



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

Certified Mail

4/5/2016

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

Mr. Vince Jolly  
 Guardian Lima, LLC  
 2485 Houx Parkway  
 Lima, OH 45804

RE: FINALAIR POLLUTION PERMIT-TO-INSTALL AND OPERATE

Facility ID: 0302020341  
 Permit Number: P0120003  
 Permit Type: Administrative Modification  
 County: Allen

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 Ohio EPA DAPC, Northwest District Office at (419)352-8461 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: Ohio EPA-NWDO



**FINAL**

**Division of Air Pollution Control  
Permit-to-Install and Operate  
for  
Guardian Lima, LLC**

Facility ID:	0302020341
Permit Number:	P0120003
Permit Type:	Administrative Modification
Issued:	4/5/2016
Effective:	4/5/2016
Expiration:	12/16/2019





**Division of Air Pollution Control  
Permit-to-Install and Operate**

for  
Guardian Lima, LLC

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**Final Permit-to-Install and Operate**  
Guardian Lima, LLC  
**Permit Number:** P0120003  
**Facility ID:** 0302020341  
**Effective Date:** 4/5/2016

## Authorization

Facility ID: 0302020341  
Application Number(s): A0054932  
Permit Number: P0120003  
Permit Description: Administrative modification to update the permit based on the current facility operations.  
Permit Type: Administrative Modification  
Permit Fee: \$6,475.00  
Issue Date: 4/5/2016  
Effective Date: 4/5/2016  
Expiration Date: 12/16/2019  
Permit Evaluation Report (PER) Annual Date: Apr 1 - Mar 31, Due May 15

This document constitutes issuance to:

Guardian Lima, LLC  
2485 Houx Parkway  
Lima, OH 45804

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

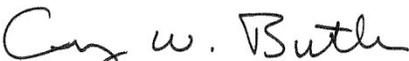
Ohio Environmental Protection Agency (EPA) District Office or local air agency responsible for processing and administering your permit:

Ohio EPA DAPC, 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

  
Craig W. Butler  
Director



## Authorization (continued)

Permit Number: P0120003

Permit Description: Administrative modification to update the permit based on the current facility operations.

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>F001</b>
Company Equipment ID:	F001
Superseded Permit Number:	P0108834
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>J001</b>
Company Equipment ID:	J001
Superseded Permit Number:	P0117569
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P001</b>
Company Equipment ID:	P001
Superseded Permit Number:	P0108834
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P002</b>
Company Equipment ID:	P002
Superseded Permit Number:	P0117569
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P003</b>
Company Equipment ID:	P003
Superseded Permit Number:	P0108834
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P004</b>
Company Equipment ID:	P004
Superseded Permit Number:	P0117569
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P901</b>
Company Equipment ID:	P901
Superseded Permit Number:	P0108834
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P902</b>
Company Equipment ID:	P902
Superseded Permit Number:	P0108834
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P903</b>
Company Equipment ID:	P903
Superseded Permit Number:	P0117569
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>P904</b>
Company Equipment ID:	P904
Superseded Permit Number:	P0117569
General Permit Category and Type:	Not Applicable



**Emissions Unit ID: P905**  
 Company Equipment ID: P905 (fka F002)  
 Superseded Permit Number: P0117569  
 General Permit Category and Type: Not Applicable

**Emissions Unit ID: T003**  
 Company Equipment ID: T003  
 Superseded Permit Number: P0108834  
 General Permit Category and Type: Not Applicable

**Emissions Unit ID: T004**  
 Company Equipment ID: T004  
 Superseded Permit Number: P0108834  
 General Permit Category and Type: Not Applicable

**Group Name: 63 MMBtu/hr NG Fired Boilers**

<b>Emissions Unit ID:</b>	<b>B001</b>
Company Equipment ID:	B001
Superseded Permit Number:	P0108834
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>B002</b>
Company Equipment ID:	B002
Superseded Permit Number:	P0108834
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>B003</b>
Company Equipment ID:	B003
Superseded Permit Number:	P0108834
General Permit Category and Type:	Not Applicable

**Group Name: Ethanol Day Tanks**

<b>Emissions Unit ID:</b>	<b>T001</b>
Company Equipment ID:	T001
Superseded Permit Number:	P0108834
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>T002</b>
Company Equipment ID:	T002
Superseded Permit Number:	P0108834
General Permit Category and Type:	Not Applicable
<b>Emissions Unit ID:</b>	<b>T005</b>
Company Equipment ID:	T005
Superseded Permit Number:	P0108834
General Permit Category and Type:	Not Applicable



**Final Permit-to-Install and Operate**  
Guardian Lima, LLC  
**Permit Number:** P0120003  
**Facility ID:** 0302020341  
**Effective Date:** 4/5/2016

## **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**  
Guardian Lima, LLC  
**Permit Number:** P0120003  
**Facility ID:** 0302020341  
**Effective Date:** 4/5/2016

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



**Final Permit-to-Install and Operate**

Guardian Lima, LLC

**Permit Number:** P0120003

**Facility ID:** 0302020341

**Effective Date:** 4/5/2016

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.



**Final Permit-to-Install and Operate**  
Guardian Lima, LLC  
**Permit Number:** P0120003  
**Facility ID:** 0302020341  
**Effective Date:** 4/5/2016

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

**1. F001, Roadways and Parking Areas**

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

Roadways and Parking Areas

- 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)	1.89 tons fugitive particulate emissions (PE)/yr  No visible PE except for one minute during any 60-minute period  Best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust  See b)(2)a. through b)(2)f.
b.	OAC rule 3745-17-07(B)	See b)(2)g.
c.	OAC rule 3745-17-08(B)	See b)(2)h.

- (2) Additional Terms and Conditions
  - a. The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

paved roadways

paved parking areas

all paved road segments

all paved road segments

- b. The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to treat the paved roadways and parking areas by sweeping and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.
- c. The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for paved roadways and parking areas that are covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.
- d. The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.
- e. Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.
- f. Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the Best Available Technology (BAT) requirements of OAC rule 3745-31-05(A)(3).
- g. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- h. The facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) Except as otherwise provided in this section, the permittee shall perform inspections of each of the roadway segments and parking areas in accordance with the following frequencies:

paved roadways and parking areas minimum inspection frequency

all paved roadways/parking areas          once during each week of operation

- (2) The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.
- (3) The permittee may, upon receipt of written approval from the Northwest District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.
- (4) The permittee shall maintain records of the following information:
  - a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;
  - b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;
  - c. the dates the control measures were implemented; and
  - d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

The information required in d)(4)d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The 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 identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in d)(4):
  - a. each instance during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

- b. each instance when a control measure, that was to be implemented as a result of an inspection, was not implemented.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or instances to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that all inspections were performed by the required frequency and control measure(s) were properly implemented.

