the Commission's Office of External Affairs at (866) 208-FERC or on the FERC website ([www.ferc.gov](http://www.ferc.gov)). Use the "eLibrary" link, select "General Search" from the eLibrary menu, enter the selected date range and "Docket Number" excluding the last three digits (i.e., CP16-22), then follow the instructions.

- b. Comment:** How does Ohio EPA know the volume of allowable pollutants emitted by the Wadsworth Compressor Station is safe for the public and will not have negative health effects on surrounding population? Will there be a complete public health assessment before permitting?

**Response:** There is no evidence that operating the facility will result in adverse effects to human health or the environment. Under the Clean Air Act (CAA), before establishing National Ambient Air Quality Standards (NAAQS) (<https://www.epa.gov/criteria-air-pollutants/naaqs-table>), U.S. EPA – the agency entrusted by Congress to perform the evaluation – must conduct a detailed, thorough and highly public evaluation of the health and environmental impacts associated with various ambient levels of the air pollutant in question. U.S. EPA's analysis must include all available scientific data, which is compiled, peer-reviewed and provided for public review and comment. The NAAQS are then periodically reviewed and updated as necessary. In addition, states must develop individual State Implementation Plans (SIPs) (<https://www.epa.gov/approved-sips/approved-sips-region-5>) to further regulate specific areas and sources to ensure compliance with federal NAAQS. Compliance with the applicable permit limitations means that emissions from the Wadsworth Compressor Station would not create a significant impact to human health and the environment within the specific area in which the permitted facility is located.

Public health assessments also fall under the jurisdiction of state and/or local health departments:

e Ohio Department of Health  
246 North High Street  
Columbus, OH 43215  
(614) 466-3543

Medina County Health Department  
4800 Ledgeswood Drive  
Medina, OH 44256  
(330) 723-9688

- c. **Comment:** Regional National Ambient Air Quality Standards (NAAQS) do not protect the health of nearby residents.

**Response:** The Clean Air Act (CAA), last amended in 1990, requires the EPA to set NAAQS for pollutants that are common in outdoor air and considered harmful to public health and the environment (<https://www.epa.gov/criteria-air-pollutants/naaqs-table>). The CAA identifies two types of national ambient air quality standards. Primary standards provide public health protection, including protecting the health of "sensitive" populations such as asthmatics, children and the elderly. Secondary standards provide public welfare protection, including protection against decreased visibility and damage to animals, crops, vegetation and buildings.

The EPA has set NAAQS for six principal pollutants, which are called "criteria" pollutants: carbon monoxide (CO), lead (Pb), ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>) and particulate matter [less than or equal to 2.5 microns in diameter (PM<sub>2.5</sub>) and less than or equal to 10 microns in diameter (PM<sub>10</sub>)]. Furthermore, these standards must "...accurately reflect the latest scientific knowledge." The CAA states that NAAQS must be set based on the "judgment of the Administrator" to allow "an adequate margin of safety" and to be "requisite to protect the public health." The term "margin of safety" has been interpreted (by EPA and federal courts) to be intended to address uncertainties and to provide a reasonable degree of protection, but not necessarily provide zero risk to all individuals. In making decisions regarding the "adequate margin of safety," EPA typically takes into account the nature and severity of the health effects, the size of the sensitive populations at risk, and the kind and degree of uncertainties.

- d. **Comment:** Is Ohio currently ranked third in the United States for the most EPA air monitoring sites? Is that because we already have some of the dirtiest air in the country? What outside monitoring results for the Wadsworth Compressor Station would be recognized by Ohio EPA?

**Response:** Ohio EPA follows a complex procedure conforming to U.S. EPA guidance and rules to decide where monitors must be placed in order to determine the ambient concentrations of the six criteria pollutants: carbon monoxide (CO), lead (Pb), ozone (O<sub>3</sub>), nitrogen dioxide (NO<sub>2</sub>), sulfur dioxide (SO<sub>2</sub>) and particulate matter [less than or equal to 2.5 microns in diameter (PM<sub>2.5</sub>) and less than or equal to 10 microns in diameter (PM<sub>10</sub>)]. Ohio EPA uses data loggers to acquire data from numerous O<sub>3</sub> and PM<sub>2.5</sub> (fine particulate) monitors throughout the state. These hourly data are sent to the U.S. EPA's AIRNow webpage (<http://airnow.gov/>) and are made available to the public and media outlets at its website.

The expansive network of existing monitors is used to determine compliance with the ambient air quality standards; provide real-time monitoring of air pollution episodes; provide data for trend analyses, regulation evaluation and planning; and provide daily information to the public concerning the quality of the air in high-population areas, near major emission sources and in rural areas. Please note that the entire state of Ohio is in attainment for CO and PM<sub>10</sub>, and most counties are in attainment for O<sub>3</sub>, SO<sub>2</sub> and PM<sub>2.5</sub>.

More information about Ohio EPA's air monitoring network can also be found at: <http://epa.ohio.gov/dapc/ams/amsmain.aspx>.

Also, Ohio EPA does not accept monitoring results from outside sources if unable to determine the validity of the data acquired. Ohio EPA could not use the results from the interested third party for purposes of enforcement. If an interested third party has a complaint against the facility, and wants to submit results of fence line monitoring to Ohio EPA as part of complaint documentation, that is allowed. The documentation could be used by Ohio EPA representatives to assist in determining the source of the complaint.

- e. **Comment:** Ohio EPA should deny issuance of a final air permit to the Wadsworth Compressor Station. This facility will violate the public nuisance provisions of Ohio Administrative Code (OAC) rule 3745-15-07 as clearly evidenced by existing compressor stations and the provisions of the draft permit itself. The Director of the Ohio EPA cannot protect human health and prevent injury to plant, animal life and property, as required by OAC rule 3745-15-02, by granting permit P0119280 to the Wadsworth Compressor Station.

