



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

4/27/2016

Certified Mail

Stewart Grove, III  
 Cincinnati Renewable Fuels, LLC  
 4700 Este Avenue  
 Cincinnati, OH 45232

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

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE  
 Facility ID: 1431074118  
 Permit Number: P0119855  
 Permit Type: Administrative Modification  
 County: Hamilton

Dear Permit Holder:

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

- **How to appeal this permit**
- **How to save money, reduce pollution and reduce energy consumption**
- **How to give us feedback on your permitting experience**
- **How to get an electronic copy of your permit**
- **What should you do if you notice a spill or environmental emergency?**

**How to appeal this permit**

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

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

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

The Ohio EPA is encouraging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Compliance Assistance and Pollution Prevention at (614) 644-3469. Additionally, all or a portion of the capital expenditures related to installing air pollution control equipment under this permit may be eligible for financing and State tax exemptions through the Ohio Air Quality Development Authority (OAQDA) under Ohio Revised Code Section 3706. For more information, see the OAQDA website: [www.ohioairquality.org/clean\\_air](http://www.ohioairquality.org/clean_air)

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

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

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

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

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

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

If you have any questions regarding your permit, please contact Southwest Ohio Air Quality Agency at (513)946-7777 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: SWOQA



**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Cincinnati Renewable Fuels, LLC**

Facility ID:	1431074118
Permit Number:	P0119855
Permit Type:	Administrative Modification
Issued:	4/27/2016
Effective:	4/27/2016
Expiration:	10/11/2017





**Division of Air Pollution Control**  
**Permit-to-Install and Operate**  
for  
Cincinnati Renewable Fuels, LLC

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**Final Permit-to-Install and Operate**  
Cincinnati Renewable Fuels, LLC  
**Permit Number:** P0119855  
**Facility ID:** 1431074118  
**Effective Date:** 4/27/2016

## Authorization

Facility ID: 1431074118  
Application Number(s): A0054720  
Permit Number: P0119855  
Permit Description: Administrative modification to lower the allowable OC limitation of P004.  
Permit Type: Administrative Modification  
Permit Fee: \$625.00  
Issue Date: 4/27/2016  
Effective Date: 4/27/2016  
Expiration Date: 10/11/2017  
Permit Evaluation Report (PER) Annual Date: Jan 1 - Dec 31, Due Feb 15

This document constitutes issuance to:

Cincinnati Renewable Fuels, LLC  
4700 Este Avenue  
Cincinnati, OH 45232

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

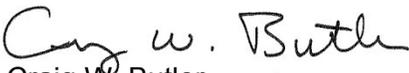
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Southwest Ohio Air Quality Agency  
250 William Howard Taft Rd.  
Cincinnati, OH 45219  
(513)946-7777

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

  
Craig W. Butler  
Director



**Final Permit-to-Install and Operate**  
Cincinnati Renewable Fuels, LLC  
**Permit Number:** P0119855  
**Facility ID:** 1431074118  
**Effective Date:** 4/27/2016

## Authorization (continued)

Permit Number: P0119855

Permit Description: Administrative modification to lower the allowable OC limitation of P004.

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

<b>Emissions Unit ID:</b>	<b>P004</b>
Company Equipment ID:	Biodiesel Manufacturing Process
Superseded Permit Number:	P0116561
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install and Operate**  
Cincinnati Renewable Fuels, LLC  
**Permit Number:** P0119855  
**Facility ID:** 1431074118  
**Effective Date:** 4/27/2016

## **A. Standard Terms and Conditions**

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

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

**2. Who is responsible for complying with this permit?**

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

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

**3. What records must I keep under this permit?**

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

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

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

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

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

- Annual emissions fee. Ohio EPA will assess a separate fee based on the total annual emissions from your facility. You self-report your emissions in accordance with Ohio Administrative Code (OAC) Chapter 3745-78. This fee assessed is based on a fee schedule in ORC section 3745.11 and funds Ohio EPA's permit compliance oversight activities. For facilities that are permitted as synthetic minor sources, the fee schedule is adjusted annually for inflation. Ohio EPA will notify you when it is time to report your emissions and to pay your annual emission fees.