- (3) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

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:

1.89 tons fugitive PE/yr

Applicable Compliance Method:

The maximum potential uncontrolled emission rate for paved roadways and parking areas was calculated by multiplying an emission factor of 0.33 lb per vehicle mile traveled [AP-42, section 13.2.1.2 (12/03)] by a maximum annual vehicle miles traveled of 11,329 and dividing by 2000 lbs per ton. Therefore, provided compliance is shown with the requirements of this permit to apply best available control measures, compliance with the annual fugitive PE limitation shall also be demonstrated.

- b. Emission Limitation:

No visible particulate emissions except for one minute during any 60-minute period.

Applicable Compliance Method:

If required, compliance with the visible emission limitation listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

g) Miscellaneous Requirements

- (1) None.

**2. J001, Ethanol Loadout**

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

Ethanol loadout controlled by a flare

- 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).
  - (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)	<u>Loadout Emissions</u> 8.48 lbs volatile organic compounds (VOC)/hr; 4.80 tons VOC/yr  <u>Flare Combustion Emissions</u> 5.01 lbs carbon monoxide (CO)/hr; 2.82 tons CO/yr  No visible particulate emissions (PE) except for periods not to exceed 5 minutes during any two consecutive hours  Control Requirements [See b)(2)a. and b)(2)d.]
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-17-11(B)	See b)(2)c.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) control requirements for this emissions unit have been determined to be the use of a closed process vent system for all liquid product loadout operations, combusted in a flare, and compliance with the emission limits specified in b)(1)a.
- b. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because this emissions unit is not subject to the requirements of OAC rule 3745-17-11.
- c. The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs/hr. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(I), Figure II of OAC rule 3745-17-11 does not apply. Table I of OAC rule 3745-17-11 does not apply because the process weight rate, as defined in OAC rule 3745-17-01(B)(14) does not include gaseous fuels used solely as a fuel for the flare as a control device.
- d. Nitrogen oxide emissions associated with the products of combustion from the flare are considered negligible (1.13 tons/yr) and will not be included in the permit.

c) Operational Restrictions

- (1) The maximum annual ethanol throughput rate for this emissions unit shall not exceed 66,000,000 gallons. The maximum annual gasoline throughput rate for this emissions unit shall not exceed 1,650,000 gallons.
- (2) The permittee shall comply with the following restrictions on the flare controlling this emissions unit:
  - a. The closed vent system shall be operated at all times when emissions may be vented to it;
  - b. The flare shall be operated with a pilot flame. The flame shall be present at all times and shall be monitored with a thermocouple or any other equivalent device to detect the presence of a pilot flame;
  - c. The net heating value of the gas being combusted in the flare, as determined by the method specified in paragraph (P)(2) of rule 3745-21-10 of the Administrative Code, shall be 300 Btu/scf or greater;
  - d. The flare shall be designed and operated with an actual exit velocity, as determined by the method specified in paragraph (P)(3) of rule 3745-21-10 of the Administrative Code, less than 60 feet per second; and
  - e. The permittee shall ensure the flare is operated and maintained in conformance with its design.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The ethanol throughput, in gallons per month and total gallons, to date for the calendar year;
  - b. The gasoline throughput, in gallons per month and total gallons, to date for the calendar year;
  - c. The calculated emissions of VOC\*, in tons; and
  - d. The annual, year-to-date emissions of VOC, in tons.

\*Emissions of VOC shall be calculated using the emissions data supplied in Application A0054932 submitted for Permit #P0120003, as well as any additional site specific information available to the permittee. The monthly emissions shall include any emissions associated with startups, shutdowns, or process upsets, if applicable.

- (2) The permittee shall comply with the following monitoring and record keeping requirements on the flare controlling this emissions unit:
  - a. The flare shall be monitored with a thermocouple or any other equivalent device to detect the presence of a pilot flame;
  - b. The permittee shall maintain records of the following:
    - i. Records of all periods when the flare pilot flame is absent;
    - ii. Periods when the closed vent system and flare are not operated as designed; and
    - iii. Dates of start-ups and shutdowns of the closed vent system and flare.
  - c. The permittee shall collect and record a daily log or record of operating time for the closed vent system, flare and monitoring equipment.
- (3) The permittee shall perform daily checks, when the emissions unit is in operation, for visible emissions from the flare. The presence or absence of any visible fugitive emissions shall be noted in an operations log, including the date and time the daily check was performed. If visible emissions are observed, the permittee shall also record the following in the operations log:
  - a. The total duration of any visible emission incident; and
  - b. Any corrective actions taken to eliminate the visible emissions.
- (4) This Permit-to-Install and Operate (PTIO) application for this emissions unit, J001, was evaluated based on the actual materials and the design parameters of each emissions unit's exhaust system, as specified by the permittee in the PTIO 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 PTIO application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 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:** Hexane

TLV (mg/m<sup>3</sup>): 176.23

Maximum Hourly Emission Rate (lbs/hr): 0.42

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 0.99

MAGLC (ug/m<sup>3</sup>): 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 an toxic air contaminant listed in OAC rule 3745-114-01 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 emissions of any toxic air contaminant listed in OAC rule 3745-114-01 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 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 provisions 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 still satisfy the “Air Toxic Policy:”

- d. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
  - e. documentation of its evaluation and determination that the changed emissions unit still satisfies the “Air Toxic Policy”; and
  - f. 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 District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
  - (2) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for the flare in condition d)(2):
    - a. Exceedances of all monitoring parameters;
    - b. Periods of time when the closed vent system stream is diverted from system control devices;
    - c. All periods of time when the flare was not operational, including all periods of time during which the pilot flame on the flare is not functioning properly; and
    - d. All periods of time when required monitoring data was not collected.
  - (3) The permittee shall identify the following information in the annual PER in accordance with the monitoring requirements for visible emissions in d)(3):
    - a. All instances during which any visible particulate emissions were observed from the stack(s) serving this emissions unit; and
    - b. Any corrective action taken to minimize or eliminate the visible particulate emissions.
  - (4) The above information in e)(2) and e)(3) shall be provided as an attachment to the PER. If there were no deviations and/or corrective action(s) taken to identify as required above, the permittee shall indicate within the “Additional Information and Corrections” section of the PER that no exceedances or visible emissions were observed and no corrective actions were taken.
  - (5) The reports required by this permit may be submitted through the Ohio EPA’s eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

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:

8.48 lbs VOC/hr

Applicable Compliance Method:

The emission limitation above represents the potential to emit\*; therefore, no monitoring, record keeping, reporting or compliance method calculations are required.

\*The potential to emit was calculated by multiplying the controlled emission factor of 0.14 lb/1000 gallons (submitted by the permittee in the application for Permit #P0120003) as determined through the methodology in AP-42, section 5.2.2 (1/95) by the maximum hourly denatured ethanol throughput of 60,000 gallons/hr.