**Response:** Ohio EPA has a legal obligation to evaluate proposed sources and determine whether or not they are able to comply with all applicable state and federal air pollution control regulations. Permit P0119280 for the Wadsworth Compressor Station documents what the proposed sources must do in order to comply with these regulations. As long as the emission sources meet the permit terms and conditions, the potential emissions are not expected to cause adverse health and welfare effects. Pursuant to Ohio Revised Code (ORC) 3704.03(F)(2)(a): *“No installation permit shall be issued except in accordance with all requirements of this chapter and rules adopted thereunder. No application shall be denied or permit revoked or modified without a written order stating the findings upon which denial, revocation, or modification is based.”* Ohio EPA has no findings that support a denial of the permit application for the Wadsworth Compressor Station; therefore, Ohio EPA is legally obligated to issue the air permit to the Wadsworth Compressor Station because the potential air contaminants from this facility are within the emissions thresholds allowed under state and federal air pollution control regulations.

- f. **Comment:** What legal recourse do people have if their health is affected by emissions from the Wadsworth Compressor Station? Will NEXUS be required to post bond to cover damages from explosions and lost property values?

**Response:** ORC 3704.03(G) (<http://codes.ohio.gov/orc/3704.03v1>) grants Ohio EPA the authority to deny or revoke operating permits for failure to comply with this chapter or the rules adopted thereunder.

Please also refer to the response to comment 3.f. above.

Also note that Ohio EPA has no authority or role with liability issues.

## 7. Issues Outside Ohio EPA DAPC’s Regulatory Authority

- a. **Comment:** What is the actual size of the Wadsworth Compressor Station? How big is the compressor building? What is the number and height of the stacks? Will the station be staffed with operators or completely automated?

**Response:** The Medina County Auditor’s website specifies a parcel size of 75 acres for the property on which the Wadsworth Compressor Station would be located ([http://www.medinacountyauditor.org/searchresults\\_php.php?parcel=008-16B-26-001](http://www.medinacountyauditor.org/searchresults_php.php?parcel=008-16B-26-001)). The site maps provided by NEXUS indicate the station would span approximately one-third of that land. The stack egress point information submitted for the Combustion Turbine (P001) in permit application #A0053902 specifies a building height of 60 ft., building width of 90 ft., building length of 120 ft., stack diameter of 7.5 ft. and a stack height from ground of 50 ft. However, these dimensions could be subject to change pending final construction. The staffing requirements for this facility would be determined by NEXUS.

- b. **Comment:** Where is the liquid and solid waste from the Wadsworth Compressor Station being disposed and how is it being accounted for?

**Response:**NEXUS will manage all liquid and solid wastes generated from the operation of the Wadsworth Compressor Station in accordance with applicable state and federal regulatory requirements, including appropriate manifesting and disposal at approved facilities.

- c. **Comment:** Ohio EPA should mandate environmentally safe forms of energy: windmills, solar energy, hydro-electric, etc. Permitting the fossil fuel industry is working against the recent 2015 Paris Conference of Parties (COP 21) agreement. How can you permit this venture considering the poor financial fitness and sustainability of long-term natural gas development in Ohio and nationwide?

**Response:**Ohio EPA continually encourages companies to adopt programs to minimize or eliminate air emissions however, Ohio EPA cannot require a specific type of source to be installed, or a specific type of fuel to be used. The Agency can only require that the source proposed for installation meet specific emissions limitations and/or control techniques/measures. In this case, the permittee has proposed the installation of a natural gas-fired combustion turbine to power a compressor. Ohio EPA does not have the authority to require the installation of an electric-powered, solar-powered or any other source of power for the natural gas compressor since it is outside the scope of Ohio EPA's air permit review process.

- d. **Comment:** There seems to be a lack of communication or joint effort between the different government agencies regulating this source. Responsibilities are passed from one entity to the next, where does the public go for answers?

**Response:** There are multiple governmental entities that regulate various aspects of compressor stations, and information is exchanged between them as necessary. In accordance with the requirements of Ohio Administrative Code (OAC) rule 3745-31-05(I), Ohio EPA's Division of Air Pollution Control (DAPC) coordinated the review and issuance of the draft air permit for the Wadsworth Compressor Station with other relevant Ohio EPA permit-to-install programs under the Division of Materials and Waste Management (DMWM), Division of Surface Water (DSW) and Division of Drinking and Ground Waters (DDAGW). Ohio EPA also filed a preliminary assessment of permit application #A0053902 in accordance with the Federal Energy Regulatory Commission (FERC) regulations under 18 CFR section 385.2013. In addition, copies of the transcripts from the draft permit public hearing held on February 16, 2016, were filed by Ohio EPA under FERC docket number CP16-22-000 ([http://elibrary.ferc.gov/idmws/file\\_list.asp?accession\\_num=20160519-5076](http://elibrary.ferc.gov/idmws/file_list.asp?accession_num=20160519-5076)).

Many comments submitted to Ohio EPA, in response to the draft air permit issued to the Wadsworth Compressor Station, were outside the scope of permit P0119280. The table below identifies the appropriate entity to which specific questions or concerns regarding these issues should be addressed. \*

Issue	Main Regulator
Eminent domain	State of Ohio Legislature
Noise	Federal Energy Regulatory Commission or Local zoning organizations
Organic farms	U.S. Department of Agriculture
Parks and nature conservation	Ohio Department of Natural Resources or Local park districts



Property values	Local zoning organizations
Siting of compressor stations and pipelines	Federal Energy Regulatory Commission or Local zoning organizations
Safety	Pipeline and Hazardous Materials Safety Administration or Local fire departments and emergency response services
Truck traffic	Ohio Department of Transportation or Local zoning organizations
Well water	U.S. EPA Office of Water, Ohio EPA Division of Drinking and Ground Waters or Local health departments
Wetlands and streams	U.S. Army Corps of Engineers, U.S. EPA Office of Water or Ohio EPA Division of Surface Water
Wildlife	U.S. Fish and Wildlife Service or Ohio Department of Natural Resources
Zoning restrictions	Local zoning organizations

