Ohio Environmental Protection Agency

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

9/14/2016

Certified Mail

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR TO AVOID MAJOR NSR
No	CEMS
Yes	MACT/GACT
Yes	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED
No	MAJOR GHG
No	SYNTHETIC MINOR TO AVOID MAJOR GHG

Weston Threeton
Rover Pipeline - Mainline CS2
1300 Main Street
Houston, TX 77002

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL
Facility ID: 0285032017
Permit Number: P0118481
Permit Type: Initial Installation
County: Wayne

Dear Permit Holder:

Enclosed please find a final Ohio Environmental Protection Agency (EPA)Air Pollution Permit-to-Install (PTI) which will allow you to install or modify the described emissions unit(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, we urge you to read it carefully. 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 PTI 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

How to give us feedback on your permitting experience

Please complete a survey at 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 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 Ohio EPA DAPC, Northeast District Office at (330)963-1200 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: U.S. EPA
Ohio EPA-NEDO; Canada

Response to Comments

Facility ID:	0285032017
Facility Name:	Rover Pipeline - Mainline CS2
Facility Description:	
Facility Address:	0.5 mile north of W Lincoln Way on S Elyria Road Wooster, OH 44691 Wayne County
Permit:	P0118481, Permit-To-Install - Initial Installation
A public notice for the draft permit issuance was published in the Ohio EPA Weekly Review and appeared in the The Daily Record on 05/14/2016. The comment period ended on 06/20/2016.	
Hearing date (if held)	06/16/2016
Hearing Public Notice Date (if different from draft public notice)	

Agency Contacts for this Project:
Division of Air Pollution Control: Jana Gannon, 330-963-1261, Jana.Gannon@epa.ohio.gov
Public Interest Center: Mike Settles, 614-644-2160, Michael.Settles@epa.ohio.gov

Comments:
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.

Comment 1: **Citizens expressed concerns about the health and environmental effects of the compressor station on the children. There were specific concerns about toxins and methane leaks, and the monitoring frequency of the station by the Ohio EPA.**

Response 1: Ohio EPA has a legal obligation to evaluate proposed emissions sources and determine whether or not they are able to comply with all applicable state and federal air pollution control regulations. The Mainline-CS2 Compressor Station air permit documents what the proposed facility must do in order to comply with these regulations.
Ohio EPA is committed to protecting human health and the environment. The Agency's permits include limits on emissions to ensure they are not emitted at levels that could adversely impact the community. Ohio EPA evaluates pollution exposure scenarios based on constant exposure 24-hours a day, 365 days a year, for a lifetime. The Agency's air toxics assessment takes into account our most susceptible populations including the young, old, and those with respiratory weakness. The permit requires Rover to comply with all state and federal rules and regulations, which are developed for the purpose of attaining and maintaining National Ambient Air Quality Standards for all criteria pollutants. Those standards

are designed to be protective of human health and the environment regardless of the compressor station's proximity to residents.

The compressor engines are the largest source of emissions. They are required to be tested for emissions every 8,760 hours of engine operation or three years, whichever comes first. They also have continuous monitors for the inlet temperature and pressure drop on the catalyst to verify proper operation.
Any methane leaks from the compressor station components must be monitored under the facility's quarterly fugitive emissions monitoring program and the weekly audio, visual and olfactory checks. The quarterly checks are performed using either an analyzer or optical gas imaging equipment and are required to be performed in accordance with the requirements in the Leak Detection and Repair Program as specified in the permit.

Ohio EPA will monitor ongoing compliance with the air permit through on-site compliance inspections, test observations and complaint investigations, in addition to the company's quarterly and annual reporting requirements.

Comment 2: **Two statements were received in support of the compressor station**

Response 2: No response necessary.

<u>The remaining comments are from U.S. EPA (page numbers and emissions are specific to Mainline CS-1 permit, but comments apply to all Rover permits in general):</u>

Comment 3: **Permitconditions3.g(1)onpage26of36and4.g(1)onpage33of36,aswellasitem4 ofthePermitStrategyWrite-Up,statesthatsomeofthesource'semissionsunitsmaybesubjectto40CFRPart60,Subpart0000oncethatrule'sproposedamendmentsgetfinalized.TheproposedamendmentswerefinalizedonMay12,2016,so pleaseindicatewhetheranyoftheemissionsunitsaresubjecttothisNewSourcePerformance Standard,andifso,pleaseaddtheapplicablerequirementstothepermit.**

Response 3: This term has been removed. 40 CFR Part 60, Subpart OOOOa is not applicable to this compressor station because the company has submitted information that demonstrates they commenced construction prior to September 18, 2015 (the date specified in 40 CFR 60.5365a).

Comment 4: **Permitcondition 1.c(1)onpage 14of36containsthefollowingvaguelanguage: *"byconductingroutineoperationandmaintenanceactivitiesinamannerconsistentwith safetyandgoodairpollution controlpractices."* Toimprovetheenforceabilityofthepermitlanguage,pleasespecify thesafetyandgoodairpollutioncontrolpracticesforthissourceandlistthemintheperpermitaspermitrequirements.**

Response 4: This language was intended to encourage the company to minimize blowdown and starter vent frequency to the extent practical. Due to the dryness of the gas and the low volatile organic compounds (VOC) content of the material released, no further permit requirements are necessary.

Comment 5: **Forthepiggingoperationonpage 17of36,pleaseconsidertheinformationintheattachedEPADiscussionDraft**

"QuantifyingthePotentialImpactsofNaturalGasCondensateHolduponUncontrolledVolatileOrganicCompoundEmissionsfromPigReceiversDuringDepressurization inWetGasGatheringOperations"
(AttachmentA)foruseinthecompliancemethodlistedinpermitcondition2.f(1)(a)onpage19of36ofthepermit.
Condensedliquidsmaybepresentinthepigreceiverandvolatilizeaspressureinthepigreceiverisreducedfrompipelinepressuretoatmosphericpressure duringtheprocessofpigretrieval.Thesevolatilizedliquidsare ultimatelyemittedtotheatmosphere,andcancompriseasignificantportionoftotalVOCsemitteddduringpiggingoperations,especiallyfrompipelinesthattransportwetgas.

Response 5: The Rover system will receive and transport dry, pipeline quality gas throughout its transmission lines. The gas received will be free of water and hydrocarbons in the liquid state, and shall be less than 1,100 Btu per cubic foot. Due to the dryness of the gas, no liquid condensate is expected in the pig receivers. In reviewing the EPA Discussion Draft "Quantifying the Potential Impacts of Natural Gas Condensate Holdup on Uncontrolled Volatile Organic Compound Emissions from Pig Receivers During Depressurization in Wet Gas Gathering Operations", it is apparent that the discussion is focused on wet, production and midstream gathering systems. The VOC weight percentages in the two examples within the study ranged from 22-25 percent. In contrast, Rover's anticipated gas stream represented in its applications is 2 percent VOC by weight.

Comment 6:
Permitcondition3.c.1(i)onpage21of36requiresaleakdetectionandrepair(LDAR)programfortheprocessequipmentleaks,andthatitshallfollowthemonitoringandrecordkeepingrequirementsdescribedin permitcondition 5.d,butpermitcondition5.d(onpage35of36)pertainstotheamountofthroughputandemissionsfromeachslop/wastewatertank.Pleaseexplainhowthatrelatesto theLDARprogramforthe processequipmentleaks.