If required, compliance with the hourly emission limitation shall be determined in accordance with Methods 1-4 and 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

b. Emission Limitation:

4.80 tons VOC/yr

Applicable Compliance Method:

The permittee shall demonstrated compliance with the annual emission limitation in accordance with the record keeping requirements specified in section d)(1) of this permit.

c. Emission Limitation:

5.01 lbs CO/hr

Applicable Compliance Method:

The hourly emission limitation was established by multiplying the flare manufacturer supplied emission factor of 0.0835 lb/1000 gallons (submitted by the permittee in the application for Permit #P0120003) by the maximum hourly denatured ethanol throughput of 60,000 gallons/hr.

If required, compliance with the hourly emission limitation shall be determined in accordance with Methods 1-4 and 10 of 40 CFR, Part 60, Appendix A.



d. Emission Limitation:

2.82 tons CO/yr

Applicable Compliance Method:

The annual emission limitation was established by the flare manufacturer supplied emission factor of 0.0835 lb/1000 gallons (submitted by the permittee in the application for Permit #P0120003) by the maximum annual denatured ethanol throughput of 66,000,000 gallons/yr, then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the annual denatured ethanol throughput restriction, compliance with the annual limitation shall also be demonstrated.

e. Emission Limitation:

No visible PE except for periods not to exceed 5 minutes during any two consecutive hours

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined in accordance with Method 22 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

- (1) None.

**3. P001, Hammermill with Baghouse**

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

Two Hammermills with Baghouse

- 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)	<u>Stack Emissions:</u> 0.0045 grain particulate emissions (PE)/dry standard cubic foot (dscf); 4.05 tons PE/yr  Visible stack PE shall not exceed 0% opacity, as a six-minute average  <u>Fugitive Emissions:</u> 0.10 ton PE/yr  Visible fugitive PE shall not exceed 5% opacity, as a three-minute average  Control Requirements [See b)(2)a.]
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-17-11(B)	See b)(2)b.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-07(B)	See b)(2)c.
e.	OAC rule 3745-17-08(B)	See b)(2)d.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) control requirements for this emissions unit have been determined to be the use of a total enclosure with aspiration to a baghouse and compliance with the emission limitations specified in b)(1)a.
- b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- c. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- d. The facility is not located within an “Appendix A” area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emissions incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(1)d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the

emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The 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 identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
  - a. all instances during which any visible particulate emissions were observed from the stack serving this emissions unit;
  - b. all instances during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
  - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or instances to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

- (3) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

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:

0.0045 grain PE/dscf; 4.05 tons PE/yr (stack)

Applicable Compliance Method:

Compliance with the allowable grain outlet concentration has been demonstrated by performance testing conducted on June 14, 2011.

If required, compliance with the grain/dscf emission limitation shall be determined in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was developed by multiplying the maximum outlet concentration of 0.0045 grain/dscf by a maximum volumetric air flow rate of 24,000 acfm by 60 min/hr, and applying a conversion factor of 1 lb/7000 grains, then multiplying by a maximum operating schedule of 8760 hrs/yr, then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the maximum grain outlet concentration, compliance with the annual limitation shall also be demonstrated.

b. Emission Limitation:

Visible stack PE shall not exceed 0% opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

c. Emission Limitation:

0.10 ton fugitive PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by multiplying an AP-42 emission factor of 0.012 lb PE/ton from grain hammermilling [Section 9.9.1 (5/98)] by a maximum annual grain throughput of 710,769 tons grain/yr\*, then dividing by 2000 lbs/ton and applying a 99% capture efficiency for the use of total enclosure with aspiration to a baghouse.

\*This limit is established as a maximum annual throughput in emissions unit P901, grain receiving, and; therefore, effectively restricts throughput in this emissions unit as well.

d. Emission Limitation:

Visible fugitive PE shall not exceed 5% opacity, as a three-minute average

Applicable Compliance Method:

If required, compliance with the visible fugitive emission limitation shall be determined in accordance with Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60, ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002 and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

g) Miscellaneous Requirements

(1) None.

**4. P002, Ethanol Production Operations**

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

Ethanol production including the distillation column, whole and thin stillage tanks, syrup tank, 4 centrifuges and two 45 mmBtu/hr DDGS dryers controlled by an RTO. Uncontrolled process equipment included in this emissions unit is the tricanter.

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)(9).

(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)	<u>RTO Stack Emissions</u> 10.00 lbs nitrogen oxides (NOx)/hr; 43.80 tons NOx/yr  9.88 lbs carbon monoxide (CO)/hr; 43.30 tons CO/yr  4.00 lbs volatile organic compounds (VOC)/hr; 17.52 tons VOC/yr  2.00 lbs particulate matter less than 10 microns in size (PM10)/hr; 8.80 tons PM10/yr  9.13 lbs sulfur dioxide (SO2)/hr; 40.00 tons SO2/yr



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Visible stack particulate emissions (PE) shall not exceed 10% opacity, as a six-minute average  <u>Fugitive Emissions</u> 4.50 tons VOC/yr  No visible fugitive PE from any building openings associated with this emissions unit  See b)(2)a. and b)(2)e.
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-17-11(B)(1)	See b)(2)c.
d.	OAC rule 3745-18-06(E)(2)	See b)(2)c.
e.	OAC rule 3745-21-09(DD)	See b)(2)d. and g)(1)
f.	40 CFR, Part 60, Subpart VVa	See b)(2)d. and g)(1)

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) control requirements for this emissions unit have been determined to be the following:
  - i. Firing only natural gas and the use of low NOx burners in the dryers. BAT also includes operation of the dryers to be continuously maintained at or below a value to be determined by design information, and/or manufacturer's data [See condition g)(3) for the establishment of the temperature of the dryers];
  - ii. Implementation of a fugitive leak detection and repair (LDAR) program for all the miscellaneous process equipment associated with this emissions unit;
  - iii. Use of a thermal oxidizer that is designed to achieve a minimum 95% destruction efficiency at all times the emissions unit is in operation;
  - iv. Compliance with the emission limitations specified in b)(1)a.; and
  - v. Compliance with the requirements of OAC rule 3745-21-09(DD), and 40 CFR, Part 60, Subpart VVa.
- b. The visible PE limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- c. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

- d. The permittee shall include the appropriate process equipment and regulated components in a site fugitive 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 VVa (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry).
  - e. Emissions associated with the tricanter operations are considered negligible and will not be included in the permit.
- c) Operational Restrictions
- (1) The permittee shall burn only natural gas in this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
- (1) For each day during which the permittee burns a fuel other than natural gas the permittee shall maintain a record of the type and quantity of fuel burned in each emissions unit.
  - (2) The permittee shall maintain monthly records of the following information for this emissions unit:
    - a. The calculated emissions of VOC\*, in tons; and
    - b. The annual, year-to-date, emissions of VOC, in tons.
  - (3) The acceptable combustion temperature within the thermal oxidizer, during any period of time when the emissions unit controlled by the thermal oxidizer is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit was in compliance.