\*Additional Contact Information:

**Federal Energy Regulatory Commission**

Office of the Secretary  
888 First Street, NE, Room 1A  
Washington, DC 20426  
(Re: Docket No. CP16-22-000)

**Ohio Department of Natural Resources**

Division of Natural Areas and Preserves  
2045 Morse Road, Bldg. C-4  
Columbus, OH 43229  
(614) 265-6561

**Ohio Department of Natural Resources, District 3**

Division of Wildlife  
912 Portage Lakes Drive  
Akron, Ohio 44319  
(330) 644-2293

**Ohio Department of Transportation, District 3**

906 Clark Avenue  
Ashland, Ohio 44805  
(419) 281-0513

**Ohio EPA Northeast District Office**



**Response to Comments**  
Wadsworth Compressor Station  
**Permit Number:** P0119280  
**Facility ID:** 1652100116

Division of Drinking and Ground Water or Division of Surface Water  
2110 East Aurora Road  
Twinsburg, Ohio 44087  
(330) 963-1200

**Pipeline and Hazardous Materials Safety Administration**

Office of Pipeline Safety  
East Building, 2nd Floor  
1200 New Jersey Ave., SE, Mail Stop: E24-455  
Washington, DC 20590  
(202) 366-4595

**U.S. Army Corps of Engineers**

Great Lakes & Ohio River Division  
Public Affairs Office  
550 Main Street, Room 10524  
Cincinnati, OH 45202  
(513) 684-3010

**U.S. Department of Agriculture**

Medina Service Center  
6090 Wedgewood Road  
Medina, OH 44256  
(330) 722-2628

**U.S. EPA, Region 5**

Water Division  
77 W. Jackson Blvd.  
Chicago, IL 60604  
(312) 353-2000

**U.S. Fish and Wildlife Service, Region 3**

Ecological Services Field Center  
4625 Morse Road, Suite 104  
Columbus, OH 43230  
(614) 416-8993

**END OF RESPONSE TO COMMENTS**



**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Wadsworth Compressor Station**

Facility ID:	1652100116
Permit Number:	P0119280
Permit Type:	Initial Installation
Issued:	9/9/2016
Effective:	9/9/2016
Expiration:	9/9/2026





**Division of Air Pollution Control**  
**Permit-to-Install and Operate**  
for  
Wadsworth Compressor Station

**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 .....	10
1. J001, Loading Operation.....	11
2. P001, Combustion Turbine.....	14
3. P003, Gas Releases .....	24
4. P009, Pipeline Pigging .....	27
5. P801, Equipment Leaks .....	30
6. Emissions Unit Group - Separator Vessel Group: P004, P005, P006, P007 and P008.....	34





**Final Permit-to-Install and Operate**  
Wadsworth Compressor Station  
**Permit Number:** P0119280  
**Facility ID:** 1652100116  
**Effective Date:** 9/9/2016

## Authorization

Facility ID: 1652100116  
Application Number(s): A0053902, A0054530  
Permit Number: P0119280  
Permit Description: Initial Installation PTIO for a natural gas compressor station powered by a 29,517 hp natural gas-fired combustion turbine.  
Permit Type: Initial Installation  
Permit Fee: \$2,750.00  
Issue Date: 9/9/2016  
Effective Date: 9/9/2016  
Expiration Date: 9/9/2026  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Wadsworth Compressor Station  
Guilford Road  
Wadsworth, OH 44281

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

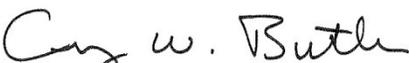
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Akron Regional Air Quality Management District  
1867 West Market St.  
Akron, OH 44313  
(330)375-2480

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: P0119280

Permit Description: Initial Installation PTIO for a natural gas compressor station powered by a 29,517 hp natural gas-fired combustion turbine.

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

- |                                   |                    |
|-----------------------------------|--------------------|
| <b>Emissions Unit ID:</b>         | <b>J001</b>        |
| Company Equipment ID:             | Loading Operation  |
| Superseded Permit Number:         |                    |
| General Permit Category and Type: | Not Applicable     |
| <b>Emissions Unit ID:</b>         | <b>P001</b>        |
| Company Equipment ID:             | Combustion Turbine |
| Superseded Permit Number:         |                    |
| General Permit Category and Type: | Not Applicable     |
| <b>Emissions Unit ID:</b>         | <b>P003</b>        |
| Company Equipment ID:             | Gas Releases       |
| Superseded Permit Number:         |                    |
| General Permit Category and Type: | Not Applicable     |
| <b>Emissions Unit ID:</b>         | <b>P009</b>        |
| Company Equipment ID:             | Pipeline Pigging   |
| Superseded Permit Number:         |                    |
| General Permit Category and Type: | Not Applicable     |
| <b>Emissions Unit ID:</b>         | <b>P801</b>        |
| Company Equipment ID:             | Equipment Leaks    |
| Superseded Permit Number:         |                    |
| General Permit Category and Type: | Not Applicable     |

**Group Name: Separator Vessel Group**

<b>Emissions Unit ID:</b>	<b>P004</b>
Company Equipment ID:	Separator Vessel #1
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P005</b>
Company Equipment ID:	Separator Vessel #2
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P006</b>
Company Equipment ID:	Separator Vessel #3
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P007</b>
Company Equipment ID:	Separator Vessel #4
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P008</b>
Company Equipment ID:	Separator Vessel #5
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install and Operate**  
Wadsworth Compressor Station  
**Permit Number:** P0119280  
**Facility ID:** 1652100116  
**Effective Date:** 9/9/2016

