



Environmental Protection Agency

John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

9/1/2011

Mr. Cliff Brannon
POET Biorefining - Marion
1660 Hillman-Ford Road
Marion, OH 43302

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0351010207
Permit Number: P0104476
Permit Type: Renewal
County: Marion

Certified Mail

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

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate (PTIO) which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully. Please complete a survey at www.epa.ohio.gov/dapc/permitsurvey.aspx and give us feedback on your permitting experience. We value your opinion.

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
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions, please contact Ohio EPA DAPC, Northwest District Office at (419)352-8461 or the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. This permit can be accessed electronically on the DAPCWeb page, www.epa.ohio.gov/dapc, by clicking the "Issued Air Pollution Control Permits" link.

Sincerely,

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

Cc: Ohio EPA-NWDO



FINAL

**Division of Air Pollution Control
Permit-to-Install and Operate
for
POET Biorefining - Marion**

Facility ID:	0351010207
Permit Number:	P0104476
Permit Type:	Renewal
Issued:	9/1/2011
Effective:	9/1/2011
Expiration:	6/26/2014



Division of Air Pollution Control
Permit-to-Install and Operate
for
POET Biorefining - Marion

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Authorization

Facility ID: 0351010207
Application Number(s): A0036911
Permit Number: P0104476
Permit Description: Renewal PTIO for a cooling tower (P011), 2000 kW emergency electrical generator (P012) and fugitive equipment leaks (P801)
Permit Type: Renewal
Permit Fee: \$0.00
Issue Date: 9/1/2011
Effective Date: 9/1/2011
Expiration Date: 6/26/2014
Permit Evaluation Report (PER) Annual Date: Oct 1 - Sept 30, Due Nov 15

This document constitutes issuance to:

POET Biorefining - Marion
Hillman-Ford Road
Marion, OH 43302

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

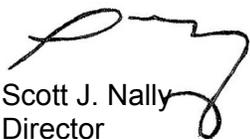
Ohio EPA District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, Northwest District Office
347 North Dunbridge Road
Bowling Green, OH 43402
(419)352-8461

The above named entity is hereby granted this Permit-to-Install and Operate for the air contaminant source(s) (emissions unit(s)) listed in this section pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the described emissions unit(s) will operate in compliance with applicable State and federal laws and regulations.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency


Scott J. Nally
Director

Authorization (continued)

Permit Number: P0104476

Permit Description: Renewal PTIO for a cooling tower (P011), 2000 kW emergency electrical generator (P012) and fugitive equipment leaks (P801)

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

Emissions Unit ID:	P011
Company Equipment ID:	Cooling Tower - F005
Superseded Permit Number:	03-17303
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P012
Company Equipment ID:	EU037
Superseded Permit Number:	03-17303
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	P801
Company Equipment ID:	Equipment Leaks-F004
Superseded Permit Number:	03-17303
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

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

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

2. Who is responsible for complying with this permit?

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

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

3. What records must I keep under this permit?

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

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

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

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

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

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

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

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

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

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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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

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

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

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

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

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

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

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

You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting¹ a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.

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

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

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

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

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

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

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

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

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

B. Facility-Wide Terms and Conditions

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
 - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
 - (1) None.
 - b) For the purpose of a permit-to-operate document, the facility-wide terms and conditions identified below are enforceable under state law only with the exception of those listed below which are federally enforceable.
 - (1) None.
2. The permittee is advised that this facility is subject to the "Generally Available Control Technology" (GACT) requirements under 40 CFR Part 63 Subpart ZZZZ (National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines). Refer to 40 CFR 63.6590(c) for specific requirements in this case. The U.S. EPA is responsible for the administration of the requirements of this rule at this time. It should be noted that the enforcement authority of the GACT requirements have not been delegated to Ohio EPA at the time of this permit processing. The complete requirements of this rule (including the Part 63 General Provisions) may be accessed via the Internet from the Electronic Code of Federal Regulations (e-CFR) website <http://ecfr.gpoaccess.gov> or by contacting the appropriate Ohio EPA District Office of local air agency.

C. Emissions Unit Terms and Conditions



1. P011, Cooling Tower - F005

Operations, Property and/or Equipment Description:

cooling tower

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(F)	Particulate matter equal to or less than 10 microns in size (PM ₁₀) shall not exceed 1.63 pounds/hour (lbs/hr) and 7.14 tons per year (TPY). Visible particulate emissions (PE) shall not exceed 5% opacity, as a six-minute average. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-17-07(A)	See b)(2)c.
c.	OAC rule 3745-17-11(B)	See b)(2)d.