Response 6: This language has been revised to the following:

The program shall follow the monitoring and record keeping requirements described in paragraphs d)(3) and d)(4) of this permit.

Comment 7: **It'sunclearwhetherthispermit isamajor,minororsyntheticminorsourcepermitbecausethereiscontradictoryinformationonthepermits'coverpageandthePermit Strategy Write-Up.ThetableonthepermitcoverpageindicatesthatthepermitisneitheraPrevention ofSignificantDeteriorationmajorsourcenoranettingpermit, butitems1,4,and7inthePermitStrategyWrite-Upcontradictsthatbyindicating:bothasyntheticminordeterminationandanettingdeterminationhasbeenmadeforthissource(item1);engineemissionsexceed majorsourcethresholds(item4);andthatthenitrogenoxide(NOx)emissionsare103.69tonsperyear(tpy)andtheformaldehydeemissionsare 13.14tpy (item7)indicatingthat thesourceismajorforNOxandhazardousairpollutants(formaldehyde).**

Pleaseclarifythestatusofthesource/permit.Ifitismajor,thepermitwouldneedtogo throughmajorNewSourceReview.Ifthesourceissyntheticminor,restrictionswou ldneedtobeaddedtothepermit,andifitisa nettingpermit,thedraftpermitwouldneedtocontainthenettinganalysis.

Response 7: The Mainline-CS2 station is major for Title V purposes, not New Source Review. This is stated correctly on the permit's cover page. The Permit Strategy Write-Up will be revised to make it clear that the source exceeds only the Title V thresholds. The check boxes on the Permit Strategy Write-Up document are not checked for synthetic minor or netting, which indicates that they don't apply

FINAL

Division of Air Pollution Control
Permit-to-Install
for
Rover Pipeline - Mainline CS2

Facility ID:	0285032017
Permit Number:	P0118481
Permit Type:	Initial Installation
Issued:	9/14/2016
Effective:	9/14/2016

Ohio Environmental Protection Agency

Division of Air Pollution Control
Permit-to-Install
for
Rover Pipeline - Mainline CS2

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Authorization

Facility ID:	0285032017
Facility Description:	
Application Number(s):	A0052756
Permit Number:	P0118481
Permit Description:	Initial installation permit for an oil/gas compressor station consisting of 3-8,180 horsepower (hp) and 3-4,735 hp natural gas compressors; 2-1,340 hp emergency generators; slop, waste water, oil and coolant storage tanks; slop and waste water truck loading; unpaved roadways and the associated fugitive emissions from engine blowdown/start-up events and equipment leaks
Permit Type:	Initial Installation
Permit Fee:	$2,200.00
Issue Date:	9/14/2016
Effective Date:	9/14/2016

This document constitutes issuance to:

Rover Pipeline - Mainline CS2
.5mi N of W Lincoln Way on S Elyria Rd
Wooster, OH 44691

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

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

Ohio EPA DAPC, Northeast District Office
2110 East Aurora Road
Twinsburg, OH 44087
(330)963-1200

The above named entity is hereby granted a Permit-to-Install for the 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 emissions unit(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Craig W. Butler
Director

Authorization (continued)

Permit Number: P0118481
Permit Description: Initial installation permit for an oil/gas compressor station consisting of 3-8,180 horsepower (hp) and 3-4,735 hp natural gas compressors; 2-1,340 hp emergency generators; slop, waste water, oil and coolant storage tanks; slop and waste water truck loading; unpaved roadways and the associated fugitive emissions from engine blowdown/start-up events and equipment leaks

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

Emissions Unit ID:	**P007**
Company Equipment ID:	BDSV
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P008**
Company Equipment ID:	Pigging
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P801**
Company Equipment ID:	Fugitives
Superseded Permit Number:	
General Permit Category and Type:	Not Applicable

Group Name: Group 1 compressors

Emissions Unit ID:	**P001**
Company Equipment ID:	COMP1
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P002**
Company Equipment ID:	COMP2
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P003**
Company Equipment ID:	COMP3
Superseded Permit Number:	
General Permit Category andType:	Not Applicable

Group Name: Group 2 compressors

Emissions Unit ID:	**P004**
Company Equipment ID:	COMP4
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**P005**
Company Equipment ID:	COMP5
Superseded Permit Number:	
General Permit Category andType:	Not Applicable

Emissions Unit ID:	**P006**
Company Equipment ID:	COMP6
Superseded Permit Number:	
General Permit Category andType:	Not Applicable

Group Name: Truck Loading

Emissions Unit ID:	**J001**
Company Equipment ID:	LOADING1
Superseded Permit Number:	
General Permit Category andType:	Not Applicable
Emissions Unit ID:	**J002**
Company Equipment ID:	LOADING2
Superseded Permit Number:	
General Permit Category andType:	Not Applicable

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

a) All Standard Terms and Conditions are federally enforceable, with the exception of those listed below which are enforceable under State law only:

(1) Standard Term and Condition A.2.a), Severability Clause

(2) Standard Term and Condition A.3.c) through A. 3.e)General Requirements

(3) Standard Term and Condition A.6.c) and A. 6.d), Compliance Requirements

(4) Standard Term and Condition A.9., Reporting Requirements

(5) Standard Term and Condition A.10., Applicability

(6) Standard Term and Condition A.11.b) through A.11.e), Construction of New Source(s) and Authorization to Install

(7) Standard Term and Condition A.14., Public Disclosure

(8) Standard Term and Condition A.15., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(9) Standard Term and Condition A.16., Fees

(10) Standard Term and Condition A.17., Permit Transfers

2. Severability Clause

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

b) All terms and conditions designated in parts B and C of this permit are federally enforceable as a practical matter, if they are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. Terms and conditions in parts B and C of this permit shall not be federally enforceable and shall be enforceable under State law only, only if specifically identified in this permit as such.

3. General Requirements

a) Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification.

b) It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.

c) This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

d) This permit does not convey any property rights of any sort, or any exclusive privilege.

e) The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

4. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

(1) The date, place (as defined in the permit), and time of sampling or measurements.

(2) The date(s) analyses were performed.

(3) The company or entity that performed the analyses.

(4) The analytical techniques or methods used.

(5) The results of such analyses.

(6) The operating conditions existing at the time of sampling or measurement.

b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

c) Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:

(1) Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the Ohio EPA DAPC, Northeast District Office.

(2) Quarterly written reports of (i) any deviations from federally enforceable emissionlimitations, operationalrestrictions, andcontroldeviceoperatingparameterlimitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to the Ohio EPA DAPC, Northeast District Office. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See A.15. below if no deviations occurred during the quarter.

(3) Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, andreportingrequirements contained in this permit shall be submitted to the Ohio EPA DAPC, Northeast District Office every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.