## **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**  
Wadsworth Compressor Station  
**Permit Number:** P0119280  
**Facility ID:** 1652100116  
**Effective Date:** 9/9/2016

## **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.4.
  - 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 following emissions unit contained in this permit is subject to 40 CFR Part 60, Subpart KKKK, Standards of Performance for Stationary Combustion Turbines: P001. The complete New Source Performance Standards (NSPS) requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://www.ecfr.gov> or by contacting the appropriate Ohio EPA District Office or Local Air Agency.
3. The following emissions unit contained in this permit is subject to 40 CFR Part 60, Subpart OOOOa, Standards of Performance for Crude Oil and Natural Gas Facilities: P801. The complete New Source Performance Standards (NSPS) requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website <http://www.ecfr.gov> or by contacting the appropriate Ohio EPA District Office or Local Air Agency.
4. Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the 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 for those emissions units subject to this rule. OAC Chapter 3745-31 requires a permittee 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 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.
5. Air contaminant sources that qualify as de minimis under OAC rule 3745-15-05, or are exempt under OAC rules 3745-31-03(B)(1) or 3745-31-03(C) are not subject to emission standards established within this permit. Although this permit does not apply to de minimis or exempt sources, emissions from de minimis or exempt sources must be included in the total potential to emit (PTE) calculations for this permit.



**Final Permit-to-Install and Operate**  
Wadsworth Compressor Station  
**Permit Number:** P0119280  
**Facility ID:** 1652100116  
**Effective Date:** 9/9/2016

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

**1. J001, Loading Operation**

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

Periodic transfer of condensate liquids, used lubricating oil, and oily water to tanker trucks for shipment off-site.

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) June 30, 2008	Fugitive volatile organic compound (VOC) emissions shall not exceed 0.001 ton per month averaged over a 12-month rolling period. See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the potential to emit is less than 10 tons/year. See b)(2)b. below.

- (2) Additional Terms and Conditions
  - a. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
  - b. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.
- c) Operational Restrictions
  - (1) Tank Truck Unloading Operations
    - a. Prior to connecting the condensate transfer line(s) from the condensate tank to the condensate tank truck, the permittee shall inspect all fittings, valves, gaskets and fasteners that will be used during the transfer to ensure they are in proper condition (i.e., not corroded, torn, worn, stripped or otherwise damaged) and will result in vapor tight connections.
    - b. During the loading of condensate from the condensate to the condensate tank truck, the permittee shall continually monitor the transfer equipment, the condensate tank and the tank truck for any leaks through visual, olfactory, or other observations. If any leak is detected, loading of the condensate shall cease until the leaking component has been repaired.
    - c. The permittee shall not permit condensate and used oil to be spilled, discarded in sewers, stored in open containers or handled in any other manner that would result in evaporation.
  - (2) All condensate loading lines shall be equipped with fittings which are vapor tight.
  - (3) The delivery vessel hatches shall be closed at all times during the loading of the delivery vessel.
- d) Monitoring and/or Recordkeeping Requirements
  - (1) None.
- e) Reporting Requirements
  - (1) 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 Ohio EPA District Office or Local Air Agency.
  - (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

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:

VOC emissions shall not exceed 0.001 ton per month averaged over a twelve-month rolling period.

Applicable Compliance Method:

The permittee has demonstrated compliance with this emissions limitation with the calculations submitted as part of the permit application associated with this permit (#A0053902, dated 7/15/15). The emissions limitation was derived by multiplying the loading loss factor for each material loaded by the annual throughput of each material loaded to determine the annual emissions of each material loaded in pounds per year. Divide the sum of the annual emissions from all liquids loaded by 2,000 pounds per ton, and divide by 12 months per year to determine the monthly emissions averaged over a twelve-month rolling period. The loading loss factors were derived using AP-42, Section 5.2, "Transportation and Marketing of Petroleum Liquids", Equation 1 (6/08).

$$L_L = 12.46 \text{ SPM/T}$$

Where:

$L_L$  = loading loss, pounds per 1000 gallons of liquid loaded;

$S$  = saturation factor, 0.6 for submerged fill and 1.45 for splash;

$P$  = true vapor pressure of liquid loaded, pounds per square inch absolute (psia);

$M$  = molecular weight of vapors, pounds per pound-mole (lb/lb-mole); and

$T$  = temperature of bulk liquid loaded, in °R (°F + 460).

g) Miscellaneous Requirements

- (1) None.

**2. P001, Combustion Turbine**

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

29,517 HP (196.51 MMBtu/hr) natural gas-fired Solar Turbine; Titan-250-30002S4 Compressor Turbine equipped with SoLoNOx technology and an oxidation catalyst.

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) June 30, 2008	<p>Particulate matter 10 microns or less in size (PM<sub>10</sub>) from shall not exceed 0.52 ton per month averaged over a 12-month rolling period.</p> <p>Sulfur dioxide (SO<sub>2</sub>) emissions shall not exceed 0.27 ton per month averaged over a 12-month rolling period.</p> <p>The hourly carbon monoxide (CO) BAT emission limitation established pursuant to this rule is equivalent to the hourly CO limitation established pursuant to OAC rule 3745-31-05(E).</p> <p>The annual CO emissions shall not exceed 7.79 tons per year (tpy).</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		<p>The hourly volatile organic compound (VOC) BAT emission limitation established pursuant to this rule is equivalent to the hourly VOC emission limitation established pursuant to OAC rule 3745-31-05(E).</p> <p>The annual VOC emissions shall not exceed 3.30 tpy.</p> <p>See b)(2)a. below.</p>
b.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	<p>The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the PM<sub>10</sub>, SO<sub>2</sub>, CO and VOC emissions from this air contaminant source since the potential to emit of each is less than 10 tons/year.</p> <p>See b)(2)b. below.</p>
c.	ORC 3704.03(T)	NO <sub>x</sub> emissions shall not exceed 2.58 tons per month averaged over a 12-month rolling period.
d.	OAC rule 3745-31-05(E) June 30, 2008	<p>CO emissions shall not exceed 0.66 lb/hr during normal operations and 0.65 ton per month averaged over a 12-month rolling period.</p> <p>VOC emissions shall not exceed 0.82 lb/hr during normal operations and 0.28 ton per month averaged over a 12-month rolling period.</p> <p>See b)(2)c. below.</p>
e.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) from any stacks serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by rule.
f.	OAC rule 3745-17-11(B)(4)	PE shall not exceed 0.040 pound per million Btu of actual heat input.
g.	OAC rule 3745-18-06(F)	This emissions unit is exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(A).
h.	OAC rule 3745-110-03(E)	This emission limitation is less stringent than the limitation listed pursuant to 40 CFR