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

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

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

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

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

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

**7. What reports must I submit under this permit?**

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

change in ownership or operator. Any transferee of this permit must assume the responsibilities of the transferor permit holder.

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

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

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

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



**Final Permit-to-Install and Operate**  
Cincinnati Renewable Fuels, LLC  
**Permit Number:** P0119855  
**Facility ID:** 1431074118  
**Effective Date:** 4/27/2016

## **B. Facility-Wide Terms and Conditions**

1. This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - a) For the purpose of a permit-to-install document, the facility-wide terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - (1) 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) 2.,3.,4. and 5.
2. The actual emissions from P004 (Biodiesel Manufacturing Process), J001 (Methanol Loadout), P012 (Wastewater Treatment Process), P801 (Fugitive Equipment Leaks), and future to-be-installed air contaminant sources, combined, shall not exceed 6.57 TPY for methanol. Compliance with the above limitations shall be based on a rolling 12-month summation.
3. The permittee shall collect and record the following information each month for the emissions units identified in 2.:
  - a) The methanol emissions in pounds or tons per month;
  - b) The updated rolling, 12-month summation for methanol emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.
4. The permittee shall submit quarterly deviation (excursion) reports for any emissions unit that applies methanol-containing materials listed in B.2 that identify:
  - a) All deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:
    - (1) any exceedance of the methanol emission limitations outlined in 2.
  - 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



**Final Permit-to-Install and Operate**  
Cincinnati Renewable Fuels, LLC  
**Permit Number:** P0119855  
**Facility ID:** 1431074118  
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schedule has been established and approved by the Director (the appropriate District Office or local air agency).

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.

5. Emission Limitation:

Methanol emissions shall not exceed 6.57 TPY based on a rolling, 12-month summation for the emissions units listed in 2.

Applicable Compliance Method:

Compliance with the methanol emission limitations in 2 shall be demonstrated by the record keeping requirements specified in 3.



**Final Permit-to-Install and Operate**  
Cincinnati Renewable Fuels, LLC  
**Permit Number:** P0119855  
**Facility ID:** 1431074118  
**Effective Date:** 4/27/2016

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

**1. P004, Biodiesel Manufacturing Process**

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

Biodiesel Manufacturing Process

- a) This permit document constitutes a permit-to-install issued in accordance with ORC 3704.03(F) and a permit-to-operate issued in accordance with ORC 3704.03(G).
  - (1) For the purpose of a permit-to-install document, the emissions unit terms and conditions identified below are federally enforceable with the exception of those listed below which are enforceable under state law only.
    - a. d)(4), d)(5), and e)(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)c., b)(2)c-e. and c)(1)
- 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	Organic Compound (OC) emissions shall not exceed 0.28 pound per hour* and 1.23 ton per year.  * The hourly emission limitation is based upon the emission unit's potential to emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limitation.  See b)(2)a.
b.	OAC rule 3745-31-05(A)(3), June 30, 2008	See b)(2)b.
c.	OAC rule 3745-31-05(D) Synthetic Minor to avoid Title V permit requirements	See Section B.2., b)(2)c. and c)(1).
d.	40 CFR 60, Subpart A	See b)(2)d.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
e.	40 CFR 60, Subpart NNN	This facility shall maintain a TRE index value greater than 8.0 without use of VOC emission control devices or reduce emissions to a TOC (less methane and ethane) concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen.  See d)(1), c)(3), d(7), e(6) and f(3).
f.	40 CFR 60, Subpart Kb	See c(2), d(6), e(5) and f(2).
g.	40 CFR 60, Subpart RRR	Not subject. See b)(2)e.
h.	40 CFR 63, Subpart VVVVVV	Not subject. See b)(2)f.
i.	OAC rule 3745-21-13	Not subject. See b)(2)g.
j.	OAC rule 3745-21-14	Not subject. See b)(2)h.