(4) This permit is for an emissions unit located at a Title V facility. Each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.

d) The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

5. Scheduled Maintenance/Malfunction Reporting

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

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

6. Compliance Requirements

a) All applications, notifications or reports required by terms and conditions in this permit to be submitted or "reported in writing" are to be submitted to Ohio EPA through the Ohio EPA's eBusiness Center: Air Services web service ("Air Services"). Ohio EPA will accept hard copy submittals on an as-needed basis if the permittee cannot submit the required documents through the Ohio EPA eBusiness Center. In the event of an alternative hard copy submission in lieu of the eBusiness Center, the post-marked date or the date the document is delivered in person will be recognized as the date submitted. Electronic submission of applications, notifications or reports required to be submitted to Ohio EPA fulfills the requirement to submit the required information to the Director, the appropriate Ohio EPA District Office or contracted

local air agency, and/or any other individual or organization specifically identified as an additional recipient identified in this permit unless otherwise specified. Consistent with OAC rule 3745-15-03, the electronic signature date shall constitute the date that the required application, notification or report is considered to be "submitted". Any document requiring signature may be represented by entry of the personal identification number (PIN) by responsible official as part of the electronic submission process or by the scanned attestation document signed by the Authorized Representative that is attached to the electronically submitted written report.

Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a Responsible Official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.

b) Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:

(1) At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.

(3) Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit.

(4) As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.

c) The permittee shall submit progress reports to the Ohio EPA DAPC, Northeast District Office concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:

(1) Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.

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

7. Best Available Technology

As specified in OAC Rule 3745-31-05, new sources that must employ Best Available Technology (BAT) shall comply with the Applicable Emission Limitations/Control Measures identified as BAT for each subject emissions unit.

8. Air Pollution Nuisance

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

9. Reporting Requirements

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or recordkeeping of state-only enforceable information shall be submitted to the Ohio EPA DAPC, Northeast District Office.

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

10. Applicability

This Permit-to-Install is applicable only to the emissions unit(s) identified in the Permit-to-Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s)not exempt from the requirement to obtain a Permit-to-Install.

11. Construction of New Sources(s) and Authorization to Install

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

b) If applicable, authorization to install any new emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit if the owner or operator has not undertaken a continuing program of installation or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation. This deadline may be extended by up to 12 months if application is made to the

Director within a reasonable time before the termination date and the permittee shows good cause for any such extension.

c) The permittee may notify Ohio EPA of any emissions unit that is permanently shut down (i.e., 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) by submitting a certification from the authorized official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the authorized official that the emissions unit was permanently shut down. At a minimum, notification of permanent shut down shall be made or confirmed by marking the affected emissions unit(s) as "permanently shut down" in "Air Services" along with the date the emissions unit(s) was permanently removed and/or disabled. Submitting the facility profile update electronically will constitute notifying the Director of the permanent shutdown of the affected emissions unit(s).

d) The provisions of this permit shall cease to be enforceable for each affected emissions unit after the date on which an emissions unit is permanently shut down (i.e., 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). All records relating to any permanently shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law. All reports required by this permit must be submitted for any period an affected emissions unit operated prior to permanent shut down. At a minimum, the permit requirements must be evaluated as part of the reporting requirements identified in this permit covering the last period the emissions unit operated.

Unless otherwise exempted,no emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit pursuant to OAC Chapter 3745-31 and OAC Chapter 3745-77 if the restarted operation is subject to one or more applicable requirements.

e) The permittee shall comply with any residual requirements related to this permit, such as the requirement to submit a deviation report, air fee emission report, or other any reporting required by this permit for the period the operating provisions of this permit were enforceable, or as required by regulation or law. All reports shall be submitted in a form and manner prescribed by the Director. All records relating to this permit must be maintained in accordance with law.

12. Permit-To-Operate Application

The permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77. The permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if operation of the proposed new or modified source(s) as authorized by this permit would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d)must be obtained beforeoperating the source in a manner that would violate the existing Title V permit requirements.

13. Construction Compliance Certification

The applicant shall identify the following dates in the "Air Services"facility profile for each new emissions unit identified in this permit.

a) Completion of initial installation date shall be enteredupon completion of construction and prior to start-up.

b) Commence operation after installation or latest modification date shall be entered within 90 days after commencing operation of the applicable emissions unit.

14. Public Disclosure

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

15. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

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

16. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable permit-to-install fees within 30 days after the issuance of any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

17. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The new owner must update and submit the ownership information via the "Owner/Contact Change" functionality in "Air Services" once the transfer is legally completed.The change must be submitted through "Air Services" within thirty days of the ownership transfer date.

18. Risk Management Plans

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

19. Title IV Provisions

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

B. Facility-Wide Terms and Conditions

1. All the following facility-wide terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

   a) None.

2. The Ohio EPA has determined that this facility is subject to the requirements of 40 CFR Part 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines. Although Ohio EPA has determined that this Generally Available Control Technology NESHAP (GACT) applies, at this time Ohio EPA does not have the authority to enforce this standard. Instead, U.S. EPA has the authority to enforce this standard. Please be advised, that all requirements associated with this rule are in effect and shall be enforced by U.S. EPA. For more information on the area source rules, please refer to the following U.S. EPA website: http://www.epa.gov/ttn/atw/area/arearules.html.

3. The following emissions units contained in this permit are subject to 40 CFR Part 60, Subpart JJJJ - Standards of Performance for Stationary Spark Ignition Internal Combustion Engines: P001 – P006. The complete NSPS requirements may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoacess.gov or by contacting the Ohio EPA Northeast District Office.

4. Air contaminant sources that qualify as de minimis under OAC rule 3745-15-05, or are exempt under OAC rule 3745-31-03(A)(1) or (4) 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.

C. Emissions Unit Terms and Conditions

1. P007, BDSV

Operations, Property and/or Equipment Description:

Compressor blowdowns and engine start-up events

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) 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 from all blowdown/starter vents shall not exceed 0.06 ton/month averaged over a 12-month rolling period. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	See b)(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) rule 3745-31-05(A)(3)(a)(ii) (the less than 10 tpy BAT exemption) into the Ohio State Implementation Plan (SIP).

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

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit is less than 10 tons/year.

c) Operational Restrictions

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

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the following information:

a. number and the type of each blowdown/starter vent;

b. the total VOC percentage in the gas stream using the most recent representative analysis;

c. the estimated volume of gas emitted from all blowdowns/starter vents for each month, in scf; and

d. the rolling, 12-month summation of the VOC emissions, in ton/month, from all blowdowns/starter vents as calculated in f)(1)a.

e) Reporting Requirements

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

(2) The permittee shall submit annual reports by January 31 of each year that identify the estimated annual volume of natural gas released from all blowdown/starter vents.

These reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(3) If, after the first two full years of operation, the annual reports demonstrate that the volume of gas released from blowdown/starter vent activities has not led to an exceedance of the annual VOC emission limitation, the permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, discontinue this reporting requirement.

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. <u>Emission Limitation</u>:
VOC emissions from all blowdown/starter vents shall not exceed 0.06 ton/month averaged over a 12-month rolling period.

<u>Applicable Compliance Method</u>:
This emission limitation is based on the predicted maximum annual blowdown/starter vent occurrences. Compliance with the VOC emission limitation shall be demonstrated by the summation of monthly emissions from blowdown and starter vents and based upon the following calculations using the inputs provided in the application and the record keeping requirements in d)(1):

VOC (ton/month) = $B_{total} + SV_{total}$

where:
B_{total} = total blowdown emissions, in tons; and
SV_{total} = total starter vent emissions, in tons.