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		60, Subpart KKKK.
i.	<p>40 CFR Part 60, Subpart KKKK (40 CFR Part 60.4300 – 60.4420)            [In accordance with 40 CFR 60.4305(a), this emissions unit has a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel.]</p>	<p>NO<sub>x</sub> emissions shall not exceed 25 ppm at 15% O<sub>2</sub> or 150 ng/J of useful output (1.2 lb/MWh) when operating at least 75% of peak load.</p> <p>NO<sub>x</sub> emissions shall not exceed 96 ppm at 15% O<sub>2</sub> or 590 ng/J of useful output (4.7 lb/MWh) when operating at less than 75% of peak load or when operating at temperatures less than 0 degrees Fahrenheit (°F).</p> <p>SO<sub>2</sub> emissions shall not exceed 110 nanograms per Joule (0.90 pound per mega-Watt hour) or 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/MMBtu).</p> <p>[Table 1 to 40 CFR Part 60 Subpart KKKK and 60.4330(a)(1) and (a)(2)]</p> <p>See b)(2)d. below.</p>
j.	<p>40 CFR Part 60, Subpart GG (40 CFR Part 60.330 – 60.335)</p> <p>[In accordance with 40 CFR 60.330 (a), this emissions unit has a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel.]</p>	<p>Stationary combustion turbines regulated pursuant to 40 CFR Part 60, Subpart KKKK are exempt from the requirements of 40 CFR Part 60, Subpart GG.</p>
k.	<p>40 CFR Part 60, Subpart OOOOa (40 CFR 60.5360a – 60.5432a)</p>	<p>The compressor associated with this emissions unit does not employ wet seals and; therefore, is exempt from the requirements of 40 CFR Part 60, Subpart OOOOa.</p>
l.	<p>40 CFR Part 60, Subpart A (40 CFR Part 60.1 – 60.19)</p>	<p>General Provisions.            See b)(2)d. below.</p>

(2) Additional Terms and Conditions

- a. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- b. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP. It should be noted that the emission limitations established pursuant to OAC rule 3745-31-05(E) will remain applicable after the above SIP revisions are approved by U.S. EPA.
- c. The Permit-to-Install and Operate (PTIO) for this air contaminant source takes into account the following voluntary emission limitations associated with the use of an oxidation catalyst to minimize emissions, [see c)(3)], as proposed by the permittee for the purpose of avoiding BAT requirements under OAC rule 3745-31-05(A)(3).
  - i. CO emissions shall not exceed 0.66 lb/hr (at temperatures above 0°F during normal operations) and 0.65 ton per month averaged over a 12-month rolling period.
  - ii. VOC emissions shall not exceed 0.82 lb/hr (at temperatures above 0°F during normal operations) and 0.28 ton per month averaged over a 12-month rolling period.
  - iii. “Normal operations” includes all periods of operation, except for startup, shutdown, and operation at temperatures below 0 °F.
- d. The permittee shall demonstrate compliance with the applicable provisions of 40 CFR Part 60, Subpart KKKK in accordance with 40 CFR Part 60, Subpart A. Proposed amendments to 40 CFR Part 60, Subpart KKKK were published in the Federal Register on August 29, 2012. If final amendments to 40 CFR Part 60, Subpart KKKK become effective during the term of this PTIO, then the permittee shall comply with the effective version of 40 CFR Part 60, Subpart KKKK on the date that the new requirements go into effect, rather than the 40 CFR Part 60 Subpart KKKK requirements specified in this PTIO.

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in this emissions unit.
- (2) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subpart KKKK, including the following sections:

60.4333(a)	Utilize good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.
------------	---

- (3) The permittee shall install and operate the turbine with an oxidation catalyst for the partial control of CO and VOC emissions whenever this emissions unit is in operation excluding startup and shutdown and shall maintain the turbine and oxidation catalyst in accordance with the manufacturer’s recommendations, instructions, and/or operating manual(s), with any modifications deemed necessary by the permittee.

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 maintain monthly records of the following information:
  - a. the total hours of operation, including a breakdown of the following different temperature operating scenarios;
    - i. ambient temperatures greater than 0°F;
    - ii. ambient temperatures less than or equal to 0°F but greater than -20°F; and
    - iii. ambient temperatures less than or equal to -20°F.
  - b. the number of startups and shutdowns;
  - c. the monthly emissions of CO, VOC, and NO<sub>x</sub>, in tons per month;
  - d. the annual emissions of CO and VOC, in tons per year; and
  - e. beginning after the first 12 months of operation, the emissions of CO, VOC, and NO<sub>x</sub> in tons per month averaged over a 12-month rolling period.
- (3) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subpart KKKK, including the following sections:

60.4340	Option to conduct performance testing for NO <sub>x</sub> in lieu of installing a continuous emissions monitor.
60.4360	Exemption from determining the total sulfur content of the fuel being fired in the turbine as provided in §60.4365.
60.4365(a)	Maintain current, valid purchase contract, tariff sheet or transportation contract that specifies the maximum total sulfur content for natural gas in continental areas is 20 grains of sulfur or less per 100 standard cubic feet.

e) Reporting Requirements

- (1) 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 Ohio EPA District Office or Local Air Agency.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subpart KKKK, including the following sections:

60.4375(a)	Excess emissions reporting.
------------	-----------------------------

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:

PM<sub>10</sub> emissions shall not exceed 0.52 ton per month averaged over a 12-month, rolling period.