The temperature range/limit is 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 temperature range/limit based upon information obtained during future performance tests that demonstrate compliance with the allowable emission rates for the controlled pollutants. In addition, approved revisions to the temperature range/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 permittee shall properly install, operate, and maintain a continuous temperature monitor and recorder that measures and records the combustion temperature within the thermal oxidizer when the emissions unit is in operation, including periods of startup and shutdown. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within + 1 percent of the temperature being measured or + 5 degrees Fahrenheit, whichever is greater. The temperature monitor and recorder shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals, with any modifications deemed necessary by the permittee. The acceptable temperature setting shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate temperature range is established to demonstrate compliance. Following compliance testing, the permittee shall collect and record the following information each day the emissions unit is in operation:
- a. all 3-hour blocks of time, when the emissions unit controlled by the thermal oxidizer was in operation, during which the average combustion temperature within the thermal oxidizer was more than 50 degrees Fahrenheit below the average temperature measured during the most recent performance test that demonstrated the emissions unit was in compliance; and
  - b. a log (date and total time) of the downtime or bypass of the capture (collection) system and thermal oxidizer, and/or downtime of the monitoring equipment, when the associated emissions unit was in operation.

These records shall be maintained at the facility for a period of three years.

- (5) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature within the dryers when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modification deemed necessary by the permittee. The permittee shall collect and record all time periods during which the maximum temperature within the dryers, when the emissions unit is in operation, is more than the maximum temperature requirement in section b)(2)a.i.
- (6) Whenever the following monitored parameters deviate from the range(s) or limit(s) established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation(s):
- a. average combustion temperature within the thermal oxidizer;
  - b. maximum operating temperature for each dryer.
- (7) The permittee shall maintain records of the following information for each investigation required in d)(6):
- 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 operation of the control equipment within the acceptable range/limit 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 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 temperature 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.

- (8) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive PE from any egress points (i.e., building windows, doors, roof monitors, etc.) associated with this emissions unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log, including the date and time the daily check was performed. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. the total duration of any visible emission incident; and
  - c. any corrective actions taken to minimize or eliminate the visible emissions.
- (9) This PTIO application for this emissions unit, P002, was evaluated based on the actual materials and the design parameters of each emissions unit's exhaust system, as specified by the permittee in the PTIO 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 PTIO application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-

level concentration from the use of the SCREEN 3.0 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:** Acetaldehyde

TLV (mg/m<sup>3</sup>): 45.04

Maximum Hourly Emission Rate (lbs/hr): 0.34

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 1.077

MAGLC (ug/m<sup>3</sup>): 1,072

**Pollutant:** Hexane

TLV (mg/m<sup>3</sup>): 176.23

Maximum Hourly Emission Rate (lbs/hr): 0.54

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 1.711

MAGLC (ug/m<sup>3</sup>): 4,196

**Pollutant:** Formaldehyde

TLV (mg/m<sup>3</sup>): 0.368

Maximum Hourly Emission Rate (lbs/hr): 0.24

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 0.7598

MAGLC (ug/m<sup>3</sup>): 8.77

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 still 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 toxic air contaminant listed in OAC rule 3745-114-01 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 emissions of any toxic air contaminant listed in OAC rule 3745-114-01 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 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 provisions 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 still satisfy the "Air Toxic Policy:"

- d. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- e. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- f. 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 District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (2) The permittee shall identify in the annual PER the following information concerning the operations of the thermal oxidizer and dryers 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 following parameters were outside of the range(s) or limit(s) specified by the manufacturer and/or outside of the acceptable range(s) or limit(s) following any required compliance demonstration:
    - i. average combustion temperature within the thermal oxidizer; and/or
    - ii. maximum operating temperature for each dryer.
  - b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to the thermal oxidizer.
  - c. each incident of deviation described in e)(3)a. or e)(3)b. (above) where a prompt investigation was not conducted;
  - d. each incident of deviation described in e)(3)a. or e)(3)b. where prompt corrective action, that would bring the emissions unit into compliance and/or the temperature within the thermal oxidizer into compliance with the acceptable range, was determined to be necessary and was not taken; and

- e. each incident of deviation described in e)(3)a. or e)(3)b. where proper records were not maintained for the investigation and/or the corrective action(s).
- (3) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in d)(8):
- a. all instances during which any visible fugitive particulate emissions were observed from the area immediately above the capture system serving this emissions unit; and
  - b. any corrective actions taken to eliminate the visible fugitive particulate emissions.
- The above information shall be provided as an attachment to the PER. If there were no day(s) and/or instances to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.
- (4) The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.
- (5) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

f) **Testing Requirements**

- (1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within one year after issuance of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the NO<sub>x</sub>, CO and VOC mass emission limitations from the thermal oxidizer controlling this emissions unit. Emission testing shall also be conducted to demonstrate compliance with the control efficiency limitation for VOCs from the thermal oxidizer controlling this emissions unit.
  - c. The following test methods shall be employed to demonstrate compliance with the allowable mass emission rates:

For NO<sub>x</sub>: Methods 1-4 and 7 of 40 CFR, Part 60, Appendix A;

For CO: Methods 1-4 and 10 of 40 CFR, Part 60, Appendix A; and

For VOC: Methods 1-4 and 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

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

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Methods 18, 25, or 25A, as appropriate, or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

- d. During the emissions testing, the emissions unit shall be operated under operational conditions approved in advance by the appropriate Ohio EPA District Office or local air agency. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.), or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under "worst case" conditions expected during the life of the permit. As part of the information provided in the "Intent to Test" notification form described below, the permittee shall provide a description of the emissions unit operational conditions they will meet during the emissions testing and describe why they believe "worst case" operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA District Office or local air agency that the proposed operating conditions constitute "worst case". Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.
  - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
  - f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
  - g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
- (2) 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:

10.00 lbs NO<sub>x</sub>/hr; 43.80 tons NO<sub>x</sub>/yr  
9.88 lbs CO/hr; 43.30 tons CO/yr  
4.00 lbs VOC/hr; 17.52 tons VOC/yr

Applicable Compliance Method:

Compliance with the hourly mass emission limitations shall be demonstrated in accordance with the performance testing required in section f)(1) above.

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

b. Emission Limitations:

2.00 lbs PM<sub>10</sub>/hr; 8.80 tons PM<sub>10</sub>/yr  
9.13 lbs SO<sub>2</sub>/hr; 40.00 tons SO<sub>2</sub>/yr

Applicable Compliance Method:

Compliance with the hourly mass emission limitations has been previously demonstrated with performance testing conducted June 15, 2011 on this emissions unit.

If required, compliance with the hourly emission limitations shall be demonstrated in accordance with the following:

For PM<sub>10</sub>: Methods 1-5 of 40 CFR, Part 60, Appendix A and Methods 201/201A and 202 of 40 CFR, Part 51, Appendix M; and

For SO<sub>2</sub>: Methods 1-4 and 6 of 40 CFR, Part 60, Appendix A.