Emissions shall be calculated using the following equation:
(VGSE)/CF = total emissions from either blowdown or starter vents

where:
V = maximum VOC percentage in gas stream, wt % (based on the most recent gas stream representative analysis);
G= gas stream density, lb/scf, calculated by multiplying the specific gravity of the gas stream, by the MW (lb/mole) by the conversion (1 lb-mol/ 379.4 scf);
S = estimated volume of gas in the blowdown or starter vent, scf;
E = total events per month; and
CF = conversion factor (2,000 lbs/ton).

g) Miscellaneous Requirements

(1) None.

2. P008, Pigging Activities

Operations, Property and/or Equipment Description:

Pigging Emissions

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) 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 0.02 ton/month averaged over a 12-month rolling period. See b)(2)a and b)(2)c.
b.	OAC rule 3745-31-05(A)(3)(ii) June 30, 2008	See b)(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) rule 3745-31-05(A)(3)(a)(ii) (the less than 10 tpy BAT exemption) into the Ohio State Implementation Plan (SIP).

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

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC from this air contaminant source since the uncontrolled potential to emit for VOC is less than 10 tpy.

c. The permittee shall maintain a written operating manual for pig launching and recovery. The manual shall include, at a minimum, procedures for minimizing the duration and frequency of the pigging activities, and a training program for the operators performing the activities.

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 monthly records of the following information:

a. number of pigging events;

b. the total VOC percentage in the gas stream using the most recent representative analysis;

c. the estimated volume of gas emitted from all pigging for each month, in scf; and

d. the rolling, 12-month summation of the VOC emissions, in ton/month, from all pigging as calculated in f)(1)a.

e) Reporting Requirements

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

(2) The permittee shall submit annual reports by January 31 of each year that identify the annual volume of natural gas released from all pigging activities.

These reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(3) If, after the first two full years of operation, the annual reports demonstrate that the volume of gas released from pigging activities has not led to an exceedance of the annual VOC emission limitation, the permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, discontinue this reporting requirement.

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. <u>Emission Limitation</u>:

Fugitive VOC emissions shall not exceed 0.02 ton/month averaged over a 12-month rolling period.

Applicable Compliance Method:

This emission limitation is based on the predicted maximum annual pigging occurrences. Compliance with the VOC emission limitation shall be demonstrated by the summation of monthly emissions from pigging and based upon the following calculations using the inputs provided in the application and the record keeping requirements in d)(1):

VOC (ton/month) = (VGSE)/CF

where:

V = Maximum VOC percentage in the gas stream, wt % (based on the most recent gas stream representative analysis);
G= gas stream density, lb/scf, calculated by multiplying the specific gravity of the gas stream, by the MW (lb/mole) by the conversion (1 lb-mol/ 379.4 scf);
S = estimated volume of gas in the pigging event, scf;
E = total events per month; and
CF = conversion factor (2,000 lbs/ton).

g) Miscellaneous Requirements

(1) None.

3. P801, Equipment Leaks: Fugitive emissions from process equipment

Operations, Property and/or Equipment Description:

Fugitive emissions from: valves, seals, flanges, connectors and open-ended lines

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only.

(1) 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 0.22 ton/month averaged over a 12-month rolling period. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	See b)(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) rule 3745-31-05(A)(3)(a)(ii) (the less than 10 tpy BAT exemption) into the Ohio State Implementation Plan (SIP).

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

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit is less than 10 tons/year.

c) Operational Restrictions

(1) Ancillary Equipment Leak Detection and Repair Program

The permittee shall develop and implement a leak detection and repair program designed to monitor and repair leaks from ancillary equipment covered by this permit, including each pump, compressorseal, pressure relief device, connector, valve, flange, vent, cover, any bypass in the closed vent system, and each storage vessel in VOC

service. As noted below in d)(2)b., a component is considered not in VOC service if it can be determined that the VOC content of the process fluid, which is contained in or contacts the piece of equipment, can be reasonably expected never to exceed 10% by weight. This program shall meet the following requirements:

a. Leaks shall be detected by the use of either a "Forward Looking Infra-Red" (FLIR) camera or an analyzer meeting U.S. EPA Method 21 of 40 CFR Part 60, Appendix A.

b. An initial monitoring shall be completed within 90 days of startup and quarterly thereafter for a period of four consecutive quarters (1 year).

c. If following the initial four consecutive quarters, less than or equal to 2.0% of the ancillary equipment are determined to be leaking during the most recent quarterly monitoring event, then the frequency of monitoring can be reduced to semi-annual.

d. If following two consecutive semi-annual periods, less than 2.0% of the ancillary equipment are determined to be leaking during the most recent semi-annual monitoring event, then the frequency of the monitoring can be reduced to annual.

e. If more than or equal to 2.0% of the ancillary equipment are determined to be leaking during any one of the semi-annual or annual monitoring events, then the frequency of monitoring shall be returned to quarterly.

f. The program shall require the first attempt at repair within five (5) calendar days of determining a leak.

g. The program shall require that the leaking component is repaired within 30 calendar days after the leak is detected.

h. The program shall allow for the delayed repair of a leaking component following the language found in 40 CFR 60.5416(c)(5).

i. The program shall follow the Monitoring and Record Keeping requirements described in paragraphs d)(3) and d)(4) of this permit.

(2) In the event that a leak or defect is detected in the cover, closed vent system, process equipment, or control device, the permittee shall make a first attempt at repair no later than 5 calendar days after the leak is detected. Repair shall be completed no later than 30 calendar days after the leak is detected as allowed in 40 CFR 60.5416(c)(4). Any delay of repair of a leak or defect shall meet the requirements of 40 CFR 60.5416(c)(5).

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly audio, visual and olfactory (AVO) checks to detect possible leaks from pressure relief valves and equipment. Results of the AVO checks shall be maintained in an operations log and include the following:

a. name of inspector;

b. date and time of inspection;

c. company identification of leaking equipment and/or pressure relief valve;

d. estimated/calculated duration of release and/or leak and total emissions; and

e. corrective actions taken to minimize/eliminate release/leak.

(2) Within 180 days of startup, the permittee shall develop a list of components not in VOC service and the information or data used to demonstrate that the equipment is not in VOC service. This can be in the form of:

a. A written or electronic component log or identification on the facility piping and instrumentation drawings (PID).

b. A component is considered not in VOC service if it can be determined that the VOC content of the process fluid, which is contained in or contacts the piece of equipment, can be reasonably expected never to exceed 10% by weight.

(3) Ancillary Equipment Leak Detection and Repair Program Monitoring and Record Keeping for Programs Utilizing FLIR Camera's

a. Leaks shall be determined by visually observing each ancillary component through the FLIR camera to determine if leaks are visible.

b. The following information shall be recorded during each leak inspection:

i. the date the inspection was conducted;

ii. the name of the employee conducting the leak check;

iii. the identification of any component that was determined to be leaking;

iv. the date the first attempt to repair the component was made;

v. the reason the repair was delayed following the language found in 40 CFR 60.5416(c)(5);

vi. the date the component was repaired and determined to no longer be leaking;

vii. the total number of components that are leaking; and

viii. the percentage of components leaking, determined as the sum of the number of components for which a leak was detected, divided by the total number of ancillary components capable of developing a leak, and multiplied by 100.

c. The permittee shall maintain records that demonstrate the FLIR camera is operated and maintained in accordance with the manufacturer's operation and maintenance instructions.

d. The records from each inspection and the dates each leak is detected and repaired shall be maintained for at least 5 years and shall be made available to the Director or his representative upon verbal or written request.