Applicable Compliance Method:

Compliance shall be determined by using the following equation:

$$\frac{1.4231 \text{ lb}}{\text{hr}} * \frac{8,760 \text{ hr}}{\text{yr}} * \frac{\text{ton}}{2,000} * \frac{\text{yr}}{12 \text{ m rolling}} = 0.52 \frac{\text{ton}}{\text{m rolling 12}}$$

Where:

1.4231 lb/hr = PM emission factor for combined operations (i.e., normal, startup, shutdown, and low temperatures) derived from AP-42, Section 3.1, Table 3.1-2a, revised 4/2000.

If required, compliance shall be demonstrated based upon emission tests performed in accordance with Methods 1 through 4 of 40 CFR Part 60, Appendix A, and Methods 201 and 202 of 40 CFR Part 51, Appendix M to determine a site-specific emission factor.

b. Emissions Limitation:

SO<sub>2</sub> from each emissions unit emissions shall not exceed 0.27 ton per month averaged over a twelve-month, rolling period.

Applicable Compliance Method:

Compliance shall be determined by using the following equation:

$$\frac{0.7331 \text{ lb}}{\text{hr}} * \frac{8,760 \text{ hr}}{\text{yr}} * \frac{\text{ton}}{2,000} * \frac{\text{yr}}{12 \text{ m rolling}} = 0.27 \frac{\text{ton}}{\text{m rolling 12}}$$

Where:

0.7331 lb/hr = SO<sub>2</sub> emission factor for combined operations (i.e., normal, startup, shutdown, and low temperatures) derived from AP-42, Section 3.1, Table 3.1-2a, revised 4/2000.

If required, compliance shall be demonstrated based upon emission tests performed in accordance with Methods 1 through 4 and 6 of 40 CFR Part 60, Appendix A to determine a site-specific emission factor.

c. Emission Limitations:

CO emissions from each emissions unit shall not exceed 7.79 tpy, 0.66 lb/hr during normal operation, and 0.65 ton per month averaged over a 12-month rolling period.

Applicable Compliance Method:

Compliance with the hourly limitation above shall be based upon the emissions testing requirements specified in f)(2). Compliance with the annual and average monthly emission limitations shall be based on the record keeping requirements specified in d)(2).

If required, subsequent testing to demonstrate compliance with the hourly CO emission limitation shall be conducted in accordance with Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

d. Emission Limitations:

VOC emissions from each emissions unit shall not exceed 3.30 tpy, 0.82 lb/hr during normal operation, and 0.28 ton per month averaged over a 12-month rolling period.

Applicable Compliance Method:

Compliance with the hourly limitation above shall be based upon the emissions testing requirements specified in f)(2). Compliance with the annual and average monthly emission limitations shall be based on the record keeping requirements specified in d)(2).

If required, subsequent testing to demonstrate compliance with the hourly VOC emission limitation shall be conducted in accordance with Methods 1-4 and 18, 25, or 25a, as appropriate, of 40 CFR Part 60, Appendix A.

e. Emission Limitation:

NO<sub>x</sub> emissions shall not exceed 2.58 tons per month averaged over a 12-month rolling period.

Applicable Compliance Method:

Compliance with the average monthly emission limitation above shall be based on the record keeping requirements specified in d)(2).

f. Opacity Limitation:

Visible PE from any stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average, except as specified by rule.

Applicable Compliance Method:

If required, compliance with the visible PE limitation above shall be determined in accordance with OAC rule 3745-17-03(B)(1).

g. Emission Limitation:

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

Applicable Compliance Method:

Compliance with the emission limitation above shall be demonstrated based on the particulate emission factor of 0.0066 lb/MMBtu for natural gas-fired turbines (AP-42, Section 3.1, Table 3.1-2a, revised 4/2000).

If required, compliance with the above emission limitation shall be determined in accordance with the methods and procedures as outlined in Methods 1 through 5 of 40 CFR Part 60, Appendix A.

h. Emission Limitations:

NO<sub>x</sub> emissions shall not exceed 25 ppm at 15% O<sub>2</sub> or 150 ng/J of useful output (1.2 lb/MWh) when operating at least 75% of peak load.

NO<sub>x</sub> emissions shall not exceed 96 ppm at 15% O<sub>2</sub> or 590 ng/J of useful output (4.7 lb/MWh) when operating at less than 75% of peak load or when operating at temperatures less than 0°F.

Applicable Compliance Method:

Compliance shall be based upon the results of emissions testing as required in f)(2).

i. Emission Limitation:

SO<sub>2</sub> emissions shall not exceed 110 nanograms per Joule (0.90 pound per mega-Watt hour) or 26 ng SO<sub>2</sub>/J (0.060 lb SO<sub>2</sub>/mmBtu)

Applicable Compliance Method:

Compliance shall be demonstrated by record keeping required in d)(3).

(2) Pursuant to 40 CFR 60.8, 60.4340(a), 60.4375(b) and 60.4400, OAC rules 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 this emissions unit will be operated, but not later than 180 days after initial startup of this unit. Any subsequent performance tests for NO<sub>x</sub> shall be conducted in accordance with the frequencies specified in 40 CFR Part 60, Subpart KKKK and Ohio EPA Engineering Guide #16.

b. The initial emissions testing shall be conducted to demonstrate compliance with the CO, VOC, and NO<sub>x</sub> emissions limitations identified in b)(1)d. and b)(1)i. Subsequent testing shall be conducted to measure NO<sub>x</sub> and to demonstrate compliance with 40 CFR 60, Subpart KKKK.

c. The following test methods shall be employed to demonstrate compliance with the allowable limits:

CO: Methods 1 through 4 and 10 of 40 CFR Part 60, Appendix A.