(2) Additional Terms and Conditions

a. This Permit to Install and Operate (PTIO) takes into account the voluntary restrictions of 1.63 lbs PM₁₀/hr and 7.14 tons PM₁₀/yr as proposed by the

permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

- b. All emissions of particulate matter are PM_{10} .
- c. The uncontrolled mass rate of PE from this emissions unit cannot be ascertained. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(ii), Figure II of OAC rule 3745-17-11 does not apply. Also, Table 1 does not apply because the facility is located in Marion County.
- d. This emissions unit is exempt from the visible emissions limitations specified in OAC rule 3745-17-07(A), pursuant to OAC rule 3745-17-07(A)(3)(h), because OAC rule 3745-17-11 is not applicable.

c) Operational Restrictions

- (1) The permittee shall maintain the total dissolved solids (TDS) content of the circulating cooling water at 2,500 mg/L or less.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall properly install, operate, and maintain equipment to continuously monitor and continuously record the conductivity of the cooling tower water. The monitor devices shall be installed, calibrated, operated, and maintained in accordance with the manufacturers' recommendations, instructions, and operating manuals.
- (2) The conductivity shall be used to determine the TDS content of the cooling tower water based on an established correlation between TDS and conductivity of the cooling water.

e) Reporting Requirements

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

f) Testing Requirements

- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitations: PM_{10} shall not exceed 1.63 lbs/hr and 7.14 TPY.

Applicable Compliance Methods: The hourly PM_{10} emission limitation was developed by multiplying the maximum water flow rate of 1.56 million gallons per hour by the drift loss factor of 0.005%, an average total dissolved content of 2500 mg/L and applying the conversion factors of 3.785412 L/gal and 453592.4 mg/L.

If required, the permittee shall submit a testing proposal to demonstrate that the maximum drift loss does not exceed 0.005 percent.

The annual emission limitation was developed by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hours/year, and then dividing by 2000 lbs/ton. Therefore, if compliance is shown with the hourly limitation, compliance with the annual limitation shall be demonstrated.

- b. Emission Limitation: Visible PE shall not exceed 5% opacity, as a six-minute average.

Applicable Compliance Method: If required, compliance with the visible emission limitation shall be demonstrated in accordance with Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60.

g) Miscellaneous Requirements

- (1) None.



2. P012, EU037

Operations, Property and/or Equipment Description:

2000 kW emergency electrical generator

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

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

a. b)(1)h. and d)(4).

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

a. b)(1)a., b)(2)a., c)(2), d)(1), e)(2) and f)(1)f.

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(D)	<p>Nitrogen oxides (NOx) emissions shall not exceed 28.20 pounds per hour (lbs/hr) and 1.40 tons per rolling, 12-month period.</p> <p>Carbon monoxide (CO) emission shall not exceed 1.18 lbs/hr and 0.06 ton per rolling, 12-month period.</p> <p>Sulfur dioxide (SO₂) emissions shall not exceed 10.72 lbs per hour and 0.54 ton per rolling, 12-month period.</p> <p>Volatile organic compounds emissions shall not exceed 1.0 lb/hr and 0.05 ton per rolling, 12-month period.</p> <p>Particulate matter equal to or less than 10 microns in size (PM₁₀) shall not exceed</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.44 lb/hr and 0.02 ton per rolling, 12-month period [See b)(2)h.]. See b)(2)a. and c)(2)
b.	OAC rule 3745-31-05(A)(3), as effective 11/30/01	See b)(2)b. and b)(2)c.
c.	OAC rule 3745-31-05(A)(3)(a)(ii), as effective 12/1/06	See b)(2)d.
d.	OAC rule 3745-17-07(A)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
e.	OAC rule 3745-17-11(B)(5)(b)	See b)(2)e.
f.	OAC rule 3745-18-06	See b)(2)f.
g.	40 CFR, Part 60, Subpart III	See b)(2)g.
h.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(4)

(2) Additional Terms and Conditions

- a. This permit established the following federally enforceable emission limitations based on an hours of operation restriction [See c)(2)] and hourly emission limitations for purposes of avoiding Title V applicability:
 - i. 1.40 tons NO_x per rolling, 12-month period;
 - ii. 0.06 ton CO per rolling, 12-month period;
 - iii. 0.54 ton SO₂ per rolling, 12-month period;
 - iv. 0.05 ton VOC per rolling, 12-month period; and
 - v. 0.02 ton PM₁₀ per rolling, 12-month period.
- b. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3), as effective 11/30/01, have been determined to be compliance with the limitations established under OAC rule 3745-31-05(D).
- c. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to the Ohio Revised Code (ORC) changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for National Ambient Air Quality Standards (NAAQS) pollutant(s) less than ten tons per year. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy

BAT still exists as part of the federally-approved SIP for Ohio. Once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05, then these emission limitations/control measures no longer apply.