(4) Ancillary Equipment Leak Detection and Repair Program Monitoring and Record Keeping for Programs Utilizing a Method 21 Analyzer

a. Leaks shall be measured by utilizing U.S. EPA Method 21 (40 CFR Part 60, Appendix A). All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm or 10,000 ppm (as applicable) for determining compliance.

b. A component is considered to be leaking if the instrument reading is equal to or greater than:

pressure relief device in gas/vapor service	10,000 ppm
pressure relief device in light liquid service	10,000 ppm
pumps in light liquid service	10,000 ppm
compressor seals	500 ppm
sampling connection system*	*
open ended valves or lines**	**
valves in gas/vapor and light liquid service	10,000 ppm
closed vent system	500 ppm
connectors	10,000 ppm
all other ancillary and associated equipment in VOC service	10,000 ppm
* must be equipped with a closed-purge, closed-loop, or closed-vent system	
** must be equipped with a cap, blind flange, plug, or a second valve	

c. The following information shall be recorded during each leak inspection:

i. the date the inspection was conducted;

ii. the name of the employee conducting the leak check;

iii. the identification of any component that was determined to be leaking (company ID and component type (flange, pump, etc.);

iv. the date the first attempt to repair the component was made;

v. the reason the repair was delayed following the language found in 40 CFR 60.5416(c)(5);

vi. the date the component was repaired and determined to no longer be leaking;

vii. the total number of components that are leaking; and

viii. the percentage of components leaking, determined as the sum of the number of components for which a leak was detected, divided by the total number of ancillary components capable of developing a leak, and multiplied by 100.

d. The permittee shall maintain records that demonstrate the Method 21 analyzer is operated and maintained in accordance with the manufacturer's operation and maintenance instructions.

e. In order to calibrate the analyzer, the following calibration gases shall be used:

i. zero air, which consists of less than 10 ppm of hydrocarbon in air; and

ii. a mixture of air and methane or n-hexane at a concentration of approximately, but less than, 10,000 ppm of methane or n-hexane.

(5) The records from each inspection and the dates each leak is detected and repaired shall be maintained for at least 5 years and shall be made available to the Director or his representative upon verbal or written request

(6) The permittee shall meet all applicable requirements of 40 CFR Part 98, Mandatory Greenhouse Gas Reporting, for onshore natural gas transmission, including annual monitoring of fugitive components using leak detection equipment such as optical gas instrument cameras (FLIR) or other approved instruments. Leaks discovered during these surveys will be repaired in a prudent and timely manner.

e) Reporting Requirements

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

(2) For each inspection that occurred during the year, the permittee shall submit the following information annually from data collected by the ancillary equipment leak detection and repair program:

a. the date of the inspection;

b. the number of components determined to be leaking;

c. the company ID and component type (flange, pump, etc.) of each leaking component;

d. the total number of components at the site;

e. the percent of components determined to be leaking;

f. a list of all components that have not been repaired due to a delay of repair and the reason for the delay; and

g. a notification indicating if the permittee has changed future inspection frequencies based on the percent of components leaking.

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:
Fugitive VOC emissions shall not exceed 0.22 ton/month averaged over a 12-month rolling period.

Applicable Compliance Method:
Emissions shall be calculated using the emission factors from the Technical Guidance Document for Equipment Leak Fugitives (October, 2000) for components in gas, water and heavy liquid service.

Component Type (# of components) x (emission factor) x % VOC* = lb/hr

Gas/Vapor Streams
Connectors (3,689) x 0.000441 lb/hr x % VOC = lb/hr
Valves (919) x 0.00992 lb/hr x %VOC = lb/hr
Flanges (1271) x 0.00086 lb/hr x % VOC = lb/hr
Compressor seals (30) x 0.0194 lb/hr x % VOC = lb/hr
Relief valves (67) x 0.0194 lb/hr x % VOC = lb/hr
*where: % VOC = 2.00 per company's analysis

Water/Light Oil Streams
Connectors (961) x 0.000243 lb/hr x % VOC = lb/hr
Valves (156) x 0.000216 lb/hr x % VOC = lb/hr
Flanges (39) x 0.000006 lb/hr x % VOC = lb/hr
Other components (4) x 0.00055 lb/hr x % VOC = lb/hr
*where: % VOC = 100 per company's analysis

Heavy Liquid
Connectors (1,055) x 0.0000165 lb/hr x % VOC = lb/hr
Valves (278) x 0.0000185 lb/hr x % VOC = lb/hr
Pump seals (30) x 0.00113 lb/hr x % VOC = lb/hr
Flanges (88) x 0.00000086 lb/hr x % VOC = lb/hr
*where: % VOC = 100 per company's analysis

The monthly emissions from ancillary and associated equipment shall be documented from the summation of the calculations listed above, multiplied by (8,760 hours/year), the conversion factor (1 ton/2,000 pounds) and divided by (12 months/year).

g) Miscellaneous Requirements

(1) None.

4. Emissions Unit Group 1 - 8,180 horsepower (hp) Stationary Spark Ignition (SI) Internal Combustion Engines (ICE): P001, P002, P003

EU ID	Operations, Property and/or Equipment Description
P001	8,180 hp CAT G16CM34 natural gas compressor controlled by an oxidation catalyst
P002	8,180 hp CAT G16CM34 natural gas compressor controlled by an oxidation catalyst
P003	8,180 hp CAT G16CM34 natural gas compressor controlled by an oxidation catalyst

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) 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)	Emissions of formaldehyde (CH_2O) shall not exceed 14 ppmvd at 15% O_2 or emissions of carbon monoxide (CO) shall be reduced by 93% or more. The permittee shall control the emissions of CH_2O and CO from the stationary RICE exhaust using an oxidation catalyst control device. See c)(1). The requirements specified by this rule are equivalent to the requirements specified in 40 CFR Part 63, Subpart ZZZZ. Emissions from the stack serving each emissions unit shall not exceed: 0.5 g/hp-hr of nitrogen oxides (NO_x) 0.22 g/hp-hr of CO 0.15 g/hp-hr of volatile organic compound (VOC) See b)(2)a.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-31-05(A)(3) June 30, 2008	Particulate emissions (PE) from each engine shall not exceed 0.20 ton/month averaged over a 12-month rolling period. See b)(2)b and b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30,2008	See b)(2)d.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from the exhaust stack serving each emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
e.	OAC rule 3745-17-11(B)	PE shall not exceed 0.062 lb/mmBtu of actual heat input.
f.	OAC rule 3745-18-06(G)	These emissions units are exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(A). See c)(7).
g.	OAC rule 3745-110-03(F)(2)	The emission limitation specified by this rule is less stringent than the emission limitation required per ORC 3704.03(T).
h.	40 CFR Part 60, Subpart JJJJ 40 CFR 60.4233(e)	The NO_x, CO and VOC emission limitations specified by this rule are less stringent than the emission limitations established by ORC 3704.03(T). In accordance with 40 CFR 60.4230, these emissions units are subject to the New Source Performance Standards (NSPS) for Stationary SI ICE. See b)(2)e and c)(8).