VOC: Methods 1 through 4 and 18, 25, or 25A of 40 CFR Part 60, Appendix A.

NO<sub>x</sub>: Methodology specified in 40 CFR Part 60, Subpart KKKK and Appendix A.

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 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.

(3) The permittee shall comply with the applicable testing requirements of 40 CFR Part 60, Subpart KKKK, including the following sections:

60.4375(b)	Written report submittal of the performance testing results.
60.4400(a)	Initial and subsequent performance tests for NO <sub>x</sub> .
60.4400(b)	Performance test loading conditions, number of test runs and minimum duration of test runs.
60.4400(b)(4)	Emission limit compliance requirements.
60.4400(b)(6)	Performance test minimum ambient temperature requirement.
60.4415	Initial and subsequent performance tests for SO <sub>2</sub> (These requirements will not apply if the permittee qualifies for the 40 CFR 60.4365 exemption).

g) Miscellaneous Requirements

(1) None.

**3. P003, Gas Releases**

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

Gas releases due to periodic maintenance, compressor blowdowns, routine operations (startup and shutdown and reduced pressure demand events) and other miscellaneous releases.

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.	ORC 3704.03(T)	Fugitive volatile organic compound (VOC) emissions shall not exceed 1.65 tons per month averaged over a 12-month rolling period.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) The permittee shall minimize the frequency and size of gas releases by conducting routine operation and maintenance activities in a manner consistent with safety and good air pollution control practices.

(2) The permittee shall implement the following operational best management work practices where feasible for purposes of minimizing emissions from each gas release:

- a. Annual emergency shutdown (ESD) system tests required by existing DOT regulations shall be conducted to the extent practical as “capped” tests (i.e. with a minimal discharge of natural gas to the atmosphere.);
  - b. Manage station equipment during periods of system maintenance to minimize the quantity of natural gas vented to the extent practical;
  - c. Develop and follow a standby pressurized hold plan for gas compressor shutdowns in order to minimize standby gas releases and maintain safe operation; and
  - d. Schedule multiple maintenance activities concurrently to the extent possible to minimize blowdowns.
- d) **Monitoring and/or Recordkeeping Requirements**
- (1) The permittee shall record the following information for each year:
    - a. the number of gas releases;
    - b. the concentration of total VOC in the gas stream using the most recent representative analysis;
    - c. the volume of gas emitted from all gas releases for each month, in scf;
    - d. the gas density, in lb/scf, using the most recent representative analysis;
    - e. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the volume of gas emitted from all gas releases, in scf; and
    - f. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of VOC emissions, in tons, and the monthly VOC emissions, in tons, averaged over each rolling, 12-month period.
- e) **Reporting Requirements**
- (1) 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 Ohio EPA District Office or Local Air Agency.
  - (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- 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:



**Final Permit-to-Install and Operate**  
Wadsworth Compressor Station  
**Permit Number:** P0119280  
**Facility ID:** 1652100116  
**Effective Date:** 9/9/2016

a. Emission Limitation:

VOC emissions shall not exceed 1.65 tons per month averaged over a 12-month rolling period.

Applicable Compliance Method:

Compliance with the monthly VOC emissions limitation above shall be based on the record keeping requirements specified in d)(1).

g) Miscellaneous Requirements

(1) None.

**4. P009, Pipeline Pigging**

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

Pipeline pigging operations.

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) June 30, 2008	Fugitive volatile organic compound (VOC) emissions shall not exceed 0.033 ton per month averaged over a 12-month, rolling period. See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this source since the potential to emit is less than 10 tons/year. See b)(2)b. below.

(2) Additional Terms and Conditions

a. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the

less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).

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

c) Operational Restrictions

- (1) The permittee shall minimize the emissions of VOC from the pigging activities to the extent practicable.
- (2) Access openings to the receivers shall be kept closed at all times, except when a pig is being placed into or removed from the receiver, or during active maintenance operations.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain the following records on a monthly basis:
  - a. the date and number of each pigging event;
  - b. the concentration of total VOC in the gas stream using the most recent representative analysis;
  - c. the gas density, in lb/scf, using the most recent representative analysis;
  - d. the total volume of gas emitted from each pigging event, in scf;
  - e. beginning after the first 12 calendar months of operation following the issuance of this permit, the total volume of gas emitted per month, from all pigging events, in scf, as a 12-month rolling average; and
  - f. beginning after the first 12 calendar months of operation following the issuance of this permit, the monthly VOC emissions, in tons, averaged over each 12-month rolling period, from all pigging events.

e) Reporting Requirements

- (1) 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 Ohio EPA District Office or Local Air Agency.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

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:

VOC emissions shall not exceed 0.033 ton per month averaged over a 12-month rolling period.

Applicable Compliance Method:

Compliance with the monthly VOC emissions limitation above shall be based on the record keeping requirements specified in d)(1).

g) Miscellaneous Requirements

(1) None.

**5. P801, Equipment Leaks**

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

Fugitive emissions from components.

- 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) June 30, 2008	Fugitive volatile organic compound (VOC) emissions shall not exceed 0.524 ton per month averaged over a 12-month rolling period. See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this source since the potential to emit is less than 10 tons/year. See b)(2)b. below.
c.	40 CFR Part 60, Subpart OOOOa (40 CFR 60.5360a – 60.5432a) [In accordance with 40 CFR 60.5365a this emissions unit is the collection of fugitive emissions	See b)(2)c. below.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	components at a compressor station constructed after September 18, 2015 and subject to the applicable provisions of this subpart.]	
d.	40 CFR Part 60, Subpart A (40 CFR Part 60.1 – 60.19)	General Provisions. See b)(2)c. below.