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

c. Emission Limitation:

Visible stack PE shall not exceed 10% opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance with visible PE limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

d. Emission Limitation:

4.50 tons fugitive VOC/yr

Applicable Compliance Method:

The annual emission limitation was developed 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 #03-16271. Table 4-E. Therefore, provided compliance is shown with the LDAR program as described in condition b)(2)g. and g)(1), compliance with the annual limitation shall also be demonstrated.

e. Emission Limitation:

No visible fugitive PE from any building openings associated with this emissions unit

Applicable Compliance Method:

If required, compliance with visible PE limitation shall be determined in accordance with Method 22 of 40 CFR, Part 60, Appendix A.

g) **Miscellaneous Requirements**

(1) Within 180 days of the issuance of this permit, the permittee shall update the existing onsite fugitive LDAR program. At a minimum, the program shall include all the appropriate process equipment and regulated components that are subject to this program and clearly identify how the permittee will comply with the appropriate provisions (including operational restrictions, monitoring, record keeping, reporting and testing) of OAC rule 3745-21-09(DD) and 40 CFR, Part 60, Subpart VVa.

(2) Within 180 days of the issuance of this permit, the permittee shall update the existing startup, shutdown and malfunction (SSM) plan. This plan must be maintained on site and is subject to review and approval of the Ohio EPA, Northwest District Office.

\*It should be noted that this is an administrative modification to PTIO P0117569, issued December 4, 2014. The permittee submitted an updated SSM plan on November 14, 2015; therefore, the company has fulfilled the above requirement.

(3) The permittee shall submit information specifying the maximum operating temperature for each dryer [see b)(2)a.i.]. The information shall be submitted in association with the "Intent to Test" notification specified in section f)(1)e.

**5. P003, Cooling Tower**

**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(A)(3)	1.44 lbs particulate emissions (PE)/hr; 6.31 tons PE/yr  Control Requirements [See b)(2)a. and b)(2)b.]
b.	OAC rule 3745-17-07(A)	Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule
c.	OAC rule 3745-17-11(B)(4)	See b)(2)c.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) control requirements for this emissions unit have been determined to be the use of high efficiency drift eliminators and compliance with the emission limitations specified in b)(1)a.

b. The requirements of this rule also includes compliance with the requirements of OAC rule 3745-17-07(A)(1).

- c. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- c) Operational Restrictions
- (1) The permittee shall not exceed an average annual total dissolved solids content of 2,500 parts per million (ppm) in this emissions unit.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall perform the following monitoring requirements for emissions unit P003 on a monthly basis:
- a. Test and record the total dissolved solids content, in ppm; and
- b. Determine the average dissolved solids content, in ppm on an annual basis.
- e) Reporting Requirements
- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The 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 reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- 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:  
1.44 lbs PE/hr; 6.31 tons PE/yr
- Applicable Compliance Method:
- The hourly emission limitation shall be established by applying the maximum drift loss factor of 0.005 percent to the maximum average total dissolved solids content of 2,500 ppm and a maximum flow rate of 1,080,000 gallons per hour for the cooling water. Therefore, provided the permittee demonstrates compliance with the average dissolved solids content, compliance with the hourly emission limitation shall also be demonstrated.
- If required, the permittee shall submit a test proposal which will demonstrate that the maximum drift loss does not exceed 0.005 percent.



The annual emission limitation was determined by multiplying the hourly emission limitation by a maximum operating schedule of 8760 hrs/yr, then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

b. Emission Limitations:

Visible PE shall not exceed 20% opacity, as a six-minute average, except as provided by rule

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

- (1) None.

**6. P004, Fermentation Process with Scrubber**

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

Fermentation process including 6 fermentation tanks, beerwell, beer degasser and regen eductor controlled by a CO2 scrubber. Uncontrolled process equipment included in this emissions unit include the slurry tank and yeast tank.

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)(7).

(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)	<u>CO2 Scrubber Emissions</u> 6.20 lbs volatile organic compounds (VOC)/hr; 27.16 tons VOC/yr during normal operations  9.02 tons VOC/yr during scrubber bypass events [See c)(1)]  <u>Slurry Tank Vent Emissions</u> 4.38 tons VOC/yr  <u>Yeast Tank Vent Emissions</u> 4.38 tons VOC/yr  See b)(2)a.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements have been determined to be the use of a CO<sub>2</sub> scrubber that is designed to achieve a minimum of 98% collection efficiency at all times this emissions unit is in normal operations mode and compliance with the emission limitations specified in b)(1)a.

c) Operational Restrictions

- (1) The following operational restrictions have been included in this permit for the purpose of establishing the annual VOC emission limitation associated with scrubber bypass events:

- a. fermenters shall not undergo any transferring, emptying, and/or refilling operations; and
- b. only 2 fermenters may be active.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:

- a. The calculated emissions of VOC\*, in tons; and
- b. The annual, year-to-date, emissions of VOC, in tons.

\*Emissions of VOC shall be calculated using the emissions data collected during the most recent performance test conducted on this emissions unit, as well as any site specific information available to the permittee. The monthly emissions shall include any emissions associated with startups, shutdowns, or process upsets, if applicable. The monthly emissions shall not include scrubber bypass events.

- (2) For each scrubber bypass event the permittee shall maintain records of the following information:

- a. The total duration of the scrubber bypass event; and
- b. The calculated emissions of VOC\*, in tons.

\*Emissions of VOC shall be determined in accordance with the emissions calculations approach presented to the Ohio EPA, submitted by the permittee on January 5, 2016 as a supplemental document to permit application (A0054932).

- (3) The acceptable range/limit for the pressure drop across the CO<sub>2</sub> scrubber and the scrubber liquid flow rate shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range or limit for each parameter is established to demonstrate compliance.

These range(s) and/or 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 Northwest District Office. The permittee may request revisions to the permitted range or limit for the pressure drop or liquid flow rate based upon information obtained during future performance tests that demonstrate compliance with the allowable VOC emission rate for this emissions units. 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 permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop across the scrubber (in pounds per square inch, gauge), and the scrubber liquid flow rate (in gallons per minute), including periods of startup and shutdown. 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. The acceptable pressure drop and liquid flow rate and shall be based upon the manufacturer's specifications until such time as any required performance testing is conducted and the appropriate range for each parameter is established to demonstrate compliance. Following compliance testing, the permittee shall collect and record the following information on a once per shift basis when the emissions unit(s) is/are in operation:
- a. the pressure drop across the scrubber, in inches of water;
  - b. the scrubber liquid flow rate, in gallons per minute; and
  - c. a log (date and total time) of the downtime or bypass of the scrubber, and/or downtime of the monitoring equipment, when the associated emissions unit was in operation.

These records shall be maintained at the facility for a period of three years.