(2) Additional Terms and Conditions

- a. This Best Available Technology (BAT) emission limit applies until U.S. EPA approves Ohio Administrative Code (OAC) paragraph 3745-31-05(A)(3)(a)(ii) (the less than 10 tons per year BAT exemption) into the Ohio State Implementation Plan (SIP).
- b. 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 the uncontrolled organic compound (OC) emissions from this air contaminant source since the potential to emit for OC is less than 10 tons per year.
- c. Compliance with OAC rule 3745-31-05(D) shall be demonstrated by the use of a packed bed scrubber and compliance with the facility-wide HAP emissions limitations.
- d. 40 CFR Part 60 subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.
- e. The intermittently vented third settler vent stream associated with the Ester Reactor/Settlers does not meet the definition of a 'vent stream' in 40 CFR 60.701. P004 does not consist of any affected facilities under 40 CFR Part 60, Subpart RRR.
- f. The feedstocks for P004 do not contain any of the HAPs listed in Table 1 of 40 CFR Part 63, Subpart VVVVVV. P004 is not subject to this subpart.
- g. Pursuant to OAC 3745-21-13(A)(2)(e), any distillation unit subject to 40 CFR Part 60, Subpart NNN is not subject to this requirement. As the definitions for rule

applicability in this rule mirror those in 40 CFR Part 60 Subpart RRR, the intermittently vented third settler vent stream is also not subject to this rule consistent with b)(2)e.

- h. The facility has a potential to emit for VOC emissions less than 100 tpy. Therefore, P004 is not regulated under this rule.
- i. The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.

c) Operational Restrictions

- (1) All of the VOC emissions from this emissions unit shall be vented to a wet scrubber that shall meet the operational, monitoring, and record keeping requirements of this permit, when the emissions unit is in operation.
- (2) See 40 CFR 60, Subpart Kb (40 CFR 60.110b-117b) for applicable operating requirements.
- (3) See 40 CFR 60, Subpart NNN (40 CFR 60.660-668) for applicable operating requirements.

d) Monitoring and/or Recordkeeping Requirements

- (1) P004 is at an affected facility that has a total resource effectiveness (TRE) index value greater than 8.0 as determined by d)(2). P004 is exempt from all provisions of 40 CFR 60, Subpart NNN except for 40 CFR 60.662; 60.664 (e), (f), and (g); and 60.665 (h) and (l).
- (2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable pressure drop across the packed bed scrubber, that shall be maintained in order to demonstrate compliance, shall not be greater than 2 inches of water, gauge. The acceptable scrubber water flow rate is at least 8 gallons per minute or greater.
- (3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in inches of water, gauge) and the scrubber liquid flow rate (in gallons per minute during operation of this emissions unit, including periods of startup and shutdown). The permittee shall record the pressure drop across the scrubber and the scrubber liquid's flow rate on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for any parameter deviates from the limit(s) established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

- a. the date and time the deviation began;
- b. the magnitude of the deviation at that time;
- c. the date the investigation was conducted;
- d. the name(s) of the personnel who conducted the investigation; and
- e. the findings and recommendations.

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

- f. a description of the corrective action;
- g. the date the corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the pressure drop and flow rate readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

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

These limit(s) for the pressure drop and liquid flow rate are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted limit for the pressure drop, and liquid flow rate based upon information obtained during future performance tests that demonstrate compliance with the allowable organic compound emission rate for this emissions unit. In addition, approved revisions to the range or limit will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

- (4) The permit to install and operate (PTIO) for this emissions unit P004 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN3 model or other Ohio EPA approved model. The predicted

1-hour maximum ground-level concentration result(s) from the use of the SCREEN3 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), and calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the “worst case” pollutant(s):

Pollutant: methanol

TLV (ug/m3): 262

Maximum Hourly Emission Rate (lbs/hr): 1.24 lbs/hr

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1813

MAGLC (ug/m3): 6240

The above described evaluation demonstrated that the maximum ground level concentration for the new or modified source is less than eighty per cent of the maximum acceptable ground level concentration (MAGLC).

Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. 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 or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists’ (ACGIH’s) handbook entitled “TLVs and BEIs” (“Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices”);
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit 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 a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install and operate 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) meet(s) the definition of a “modification”

under other provisions of the rule, then the permittee shall obtain a final permit to install and operate prior to the change.

- (5) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):
    - a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);
    - b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);
    - c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and
    - d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.
  - (1) See 40 CFR 60, Subpart Kb (40 CFR 60.110b-117b) for applicable monitoring and record keeping requirements.
  - (2) See 40 CFR 60, Subpart NNN (40 CFR 60.660-668) for applicable monitoring and record keeping requirements.
  - (3) The permittee may submit an alternative monitoring plan (AMP) request under 40 CFR 60.13(i)(7) seeking an alternative sampling approach to 40 CFR 60.664(e)(1)(ii)(A) to (C) that only involves flow rate and composition measurements at the discharge of the methanol scrubber.
- 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 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.

- (3) The permittee shall identify in the annual permit evaluation report the following information concerning the operations of the wet scrubber during the 12-month reporting period for this/these emissions unit(s):
- a. each period of time (start time and date, and end time and date) when the pressure drop across the scrubber or the liquid flow rate was/were outside of the appropriate range or exceeded the applicable limit contained in this permit;
  - b. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the scrubber;
  - c. each incident of deviation described in “a” or “b” (above) where a prompt investigation was not conducted;
  - d. each incident of deviation described in “a” or “b” where prompt corrective action, that would bring the pressure drop, and/or liquid flow rate into compliance with the appropriate range or limit contained in this permit, was determined to be necessary and was not taken; and
  - e. each incident of deviation described in “a” or “b” where proper records were not maintained for the investigation and/or the corrective action(s), as identified in the monitoring and record keeping requirements of this permit.
- (4) The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.
- (5) See 40 CFR 60, Subpart Kb (40 CFR 60.110b-117b) for applicable reporting requirements.
- (6) See 40 CFR 60, Subpart NNN (40 CFR 60.660-668) for applicable reporting requirements.
- f) Testing Requirements
- (1) Compliance with the Emissions Limitations and/or Control Requirements specified in section b) of these terms and conditions shall be determined in accordance with the following methods:
- a. Emission Limitation:  
  
Organic Compound (OC) emissions shall not exceed 0.28 pound per hour and 1.23 ton per year.



Applicable Compliance Methods:

Compliance with the pounds of OC/hour emission limitation was demonstrated through mass emission testing conducted in November, 2008, and October 2014. The average emission rate recorded during these emissions tests was 0.11 pound of OC/hr. The hourly mass emission rate shall be multiplied by the maximum hours of operation per year and then divided by 2000 to determine the TPY emission rate.

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1-4 and 25 and/or 25A or 40 CFR 63, Appendix A Method 308

b. Emission Limitation:

This facility shall maintain a TRE index value greater than 8.0 without use of VOC emission control devices or reduce emissions to a TOC (less methane and ethane) concentration of 20 ppmv, on a dry basis corrected to 3 percent oxygen.

Applicable Compliance Methods:

- (2) Compliance with the TRE index value or ppmv concentration requirement will be demonstrated by the testing methods in 40 CFR 60.664 or an alternative approved under 40 CFR 60.13(i)(7).
- (3) See 40 CFR 60, Subpart Kb (40 CFR 60.110b-117b) for applicable testing requirements.
- (4) See 40 CFR 60, Subpart NNN (40 CFR 60.660-668) for applicable testing requirements.

g) Miscellaneous Requirements

- (1) None.