(2) Additional Terms and Conditions

- a. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- b. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.
- c. The permittee shall comply with the following requirements identified in 40 CFR Part 60, Subpart OOOOa:

60.5365a(j)	Affected facility and modifications to a compressor station.
60.5370a(a)	Subpart OOOOa of Part 60 compliance date is no later than August 2, 2016 or upon startup, whichever is later. In accordance with 40 CFR 60.5397a(f)(2), the permittee must conduct the initial monitoring survey within 60 days of startup or by June 3, 2017, whichever is later.
60.5370a(c)	Permit exempt from 40 CFR Parts 70 and 71.
60.5397a(a) through (j)	Fugitive emissions GHG and VOC standards.
60.5398a(a) through (g)	Alternative means of emission limitations for GHG and VOC.
60.5425a	Applicable General Provisions in Table 3 to Subpart OOOOa of Part 60.

c) Operational Restrictions

- (1) The permittee shall comply with the following requirements identified in 40 CFR Part 60, Subpart OOOOa:



60.5370a(b)	General duty to minimize emissions with good air pollution control practices, and compliance required at all times.
-------------	---

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall comply with the following requirements identified in 40 CFR Part 60, Subpart OOOOa:

60.5410a(j)	Initial compliance demonstration.
60.5415a(h)	Continuous compliance demonstration.
60.5420a(c) and (c)(15)	Recordkeeping requirements.

e) Reporting Requirements

- (1) 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 Ohio EPA District Office or Local Air Agency.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (3) The permittee shall comply with the following requirements identified in 40 CFR Part 60, Subpart OOOOa:

60.5420a(a)(1)	Notifications in 60.7(a)(1), (3) and (4) are not required.
60.5420a(b), (b)(1), (b)(7) and (b)(11)	Annual reporting requirements.

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 0.524 ton per month averaged over a 12-month rolling period.

Applicable Compliance Method:

Compliance with the allowable VOC emission limitation identified above shall be demonstrated by multiplying the number of each component type in gas, light oil



and heavy oil service by the applicable total organic compound (TOC) emission factor from U.S. EPA's "Protocol for Equipment Leak Emission Estimates", Table 2-4, for Oil and Gas Production Operations (EPA-453/R-95-017, November 1995). The resulting TOC hourly mass emission rate for each component type is multiplied by the VOC concentration of the applicable service stream as provided in the permittee's application, then added together for a facility-wide component emission total and multiplied by the maximum annual hours of operation (8,760 hrs/year) and conversion factors of 2.205 lb/1 kg, 1 ton/2,000 lbs and 1 yr/12 months.

\*Table 2-4 does not contain an emission factor for pump seals in heavy oil service. U.S. EPA's "Protocol for Equipment Leak Emission Estimates", Table 2-1, for Synthetic Organic Chemical Manufacturing Industry (SOCMI) (EPA-453/R-95-017, November 1995) shall be applied for pump seals in heavy liquid service.

- g) Miscellaneous Requirements
  - (1) None.

**6. Emissions Unit Group - Separator Vessel Group: P004, P005, P006, P007 and P008**

**EU ID Operations, Property and/or Equipment Description**

P004	Separator Vessel #1. 530-gallon separator vessel.
P005	Separator Vessel #2. 530-gallon separator vessel.
P006	Separator Vessel #3. 400-gallon separator vessel.
P007	Separator Vessel #4. 317-gallon separator vessel.
P008	Separator Vessel #5. 43-gallon separator vessel.

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) June 30, 2008	Volatile organic compound (VOC) emissions shall not exceed the following:  0.01 ton per month averaged over a 12-month rolling period for emissions unit P004;  0.01 ton per month averaged over a 12-month rolling period for emissions unit P005;  0.009 ton per month averaged over a 12-month rolling period for emissions unit P006;  0.05 ton per month averaged over a 12-



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		month rolling period for emissions unit P007; and  0.001 ton per month averaged over a 12-month rolling period for emissions unit P008.  See b)(2)a. below.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from these air contaminant sources since the potential to emit is less than 10 tons/year.  See b)(2)b. below.
c.	40 CFR Part 60, Subpart Kb	See b)(2)c. below.
d.	OAC Rule 3745-21-09(L)(1)	These emissions units are exempt from the requirements of OAC rule 3745-21-09(L) pursuant to OAC rule 3745-21-09(L)(2)(b).

(2) Additional Terms and Conditions

- a. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- b. These requirements apply once U.S. EPA approves OAC paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) as part of the Ohio SIP.
- c. These emission units are exempt from the control requirements of 40 CFR 60, Subpart Kb because they are vessels with a design capacity less than or equal to 75 m<sup>3</sup> used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) None.

e) Reporting Requirements

- (1) 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 Ohio EPA District Office or Local Air Agency.
- (2) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The PER shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

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:

VOC emissions shall not exceed the following:

0.01 ton per month averaged over a 12-month rolling period for emissions unit P004;

0.01 ton per month averaged over a 12-month rolling period for emissions unit P005;

0.009 ton per month averaged over a 12-month rolling period for emissions unit P006;

0.05 ton per month averaged over a 12-month rolling period for emissions unit P007; and

0.001 ton per month averaged over a 12-month rolling period for emissions unit P008.

Applicable Compliance Method:

Compliance with the above emission limitations shall be determined using a current version of the U.S. EPA's TANKS software program for storage tank working/breathing losses; data from the application, the TANKS software program, or other process simulation programs such as, but not limited to, TankESP or other proprietary tanks tools, to calculate flash losses.

g) Miscellaneous Requirements

- (1) None.