- (5) Whenever the following monitored parameters deviate from the range(s) or limit(s) established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation(s):
- a. pressure drop across CO2 scrubber; and
  - b. CO2 scrubber liquid flow rate.
- (6) The permittee shall maintain records of the following information for each investigation required in d)(5):
- 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 operation of the control equipment within the acceptable range/limit 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 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; and
- j. 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.

- (7) This PTIO application for this emissions unit, P004, was evaluated based on the actual materials and the design parameters of each emissions unit's exhaust system, as specified by the permittee in the PTIO 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 PTIO application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 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:** Acetaldehyde

TLV (mg/m<sup>3</sup>): 45.04

Maximum Hourly Emission Rate (lbs/hr): 1.51

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 401.4

MAGLC (ug/m<sup>3</sup>): 1,072

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 still 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 an toxic air contaminant listed in OAC rule 3745-114-01 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 emissions of any toxic air contaminant listed in OAC rule 3745-114-01 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 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 provisions 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 still satisfy the "Air Toxic Policy:"

- d. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- e. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- f. 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 District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (2) The permittee shall identify in the annual PER the following information concerning the operations of the CO<sub>2</sub> scrubber during the 12-month reporting period for this emissions unit:
  - a. each period of time (start time and date, and end time and date) when the following parameters were outside of the range(s) or limit(s) specified by the manufacturer and/or outside of the acceptable range(s) or limit(s) following any required compliance demonstration:
    - i. pressure drop across the CO<sub>2</sub> scrubber; and

- ii. liquid flow rate for the CO<sub>2</sub> scrubber.
  - b. any period of time (start time and date, and end time and date) when the emissions unit was in operation and the process emissions were not vented to:
    - i. the CO<sub>2</sub> scrubber.
  - c. each incident of deviation described in e)(2)a. or e)(2)b. where a prompt investigation was not conducted;
  - d. each incident of deviation described in e)(2)a. or e)(2)b. where prompt corrective action, that would bring the emissions unit(s) into compliance with the acceptable range, was determined to be necessary and was not taken; and
  - e. each incident of deviation described in e)(2)a. or e)(2)b. where proper records were not maintained for the investigation and/or the corrective action(s).
- (3) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

f) Testing Requirements

- (1) The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
- a. The emission testing shall be conducted within one year after issuance of this permit.
  - b. The emission testing shall be conducted to demonstrate compliance with the VOC mass emission limitations from the CO<sub>2</sub> scrubber controlling this emissions unit. Emission testing shall also be conducted to demonstrate compliance with the control efficiency limitation for VOCs from the CO<sub>2</sub> scrubber controlling this emissions unit.
  - c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s):

For VOC: Methods 1-4 and 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

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

The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Methods 18, 25, or 25A, as appropriate, or an alternative test protocol approved by the Ohio EPA. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

- d. During the emissions testing, the emissions unit shall be operated under operational conditions approved in advance by the appropriate Ohio EPA District Office or local air agency. Operational conditions that may need to be approved include, but are not limited to, the production rate, the type of material processed, material make-up (solvent content, etc.), or control equipment operational limitations (burner temperature, precipitator voltage, etc.). In general, testing shall be done under “worst case” conditions expected during the life of the permit. As part of the information provided in the “Intent to Test” notification form described below, the permittee shall provide a description of the emissions unit operational conditions they will meet during the emissions testing and describe why they believe “worst case” operating conditions will be met. Prior to conducting the test(s), the permittee shall confirm with the appropriate Ohio EPA District Office or local air agency that the proposed operating conditions constitute “worst case”. Failure to test under the approved conditions may result in Ohio EPA not accepting the test results as a demonstration of compliance.
  - e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission test(s).
  - f. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.
  - g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the appropriate Ohio EPA District Office or local air agency.
- (2) Compliance with the Emissions Limitations and/or Control Requirements specified in section b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

6.20 lbs of VOC/hr, 27.16 tons of VOC/yr

Applicable Compliance Method:

Compliance with the hourly mass emission limitation shall be demonstrated by the performance testing required in condition f)(1).

The permittee shall demonstrate compliance with the annual emission limitation in accordance with the record keeping requirements specified in section d)(1) of this permit.

b. Emission Limitation:

9.02 tons VOC/yr during scrubber bypass events

Applicable Compliance Method:

The permittee shall demonstrate compliance with the annual emission limitation in accordance with the record keeping requirements specified in section d)(2) of this permit.

c. Emission Limitation:

4.38 tons VOC/yr from slurry tank vents

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4 and 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

d. Emission Limitation:

4.38 tons VOC/yr from yeast tank vents

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4 and 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

(1) None.

**7. P901, Grain Receiving**

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

Grain Receiving

- 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)	<u>Stack Emissions:</u> 0.001 grain particulate emissions (PE)/dry standard cubic foot (dscf); 1.73 tons PE/yr for P901 and P902, combined  <u>Fugitive Emissions:</u> 0.12 ton PE/yr  Control Requirements [See b)(2)a.]
b.	40 CFR, Part 60, Subpart DD	Visible stack PE shall not exceed 0% opacity, as a six-minute average  Visible fugitive PE shall not exceed 5% opacity, as a three-minute average  See b)(2)e.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(A)	See b)(2)b.
d.	OAC rule 3745-17-11(B)	See b)(2)b.
e.	OAC rule 3745-17-07(B)	See b)(2)c.
f.	OAC rule 3745-17-08(B)	See b)(2)d.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) control requirements for this emissions unit have been determined to be the use of a two-sided enclosure with receiving pits with aspiration to a baghouse\*, compliance with the emission limitations specified in b)(1)a. and compliance with the requirements of 40 CFR, Part 60, Subpart DD.

\*This baghouse controls emissions units P901 and P902.

- b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- c. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- d. The facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).
- e. These opacity requirements apply to grain handling operations as they are defined in 40 CFR, Part 60, Subpart DD.

c) Operational Restrictions

- (1) The maximum annual grain throughput for this emissions unit shall not exceed 710,769 tons grain/year.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. the total grain throughput, in tons; and
  - b. total grain throughput, to date for the calendar year.
- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the location and color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(2)d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The 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 identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(2) above:
  - a. all instances during which any visible particulate emissions were observed from the stack serving this emissions unit;
  - b. all instances during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
  - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or instances to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

- (3) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

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:

0.001 grain PE/dscf; 1.73 tons PE/yr (stack)

Applicable Compliance Method:

Compliance with the allowable grain outlet concentration has been demonstrated by performance testing conducted on June 15, 2011.