- d. This rule paragraph applies once U.S. EPA approves the December 1, 2006 version of OAC rule 3745-31-05 as part of the State Implementation Plan.

The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply to NO_x, CO, SO₂, VOC and PM₁₀ emissions from this air contaminant source since the calculated annual emission rate for NO_x, CO, SO₂, VOC and PM₁₀ emissions is each less than ten tons per year taking into account the federally enforceable restriction on the number of hours of operation under OAC rule 3745-31-05(D).

- e. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(D).
- f. This emissions unit is exempt from the requirements of OAC rule 3745-18-06 in accordance with OAC rule 3745-18-06(B).
- g. This emissions unit is subject to 40 CFR, Part 60, Subpart IIII, Standards of Performance for Stationary Compression Ignition Internal Combustion. The permittee shall comply with all applicable requirements of 40 CFR, Part 60, Subpart IIII. The permittee shall also comply with all applicable requirements of 40 CFR, Part 60, Subpart A as identified in Table 8 of 40 CFR, Part 60, Subpart IIII.
- h. All emissions of particulate matter are PM₁₀.

c) Operational Restrictions

- (1) The permittee shall combust only diesel fuel that meets the per gallon standards of 40 CFR 80.510.
- (2) This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of the hours of operation, upon issuance of this permit. The maximum annual operating hours for this emissions unit shall not exceed 100, based upon a rolling, 12-month summation of the operating hours.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
- a. The number of hours of operation;
- b. The calculated monthly emission rate for CO using the following equation: CO emissions (tons) = [# of hours of operation] x [potential hourly CO emissions (lbs/hr)] x [1 ton/2000 lbs] = d)(1)a. x [1.18 lbs CO/hr] x [1 ton/2000 lbs];

- c. The calculated monthly emission rate for NO_x using the following equation: NO_x emissions (tons) = [# of hours of operation] x [potential hourly NO_x emissions (lbs/hr)] x [1 ton/2000 lbs] = d)(1)a. x [28.20 lbsNO_x/hr] x [1 ton/2000 lbs];
 - d. The calculated monthly emission rate of VOC using the following equation: VOC emissions (tons) = [# of hours of operation] x [potential hourly VOC emissions (lbs/hr)] x [1 ton/2000 lbs] = d)(1)a. x [1.0 lbs VOC/hr] x [1 ton/2000 lbs];
 - e. The calculated monthly emission rate of SO₂ using the following equation: SO₂ emissions (tons) = [# of hours of operation] x [potential hourly SO₂ emissions (lbs/hr)] x [1 ton/2000 lbs] = d)(1)a. x [10.72 lbs SO₂/hr] x [1 ton/2000 lbs];
 - f. The calculated monthly emission rate of PM₁₀ using the following equation: PM₁₀ emissions (tons) = [# of hours of operation] x [potential hourly PM₁₀ emissions (lbs/hr)] x [1 ton/2000 lbs] = d)(1)a x [0.44 lb PM₁₀/hr] x [1 ton/2000 lbs]; and
 - g. The following summations:
 - i. The rolling, 12-month CO emission rate, in tons;
 - ii. The rolling, 12-month NO_x emission rate, in tons;
 - iii. The rolling, 12-month VOC emission rate, in tons;
 - iv. The rolling, 12-month SO₂ emission rate, in tons;
 - v. The rolling, 12-month PM₁₀ emission rate, in tons; and
 - vi. The rolling, 12-month number of hours of operation.
- (2) For each day during which the permittee burns a fuel other than diesel fuel the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit. The permittee shall also maintain documentation on the sulfur content of all fuels burned.
- (3) The permittee shall use records of fuel supplier certification to demonstrate compliance with the operational restriction in section c)(1). Records of fuel supplier certification shall include the following information:
- a. The name of the oil supplier; and
 - b. A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil c)(1) above.
- (4) The permit to install for Emission Units B001, B002, J001, P007, P008, P009, P010 and P012 were evaluated based on the actual materials and the design parameters of each emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of new Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the permit to install application and the AERMOD model (or other OHIO EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the AERMOD model was compared to the Maximum Acceptable Ground-Level

Concentration (MAGLC). The following summarizes the results of the modeling for the “worst case” pollutant(s).