(2) Additional Terms and Conditions

a. The engines shall be operated with a catalyst in place at all times.

b. The emission limitations for PE are based on the uncontrolled potential to emit (PTE) for this emissions unit, therefore, no monitoring or record keeping is required to document compliance with the emission limitations.

c. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)(a)(ii) (the less than 10 tpy BAT exemption) into the Ohio State Implementation Plan (SIP).

d. These requirements apply once U.S. EPA approves OAC rule 3745-31-05(A)(3)(a)(ii) (the less than 10 tpy BAT exemption) as part of the Ohio SIP:

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE from this air contaminant source since the controlled potential to emit is less than 10 tons/year.

e. The permittee shall comply with the applicable requirements of 40 CFR Part 60, Subpart JJJJ, including the following sections:

60.4236(b)	Installation deadlines
60.4243(b)(2)(ii)	Compliance demonstration, maintenance and testing frequency
60.4246, Table 3	Applicability of General Provisions

f. The permittee must operate and maintain each emissions unit, including the air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

c) Operational Restrictions

(1) The permittee shall install a continuous parameter monitoring system (CPMS) to continuously monitor the catalyst inlet temperature

(2) The CPMS must collect data at least once every 15 minutes.

(3) The temperature sensor, for a CPMS measuring temperature range, must have a minimum tolerance of 5.0° F or 1.0% of the measurement range, whichever is larger.

(4) Except during periods of startup, the permittee shall meet the following operational limitations:

a. the pressure drop across the oxidation catalyst shall not change by more than 2” of water at 100% load +/-10% from the pressure drop across the catalyst measured during the initial performance test; and

b. maintain the engine exhaust temperature so that the catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1350°F.

(5) If the catalyst is changed, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the operating parameter values are reestablished, the permittee must also conduct a performance test using one of the methods listed in 40 CFR Part 63, Subpart ZZZZ, Table 4 to demonstrate that the engine is meeting the required emission limitation.

(6) Each engine’s time spent at idle during startup and the startup time must be minimized to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

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

(8) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subpart JJJJ, including the following sections:

60.4234	Duration of compliance with emission standards
60.4243(e)	Alternative fuel during emergency conditions
60.4243(g)	Air-to-fuel ratio controllers

(9) The height of the stacks serving the engines listed below shall not be less than the following:

Emissions Unit	Engine ID	Engine Model	Stack Height
P001	COMP1	CAT G16CM34	80 ft.
P002	COMP2	CAT G16CM34	80 ft.
P003	COMP3	CAT G16CM34	80 ft.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of any time period in which the engine(s) were operated without a catalyst installed.

(2) If a fuel other than natural gas is burned in this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned.

(3) The permittee shall develop a site-specific monitoring plan for the CPMS that contains the following elements:

a. the performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer and data acquisition and calculations;

b. sampling interface location (e.g., thermocouple) such that the monitoring system will provide representative measurements;

c. equipment performance evaluations, system accuracy audits, or other audit procedures;

d. ongoing operation and maintenance procedures; and

e. ongoing reporting and record keeping procedures.

(4) The CPMS shall be installed, operated and maintained continuously in accordance with the site-specific monitoring plan.

(5) The permittee shall conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually.

(6) The CPMS performance evaluation shall be conducted in accordance with the site-specific monitoring plan.

(7) The permittee shall measure and record the pressure drop across the catalyst once per month.

(8) The permittee shall comply with the applicable monitoring and record keeping requirements of 40 CFR Part 60, Subpart JJJJ, including the following sections:

60.4245(a)(1)	Records of notifications and supporting documentation
60.4243(b)(2)(ii) and 60.4245(a)(2)	Maintenance plan and records of maintenance conducted on the engine

e) Reporting Requirements

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

(2) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the operational, monitoring or record keeping requirements listed in sections c) and d).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(3) The permittee shall submit notifications and reports to the Ohio EPA, Northeast District Office as required pursuant to 40 CFR Part 60, Subpart JJJJ, per the following sections:

60.4245(c)(1)-(5)	Initial notification
60.4245(d)	Copies of each performance test after completion

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 Limitations:
Emissions of CH_2O shall not exceed 14 ppmvd at 15% O_2 or emissions of CO shall be reduced by 93% or more.

Applicable Compliance Method:
Compliance shall be demonstrated based upon the emission testing requirements specified in f)(2).

b. Emission Limitations:
Emissions from the stack serving each emissions unit shall not exceed:

0.5 g/hp-hr of NO_x
0.22 g/hp-hr of CO
0.15 g/hp-hr of VOC

Applicable Compliance Method:
Compliance shall be demonstrated based upon the emission testing requirements specified in f)(2).

c. Emission Limitation:
PE from each engine shall not exceed 0.20 ton/month averaged over a 12-month rolling period.

Applicable Compliance Method:
These emissions are based on each engine's PTE and were calculated using the maximum engine rating and fuel consumption by the AP 42 emission factor listed in Table 3.2-2 (7/00)

H x F x C x EF x M x (1 ton/2,000 lbs) = ton/month

where:
H = maximum engine horsepower rating: 8,180 hp;
F = maximum fuel consumption: 6,660 Btu/hp-hr;
C = conversion factor: 1mmBtu/10^6 Btu;
EF = emission factor for 4SLB natural gas engines: 0.0099871 lb/mmBtu; and
M = maximum operating hours/month.

d. Opacity Limitation:
Visible PE from the exhaust stack serving each emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:
If required, compliance with this emission limitation shall be demonstrated through visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method

e. Emission Limitation:
PE shall not exceed 0.062 lb/mmBtu of actual heat input.

Applicable Compliance Method:
Compliance with this emission limitation may be based upon an emission factor of 0.0000771 lb/mmBtu of heat input. This emission factor is specified in the U.S. EPA reference document AP-42, Compilation of Air Pollutant Emission Factors, Section 3.2, Table 3.2-2 (7/00).

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

(2) The permittee shall conduct, or have conducted, emission testing for these emissions units in accordance with the procedures specified in 40 CFR 60.4244(a) through (g), Table 2 to 40 CFR Part 60, Subpart JJJJ and the following requirements:

a. Conduct performance testing in the following manner:

i. The permittee shall conduct an initial performance test to demonstrate compliance with the mass emission limitations in 40 CFR 60.4233(e) for VOC, NO_X and CO, within 1 year of startup and subsequent testing shall be conducted every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance.

ii. To demonstrate compliance with the formaldehyde emission limitation or reduction requirement for CO, the permittee shall conduct an initial performance test within 180 days of startup and every 6 months (semiannually); except, where following 2 consecutive compliant performance tests, the frequency can be reduced to annually if each such test demonstrates compliance with the CO reduction requirement or formaldehyde emission limitation and where there have been no deviations from operating limitations, to demonstrate compliance with either limit.

b. Each performance test conducted to determine compliance with 40 CFR Part 60 Subpart JJJJ must be conducted within 10% of 100% peak (or the highest achievable) load and according to the requirements in 40 CFR 60.8 and under the specific conditions that are specified by Table 2 of Subpart JJJJ.

c. Each performance test conducted to determine compliance with ORC 3704.03(T) for either formaldehyde (CH_2O) or a 93% reduction of emissions of CO shall be conducted according to the requirements in 40 CFR 63.6620 and under the conditions specified by Table 4 of Subpart ZZZZ.

d. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northeast District Office (NEDO). 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, NEDO's refusal to accept the results of the emission test(s).

e. Personnel from the Ohio EPA, NEDO 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.

f. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NEDO 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 Ohio EPA, NEDO.