If required, compliance with the grain/dscf emission limitation shall be determined in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was developed by multiplying the maximum outlet concentration of 0.001 grain/dscf by a maximum volumetric air flow rate of 46,000 acfm by 60 min/hr, and applying a conversion factor of 1 lb/7000 grains, then multiplying by a maximum operating schedule of 8760 hrs/yr, then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the maximum grain outlet concentration, compliance with the annual limitation shall also be demonstrated.

b. Emission Limitation:

Visible stack PE shall not exceed 0% opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

c. Emission Limitation:

0.12 ton fugitive PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by multiplying an AP-42 emission factor of 0.035 lb PE/ton from grain receiving [Section 9.9.1 (5/98)] by a maximum annual grain throughput of 710,769 tons grain/yr, then dividing by 2000 lbs/ton and applying a 99% capture efficiency for the use of total enclosure with aspiration to a baghouse.



d. Emission Limitation:

Visible fugitive PE shall not exceed 5% opacity, as a three-minute average

Applicable Compliance Method:

If required, compliance with the visible fugitive emission limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

g) Miscellaneous Requirements

- (1) The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR, Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements for 40 CFR, Part 60, are also federally enforceable.

**8. P902, Grain Handling and Storage**

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

Grain Handling and Storage

- 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)	<u>Stack Emissions:</u> 0.001 grain particulate emissions (PE)/dry standard cubic foot (dscf); 1.73 tons PE/yr for P901 and P902, combined  0.44 ton PE/yr (bin vents)  <u>Fugitive Emissions:</u> 0.22 ton PE/yr  Control Requirements [See b)(2)a.]
b.	40 CFR, Part 60, Subpart DD	Visible stack PE shall not exceed 0% opacity, as a six-minute average  Visible fugitive PE shall not exceed 5% opacity, as a three-minute average See b)(2)e.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
c.	OAC rule 3745-17-07(A)	See b)(2)b.
d.	OAC rule 3745-17-11(B)	See b)(2)b.
e.	OAC rule 3745-17-07(B)	See b)(2)c.
f.	OAC rule 3745-17-08(B)	See b)(2)d.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) control requirements for this emissions unit have been determined to be the use of a two-sided enclosure with receiving pits with aspiration to a baghouse\*, compliance with the emission limitations specified in b)(1)a. and compliance with the requirements of 40 CFR, Part 60, Subpart DD.

\*This baghouse controls emissions units P901 and P902.

b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

c. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).

d. The facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

e. These opacity requirements apply to grain handling operations as they are defined in 40 CFR, Part 60, Subpart DD.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the location and color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and

- e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(1)d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The 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 identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
  - a. all instances during which any visible particulate emissions were observed from the stack serving this emissions unit;
  - b. all instances during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
  - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or instances to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

- (3) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

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:

0.001 grain PE/dscf; 1.73 tons PE/yr (stack)

Applicable Compliance Method:

Compliance with the allowable grain outlet concentration has been demonstrated by performance testing conducted on June 15, 2011.

If required, compliance with the grain/dscf emission limitation shall be determined in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was developed by multiplying the maximum outlet concentration of 0.001 grain/dscf by a maximum volumetric air flow rate of 46,000 acfm by 60 min/hr, and applying a conversion factor of 1 lb/7000 grains, then multiplying by a maximum operating schedule of 8760 hrs/yr, then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the maximum grain outlet concentration, compliance with the annual limitation shall also be demonstrated.

b. Emission Limitation:

0.44 ton PE/yr (bin vent)

Applicable Compliance Method:

The permittee shall demonstrate compliance by multiplying an AP-42 emission factor of 0.025 lb PE/ton from storage bin [Section 9.9.1 (5/98)] by a maximum annual grain throughput of 710,769 tons grain/yr\*, then dividing by 2000 lbs/ton and applying a 95% capture efficiency for the use of total enclosure with aspiration to a baghouse.

\*This limit is established as a maximum annual throughput in emissions unit P901, grain receiving, and; therefore, effectively restricts throughput in this emissions unit as well.

c. Emission Limitation:

Visible stack PE shall not exceed 0% opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

d. Emission Limitation:

0.22 ton fugitive PE/yr



Applicable Compliance Method:

The permittee shall demonstrate compliance by multiplying an AP-42 emission factor of 0.061 lb PE/ton from grain handling [Section 9.9.1 (5/98)] by a maximum annual grain throughput of 710,769 tons grain/yr\*, then dividing by 2000 lbs/ton and applying a 99% capture efficiency for the use of total enclosure with aspiration to a baghouse.

\*This limit is established as a maximum annual throughput in emissions unit P901, grain receiving, and; therefore, effectively restricts throughput in this emissions unit as well.

e. Emission Limitation:

Visible fugitive PE shall not exceed 5% opacity, as a three-minute average

Applicable Compliance Method:

If required, compliance with the visible fugitive emission limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

g) **Miscellaneous Requirements**

- (1) The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR, Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements for 40 CFR, Part 60, are also federally enforceable.

**9. P903, DDGS Cooling**

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

Dried Distillers Grains Handling and Cooling

- 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)(3).
  - (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)	<p><u>Stack Emissions:</u></p> <p>0.0045 grain particulate emissions (PE)/dry standard cubic foot (dscf); 2.53 tons PE/yr</p> <p>Visible stack PE shall not exceed 0% opacity, as a six-minute average</p> <p>2.40 lbs volatile organic compounds (VOC)/hr; 10.51 tons VOC/yr</p> <p><u>Fugitive Emissions:</u></p> <p>0.26 ton PE/yr</p> <p>Visible fugitive PE shall not exceed 5% opacity, as a three-minute average</p> <p>Control Requirements [See b)(2)a.]</p>

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-17-11(B)	See b)(2)b.
d.	OAC rule 3745-17-07(B)	See b)(2)c.
e.	OAC rule 3745-17-08(B)	See b)(2)d.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) control requirements for this emissions unit have been determined to be the use of a partial enclosure with aspiration to a baghouse and compliance with the emission limitations specified in b)(1)a.
- b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- c. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- d. The facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the following information for this emissions unit:
  - a. The DDGS throughput, in tons per month and total tons, to date for the calendar year;
  - b. The calculated emissions of VOC\*, in tons; and
  - c. The annual, year-to-date emissions of VOC, in tons.

\*Emissions of VOC shall be calculated using the emissions data collected during the most recent performance test conducted on this emissions unit. The monthly emissions shall include any emissions associated with startups or process upsets, if applicable.