Pollutant: formaldehyde

TLV (mg/m³): 368

Maximum Hourly Emission Rate (lbs/hr): 0.40 (permit total)

Predicted 1-hour Maximum Ground-Level Concentration (ug/m³): 1.21

MAGLC (ug/m³): 6.47

Pollutant: Acetaldehyde

TLV (mg/m³): 33.2

Maximum Hourly Emission Rate (lbs/hr): 4.50 (permit total, emission rate when RTO is down is included)

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 57.46

MAGLC (ug/m³): 790

Pollutant: Hexane

TLV (mg/m³): 176.23

Maximum Hourly Emission Rate (lbs/hr): 0.70 lb/hr (permit total)

Predicted 1-hour Maximum Ground-Level Concentration (ug/m³): 2.97

MAGLC (ug/m³): 4,196

Physical changes to or changes in the method of operation of the emissions units after installation or modification could affect the parameters used to determine whether or not the “Air Toxic Policy” is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the “Air Toxic Policy” will still be satisfied. If, upon evaluation, the permittee determines that the “Air Toxic Policy” will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the “Air Toxic Policy” include the following:

- a. Changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled “American Conference of Governmental Industrial Hygienists (ACGIH), “than the lowest TLV value previously modeled;

- b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emission of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. Physical changes to the emissions units or its exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of air toxic contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provision of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the "Air Toxic Policy:"

- a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. Documentation of its evaluation and determination that the changed emission unit still satisfies the "air toxic policy"; and
 - c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
- e) Reporting Requirements
- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA. The PER must be completed electronically and submitted via the Ohio EPA eBusiness Center: Air Services by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.
 - (2) The permittee shall submit quarterly deviation (excursion) reports which identify the following:
 - a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
 - i. All exceedances of the rolling, 12-month restriction of 100 hours.

- ii. All exceedances of the rolling, 12-month CO emission limitation of 0.06 ton.
 - iii. All exceedances of the rolling, 12-month NO_x emission limitation of 1.41 tons.
 - iv. All exceedances of the rolling, 12-month VOC emission limitation of 0.05 ton.
 - v. All exceedances of the rolling, 12-month SO₂ emission limitation of 0.54 ton.
 - vi. All exceedances of the rolling, 12-month PM₁₀ emission limitation of 0.02 ton.
 - vii. All exceedances of the sulfur content fuel restriction specified in condition c)(1).
- b. the probable cause of each deviation (excursion);
 - c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and
 - d. the magnitude and duration of each deviation (excursion).

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

The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September), unless an alternative schedule has been established and approved by the Director (the appropriate District Office or local air agency).

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: 28.20 lbsNO_x/hr

Applicable Compliance Method: The hourly NO_x emission limitation was developed by multiplying an emission standard of 6.40 g/kW-hr (40 CFR 89.112 Table 1) by the maximum power output of 2000 kW and the conversion factor lb/454 gram.

If required, compliance with the hourly NO_x emission limitation shall be determined according to test Methods 1-4, and 7, as set forth in the "Appendix of Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources."

- b. Emission Limitation: 1.18 lbs CO/hr

Applicable Compliance Method: The hourly CO emission limitation was developed by multiplying an emission factor of 0.20 g/hp-hr (manufacturer data) by the maximum power output of 2000 kW, the conversion factors of 1.34 hp/kW and lb/454 gram.

If required, compliance with the hourly CO emission limitation shall be determined according to test Methods 1-4, and 10, as set forth in the "Appendix of Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources."

- c. Emission Limitation: 10.72 lbs SO₂/hr

Applicable Compliance Method: The hourly SO₂ emission limitation was developed by multiplying an emission factor of 0.004 lb/hp-hr (AP-42, Table 3.4-1, revised 10/96) by the maximum power output of 2000 kW and the conversion factor of 1.34 hp/kW.

If required, compliance with the hourly SO₂ emission limitation shall be determined according to test Methods 1-4, and 6 as set forth in the "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources."

- d. Emissions Limitation: 1.0 lbs VOC/hr

Applicable Compliance Method: The hourly VOC emission limitation was developed by multiplying an emission factor of 0.16 lb/hp-hr (manufacturer data) by the maximum power output of 2000 kW and the conversion factors of 1.34 hp/kW and lb/454 gram.

If required, compliance with the hourly VOC emission limitation shall be determined according to test Methods 1-4, and 18, 25 or 25A, as set forth in the "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources."

- e. Emission Limitation: 0.44 lb PM₁₀/hr

Applicable Compliance Method: The hourly PM₁₀ emission limitation was developed by multiplying an emission factor of 0.075 g/hp-hr (manufacturer data) by the maximum power output of 2000 kW, the conversion factors of 1.34 hp/kW and lb/454 gram.