(3) The permittee shall conduct, or have conducted, a one-time emission test for one of the 8,180 hp natural gas-fired compressor engines in accordance with the following requirements:

a. The permittee shall conduct an emission test within 180 days after startup.

b. The emission testing shall be conducted to establish the lb/hr mass emission rate for formaldehyde.

c. The following test method shall be employed to demonstrate compliance with the allowable mass emission rate:

Formaldehyde – Method 323 of 40 CFR Part 63, Appendix A.

Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA.

d. The test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Ohio EPA Northeast District Office.

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA Northeast District Office. 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 Northeast District Office's refusal to accept the results of the emission test(s).

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

g) Miscellaneous Requirements

(1) None.

5. Emissions Unit Group 2- 4,735 horsepower (hp) Stationary Spark Ignition (SI) Internal Combustion Engines (ICE): P004, P005, P006

EU ID	Operations, Property and/or Equipment Description
P004	4,735 hp CAT G3616 controlled by an oxidation catalyst
P005	4,735 hp CAT G3616 controlled by an oxidation catalyst
P006	4,735 hp CAT G3616 controlled by an oxidation catalyst

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) 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)	Emissions of formaldehyde (CH_2O) shall not exceed 14 ppmvd at 15% O_2 or emissions of carbon monoxide (CO) shall be reduced by 93% or more. The permittee shall control the emissions of CH_2O and CO from the stationary RICE exhaust using an oxidation catalyst control device. See c)(1). The requirements specified by this rule are equivalent to the requirements specified in 40 CFR Part 63, Subpart ZZZZ. Emissions from the stack serving each emissions unit shall not exceed: 0.5 g/hp-hr of nitrogen oxides (NO_x) 0.19 g/hp-hr of CO 0.32 g/hp-hr of volatile organic compound (VOC) See b)(2)a.
b.	OAC rule 3745-31-05(A)(3) June 30, 2008	Particulate emissions (PE) from each engine shall not exceed 0.13 ton/month averaged

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		over a 12-month rolling period. See b)(2)b and b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii) June 30, 2008	See b)(2)d.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) from the exhaust stack serving each emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.
e.	OAC rule 3745-17-11(B)	PE shall not exceed 0.062 lb/mmBtu of actual heat input.
f.	OAC rule 3745-18-06(G)	These emissions units are exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(A). See c)(7).
g.	OAC rule 3745-110-03(F)(2)	The emission limitation specified by this rule is less stringent than the emission limitation required per ORC 3704.03(T).
h.	40 CFR Part 60, Subpart JJJJ 40 CFR 60.4233(e)	The NOx, CO and VOC emission limitations specified by this rule are less stringent than the emission limitations established by ORC 3704.03(T). In accordance with 40 CFR 60.4230, these emissions units are subject to the New Source Performance Standards (NSPS) for Stationary SI ICE. See b)(2)e and c)(8)

(2) Additional Terms and Conditions

a. The engines shall be operated with a catalyst in place at all times.

b. The emission limitations for PE are based on the uncontrolled potential to emit (PTE) for this emissions unit, therefore, no monitoring or record keeping is required to document compliance with the emission limitations.

c. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)(a)(ii) (the less than 10 tpy BAT exemption) into the Ohio State Implementation Plan (SIP).

d. These requirements apply once U.S. EPA approves OAC rule 3745-31-05(A)(3)(a)(ii) (the less than 10 tpy BAT exemption) as part of the Ohio SIP:

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE from this air contaminant source since the controlled potential to emit is less than 10 tons/year.

e. The permittee shall comply with the applicable requirements of 40 CFR Part 60, Subpart JJJJ, including the following sections:

60.4236(b)	Installation deadlines
60.4243(b)(2)(ii)	Compliance demonstration, maintenance and testing frequency
60.4246, Table 3	Applicability of General Provisions

f. The permittee must operate and maintain each emissions unit, including the air pollution control equipment and monitoring equipment, in a manner consistent with safety and good air pollution control practices for minimizing emissions.

c) Operational Restrictions

(1) The permittee shall install a continuous parameter monitoring system (CPMS) to continuously monitor the catalyst inlet temperature

(2) The CPMS must collect data at least once every 15 minutes.

(3) The temperature sensor, for a CPMS measuring temperature range, must have a minimum tolerance of 5.0° F or 1.0% of the measurement range, whichever is larger.

(4) Except during periods of startup, the permittee shall meet the following operational limitations:

a. the pressure drop across the oxidation catalyst shall not change by more than 2” of water at 100% load +/-10% from the pressure drop across the catalyst measured during the initial performance test; and

b. maintain the engine exhaust temperature so that the catalyst inlet temperature is greater than or equal to 450°F and less than or equal to 1350°F.

(5) If the catalyst is changed, the permittee must reestablish the values of the operating parameters measured during the initial performance test. When the operating parameter values are reestablished, the permittee must also conduct a performance test using one of the methods listed in 40 CFR Part 63, Subpart ZZZZ, Table 4 to demonstrate that the engine is meeting the required emission limitation.

(6) Each engine’s time spent at idle during startup and the startup time must be minimized to a period needed for appropriate and safe loading of the engine, not to exceed 30 minutes.

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

(8) The permittee shall comply with the applicable restrictions of 40 CFR Part 60, Subpart JJJJ, including the following sections:

60.4234	Duration of compliance with emission standards
60.4243(e)	Alternative fuel during emergency conditions
60.4243(g)	Air-to-fuel ratio controllers

(9) The height of the stacks serving the engines listed below shall not be less than the following:

Emissions Unit	Engine ID	Engine Model	Stack Height
P004	COMP4	CAT G3616	62 ft.
P005	COMP5	CAT G3616	62 ft.
P006	COMP6	CAT G3616	62 ft.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of any time period in which the engine(s) were operated without a catalyst installed.

(2) If a fuel other than natural gas is burned in this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned.

(3) The permittee shall develop a site-specific monitoring plan for the CPMS that contains the following elements:

a. the performance criteria and design specifications for the monitoring system equipment, including the sample interface, detector signal analyzer and data acquisition and calculations;

b. sampling interface location (e.g., thermocouple) such that the monitoring system will provide representative measurements;

c. equipment performance evaluations, system accuracy audits, or other audit procedures;

d. ongoing operation and maintenance procedures; and

e. ongoing reporting and record keeping procedures.

(4) The CPMS shall be installed, operated and maintained continuously in accordance with the site-specific monitoring plan.

(5) The permittee shall conduct the CPMS equipment performance evaluation, system accuracy audits, or other audit procedures specified in the site-specific monitoring plan at least annually.

(6) The CPMS performance evaluation shall be conducted in accordance with the site-specific monitoring plan.

(7) The permittee shall measure and record the pressure drop across the catalyst once per month.

(8) The permittee shall comply with the applicable monitoring and record keeping requirements of 40 CFR Part 60, Subpart JJJJ, including the following sections:

60.4245(a)(1)	Records of notifications and supporting documentation
60.4243(b)(2)(ii) and 60.4245(a)(2)	Maintenance plan and records of maintenance conducted on the engine

e) Reporting Requirements

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

(2) The permittee shall submit quarterly deviation (excursion) reports that identify any deviations from the operational, monitoring or record keeping requirements listed in sections c) and d).

The quarterly deviation (excursion) reports shall be submitted in accordance with the reporting requirements of the Standard Terms and Conditions of this permit.

(3) The permittee shall submit notifications and reports to the Ohio EPA, Northeast District Office as required pursuant to 40 CFR Part 60, Subpart JJJJ, per the following sections:

60.4245(c)(1)-(5)	Initial notification
60.4245(d)	Copies of each performance test after completion

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 Limitations:
Emissions of CH_2O shall not exceed 14 ppmvd at 15% O_2 or emissions of CO shall be reduced by 93% or more.

Applicable Compliance Method:
Compliance shall be demonstrated based upon the emission testing requirements specified in f)(2).

b. Emission Limitations:
Emissions from the stack serving each emissions unit shall not exceed:

0.5 g/hp-hr of NO_x
0.19 g/hp-hr of CO
0.32 g/hp-hr of VOC

Applicable Compliance Method:
Compliance shall be demonstrated based upon the emission testing requirements specified in f)(2).

c. Emission Limitation:
PE from each engine shall not exceed 0.13 ton/month averaged over a 12-month rolling period.

Applicable Compliance Method:
These emissions are based on each engine's PTE and were calculated using the maximum engine rating and fuel consumption by the AP 42 emission factor listed in Table 3.2-2 (7/00)

H x F x C x EF x M x (1 ton/2,000 lbs) = ton/month

where:
H = maximum engine horsepower rating: 4,735 hp;
F = maximum fuel consumption: 7,491 Btu/hp-hr;
C = conversion factor: 1mmBtu/10^6 Btu;
EF = emission factor for 4SLB natural gas engines: 0.0099871 lb/mmBtu; and
M = maximum operating hours/month.

d. Opacity Limitation:
Visible PE from the exhaust stack serving each emissions unit shall not exceed 20% opacity, as a 6-minute average, except as provided by the rule.

Applicable Compliance Method:
If required, compliance with this emission limitation shall be demonstrated through visible particulate emission observations performed in accordance with the methods and procedures specified in 40 CFR Part 60, Appendix A, Method 9.

e. Emission Limitation:
PE shall not exceed 0.062 lb/mmBtu of actual heat input.

Applicable Compliance Method:
Compliance with this emission limitation may be based upon an emission factor of 0.0000771 lb/mmBtu of heat input. This emission factor is specified in the U.S. EPA reference document AP-42, Compilation of Air Pollutant Emission Factors, Section 3.2, Table 3.2-2 (7/00).

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

(2) The permittee shall conduct, or have conducted, emission testing for these emissions units in accordance with the procedures specified in 40 CFR 60.4244(a) through (g), Table 2 to 40 CFR Part 60, Subpart JJJJ and the following requirements:

a. Conduct performance testing in the following manner:

i. The permittee shall conduct an initial performance test to demonstrate compliance with the mass emission limitations in 40 CFR 60.4233(e) for VOC, NO_X and CO, within 1 year of startup and subsequent testing shall be conducted every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance.

ii. To demonstrate compliance with the formaldehyde emission limitation or reduction requirement for CO, the permittee shall conduct an initial performance test within 180 days of startup and every 6 months (semiannually); except, where following 2 consecutive compliant performance tests, the frequency can be reduced to annually if each such test demonstrates compliance with the CO reduction requirement or formaldehyde emission limitation and where there have been no deviations from operating limitations, to demonstrate compliance with either limit.

b. Each performance test conducted to determine compliance with 40 CFR Part 60 Subpart JJJJ must be conducted within 10% of 100% peak (or the highest achievable) load and according to the requirements in 40 CFR 60.8 and under the specific conditions that are specified by Table 2 of Subpart JJJJ.

c. Each performance test conducted to determine compliance with ORC 3704.03(T) for either formaldehyde (CH_2O) or a 93% reduction of emissions of CO shall be conducted according to the requirements in 40 CFR 63.6620 and under the conditions specified by Table 4 of Subpart ZZZZ.

d. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Northeast District Office (NEDO). 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, NEDO's refusal to accept the results of the emission test(s).

e. Personnel from the Ohio EPA, NEDO 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.

f. A comprehensive written report on the results of the emission test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NEDO 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 Ohio EPA, NEDO.

g) Miscellaneous Requirements

(1) None.

6. Emissions Unit Group -Truck Loading: J001, J002

EU ID	Operations, Property and/or Equipment Description
J001	Truck load-out from slop tank containing liquids removed from inlet/outlet separators
J002	Truck load-out from waste-water tank

a) The following emissions unit terms and conditions are federally enforceable with the exception of those listed below which are enforceable under state law only:

(1) 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 3745-31-03(A) June 30, 2008	Fugitive volatile organic compound (VOC) emissions shall not exceed 0.0002ton/month, averaged over a 12-month rolling period. See b)(2)a.
b.	OAC rule 3745-31-03(A)(3)(ii) June 30, 2008	See b)(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) rule 3745-31-05(A)(3)(a)(ii) (the less than 10 tpy BAT exemption) into the Ohio State Implementation Plan (SIP).

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

The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source since the uncontrolled potential to emit is less than 10 tons/year.

c. All truck loading lines shall be equipped with fittings which are vapor tight.

d. The hatches on the vehicle being loaded shall be closed at all times during the loading of the vessel.

e. The permittee shall not permit slop to be spilled, discarded in sewers, stored in open containers or handled in any other manner that would result in evaporation.

c) Operational Restrictions

(1) Prior to connecting the transfer line(s) from the tank to the 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, warn, stripped or otherwise damaged) and will result in vapor tight connections.

(2) During the loading from the tank to the tank truck, the permittee shall continually monitor the transfer equipment, the tank and the tank truck for any leaks through visual, olfactory, or other observations. If any leak is detected, loading shall cease until the leaking component has been repaired.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following each month:

a. the amount of throughput from each slop/wastewater tank, in gallons; and

b. the monthly VOC emissions as calculated in section f)(1)a, in tons.

e) Reporting Requirements

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

(2) The permittee shall submit an annual report identifying the total throughput from each slop/wastewater tank, in gallons.

(3) If, after the first two years of operation, the annual reports demonstrate that the throughput has not led to an exceedance of the annual VOC emission limitation, the permittee may, upon receipt of written approval from the Ohio EPA Northeast District Office, discontinue this reporting requirement.

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. <u>Emission Limitation</u>:
Fugitive VOC emissions shall not exceed 0.0002ton/month, averaged over a 12-month rolling period.

<u>Applicable Compliance Method</u>:
VOC emissions from each loading operation shall be determined by multiplying the loading loss factor (L) by the rolling, 12-month summation of the throughput, in gallons, by the conversion (1 ton/2,000 pounds). The loading loss factor was derived using Equation (1) from AP-42, Section 5.2.2.1.1, Equation 1 (6/08).

$L = 12.46\ SMP/T$

where:
L = loading loss, lb/10^3 gal of liquid loaded;
S = saturation factor, 0.6 for submerged fill;
M = molecular weight of vapor, lb/lb-mole: (slop 21.93), (wastewater 21.78);
P = true vapor pressure of liquid loaded,0.20 average psia; and
T = temperature of bulk liquid, = 510.84 Rankine (average 51.17°F).

g) Miscellaneous Requirements

(1) None.