If required, compliance with the hourly PM₁₀ emission limitation shall be determined according to test Methods 201, 201A and 202, as set forth in 40 CFR, Part 51, Appendix M.

- f. Emissions Limitations:

1.41 tons NOx per rolling, 12-month period.

0.06 ton CO per rolling, 12 month period.

0.54 tons SO₂/rolling, 12-month period.

0.05 ton VOC per rolling, 12-month period.

0.02 ton PM₁₀ per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the ton per rolling 12-month period emission limitations above shall be demonstrated by the record keeping requirements established in section d)(1) of this permit.

g. Emission Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 20% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be demonstrated in accordance with OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

(1) None.

3. P801, Equipment Leaks-F004

Operations, Property and/or Equipment Description:

fugitive VOC emissions from equipment leaks

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 8.30 tons/yr See b)(2)a.
b.	OAC rule 3745-21-09(DD)	See b)(2)b.
c.	40 CFR, Part 60, Subpart VV (40 CFR 60.480-489)	See b)(2)c.
d.	40 CFR, Part 65, Subpart F (40 CFR 65.100-139)	See b)(2)c.

(2) Additional Terms and Conditions

a. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(DD), 40 CFR, Part 60, Subpart VV and 40 CFR, Part 65, Subpart F.

b. The permittee shall employ best available control measures for the emissions unit for the purpose of ensuring compliance with the above-mentioned applicable

requirements. The permittee has committed to implementing a Leak Detection and Repair (LDAR) program to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other equally-effective control measures to ensure compliance.

The permittee shall include the appropriate process equipment and regulated components in the LDAR program. The LDAR program shall comply with the appropriate provisions (including operational restrictions, monitoring and record keeping, reporting, and testing) of OAC rule 3745-21-09(DD) (Leaks from Process Units that Produce Organic Chemicals) and 40 CFR, Part 60, Subpart VV (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry). In the case of overlapping provisions, the permittee shall comply with the more stringent requirement.

- c. Owners or operators may choose to comply with the provisions of 40 CFR, Part 65, Subpart F, to satisfy the requirements of 40 CFR 60.482 through 60.487 for an affected facility. When choosing to comply with 40 CFR, Part 65, Subpart F, the requirements of 40 CFR 60.485(d), (e) and (f) and 40 CFR 60.486(i) and (j) still apply. Other provisions applying to an owner or operator who chooses to comply with 40 CFR, Part 65 are provided in 40 CFR 65.1. [40 CFR 60.480(e)]

Owners or operators who choose to comply with 40 CFR, Part 65, Subpart F must also comply with 40 CFR 60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for that equipment. All sections and paragraphs of subpart A of Part 60 that are not mentioned in this paragraph do not apply to owners or operators of equipment subject to 40 CFR, Part 60, Subpart VV complying with 40 CFR, Part 65, Subpart F, except that provisions required to be met prior to implementing 40 CFR, Part 65 still apply. Owners and operators who choose to comply with 40 CFR, Part 65, Subpart F, must comply with 40 CFR, Part 65, Subpart A.

The permittee has chosen to comply with 40 CFR, Part 65, Subpart F for the valves, pumps, relief valves and connectors at this facility.

- c) Operational Restrictions
(1) See 40 CFR, Part 65, Subpart F (40 CFR 65.100-139)
- d) Monitoring and/or Recordkeeping Requirements
(1) See 40 CFR, Part 65, Subpart F (40 CFR 65.100-139)
- e) Reporting Requirements
(1) See 40 CFR, Part 65, Subpart F (40 CFR 65.100-139)

f) Testing Requirements

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

a. Emission Limitation: VOC emissions shall not exceed 8.30 tons/yr

Applicable Compliance Method:The annual VOC emission limitation was calculated by multiplying the respective emission factors and control efficiencies of all the proposed equipment subject to the LDAR program, as submitted by the permittee in PTI application #03-17303. The following is a list of the proposed pieces of equipment and the relevant type of service:

- i. pump seals: 6 @ 15% VOC by weight and 7 @ 100% VOC by weight
- ii. valves in light liquid service: 117 @ 15% VOC by weight and 236 @ 100% VOC by weight
- iii. valves in gas service: 1 @ 15% VOC by weight and 32 @ 100% VOC by weight
- iv. relief valves: 9 @ 100% VOC by weight
- v. connectors: 379 @ 15% VOC by weight and 1098 @ 100% VOC by weight

Therefore, provided compliance is shown with the LDAR program, compliance with the annual VOC emission limitation shall be also be demonstrated.

g) Miscellaneous Requirements

(1) None.