- (2) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

- a. the location and color of the emissions;
- b. whether the emissions are representative of normal operations;
- c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
- d. the total duration of any visible emissions incident; and
- e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(2)d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

- (3) This PTIO application for this emissions unit, P903, was evaluated based on the actual materials and the design parameters of each emissions unit's exhaust system, as specified by the permittee in the PTIO 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 PTIO application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 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:** Acetaldehyde

TLV (mg/m<sup>3</sup>): 45.04

Maximum Hourly Emission Rate (lbs/hr): 0.06

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 2.419

MAGLC (ug/m<sup>3</sup>): 1,072

**Pollutant:** Formaldehyde

TLV (mg/m<sup>3</sup>): 0.368

Maximum Hourly Emission Rate (lbs/hr): 0.025

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 1.018

MAGLC (ug/m<sup>3</sup>): 8.77

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 still 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 an toxic air contaminant listed in OAC rule 3745-114-01 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 emissions of any toxic air contaminant listed in OAC rule 3745-114-01 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 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 provisions 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 still satisfy the "Air Toxic Policy:"

- d. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- e. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- f. 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 District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
- (2) The permittee shall identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(2) above:

- a. all instances during which any visible particulate emissions were observed from the stack serving this emissions unit;
- b. all instances during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
- c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or instances to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

- (3) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

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:

0.0045 grain PE/dscf; 2.53 tons PE/yr (stack)

Applicable Compliance Method:

The maximum grain outlet concentration was determined based on manufacturer guarantee.

If required, compliance with the grain/dscf emission limitation shall be determined in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was developed by multiplying the maximum outlet concentration of 0.0045 grain/dscf by a maximum volumetric air flow rate of 15,000 acfm by 60 min/hr, and applying a conversion factor of 1 lb/7000 grains, then multiplying by a maximum operating schedule of 8760 hrs/yr, then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the maximum grain outlet concentration, compliance with the annual limitation shall also be demonstrated.

b. Emission Limitation:

2.40 lbs VOC/hr; 10.51 tons VOC/yr

Applicable Compliance Method:

Compliance with the hourly emission limitation has been demonstrated by performance testing conducted on June 16, 2011.

If required, compliance with the grain/dscf emission limitation shall be determined in accordance with Methods 1-4 and 18, 25 or 25A, as appropriate, of 40 CFR, Part 60, Appendix A.

The permittee shall demonstrate compliance with the annual emission limitation in accordance with the record keeping requirements specified in section d)(1) of this permit.

c. Emission Limitation:

Visible stack PE shall not exceed 0% opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

d. Emission Limitation:

0.26 ton fugitive PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by multiplying an AP-42 emission factor of 0.22 lb PE/ton of DDGS cooling product [Section 9.9.1 (5/98)] by a maximum annual grain throughput of 240,000 tons grain/yr\*, then dividing by 2000 lbs/ton and applying a 99% capture efficiency for the use of partial enclosure with aspiration to a baghouse.

\*The annual DDGS throughput of 240,000 tons/yr has been calculated to be the maximum amount of DDGS that can be generated from this facility (which has an annual throughput restriction of 66,000,000 gallons of ethanol per year, see emissions unit J001) and; therefore, effectively restricts throughput in this emissions unit as well.

e. Emission Limitation:

Visible fugitive PE shall not exceed 5% opacity, as a three-minute average

Applicable Compliance Method:

If required, compliance with the visible fugitive emission limitation shall be determined in accordance with Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60, ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002 and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.



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Guardian Lima, LLC  
**Permit Number:** P0120003  
**Facility ID:** 0302020341  
**Effective Date:** 4/5/2016

- g) Miscellaneous Requirements
  - (1) None.



10. P904, DDGS Handling and Storage

Operations, Property and/or Equipment Description:

DDGS Handling and Storage

- 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)	<u>Stack Emissions:</u>  0.01 grain particulate emissions (PE)/dry standard cubic foot (dscf); 1.20 tons PE/yr  Visible stack PE shall not exceed 0% opacity, as a six-minute average  <u>Fugitive Emissions:</u>  0.10 ton PE/yr  Visible fugitive PE shall not exceed 5% opacity, as a three-minute average  Control Requirements [See b)(2)a.]
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-17-11(B)	See b)(2)b.



	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-07(B)	See b)(2)c.
e.	OAC rule 3745-17-08(B)	See b)(2)d.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) control requirements for this emissions unit have been determined to be the use of a partial enclosure with adjustable chutes, aspiration to a baghouse and compliance with the emission limitations specified in b)(1)a.
- b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- c. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- d. The facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emissions incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(1)d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous

during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The 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 identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
  - a. all instances during which any visible particulate emissions were observed from the stack serving this emissions unit;
  - b. all instances during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
  - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or instances to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

- (3) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

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:  
0.01 grain PE/dscf; 1.20 tons PE/yr (stack)  
Applicable Compliance Method:  
The maximum grain outlet concentration was determined based on manufacturer guarantee.

If required, compliance with the grain/dscf emission limitation shall be determined in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was developed by multiplying the maximum outlet concentration of 0.01 grain/dscf by a maximum volumetric air flow rate of 3,100 acfm by 60 min/hr, and applying a conversion factor of 1 lb/7000 grains, then multiplying by a maximum operating schedule of 8760 hrs/yr, then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the maximum grain outlet concentration, compliance with the annual limitation shall also be demonstrated.

b. Emission Limitation:

Visible stack PE shall not exceed 0% opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

c. Emission Limitation:

0.10 ton fugitive PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by multiplying an AP-42 emission factor of 0.0033 lb PE/ton of DDGS handling [Section 9.9.1 (5/98)] by a maximum annual grain throughput of 240,000 tons grain/yr\*, then dividing by 2000 lbs/ton and applying a 99% capture efficiency for the use of partial enclosure with aspiration to a baghouse.

\*The annual DDGS throughput of 240,000 tons/yr has been calculated to be the maximum amount of DDGS that can be generated from this facility (which has an annual throughput restriction of 66,000,000 gallons of ethanol per year, see emissions unit J001) and; therefore, effectively restricts throughput in this emissions unit as well.

d. Emission Limitation:

Visible fugitive PE shall not exceed 5% opacity, as a three-minute average

Applicable Compliance Method:

If required, compliance with the visible fugitive emission limitation shall be determined in accordance with Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60, ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002 and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.



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**Facility ID:** 0302020341  
**Effective Date:** 4/5/2016

- g) Miscellaneous Requirements
  - (1) None.

**11. P905, DDGS Loadout**

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

Dried Distillers Grains with Solubles (DDGS) Loadout (fka F002)

- 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)	<u>Stack Emissions:</u> 0.0045 grain particulate emissions (PE)/dry standard cubic foot (dscf); 0.46 ton PE/yr  Visible stack PE shall not exceed 0% opacity, as a six-minute average  <u>Fugitive Emissions:</u> 0.10 ton PE/yr  Visible fugitive PE shall not exceed 5% opacity, as a three-minute average  Control Requirements [See b)(2)a.]
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-17-11(B)	See b)(2)b.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
d.	OAC rule 3745-17-07(B)	See b)(2)c.
e.	OAC rule 3745-17-08(B)	See b)(2)d.

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) control requirements for this emissions unit have been determined to be the use of a partial enclosure with adjustable chutes and aspiration to a baghouse and compliance with the emission limitations specified in b)(1)a.
- b. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
- c. This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(B) pursuant to OAC rule 3745-17-07(B)(11)(e).
- d. The facility is not located within an "Appendix A" area as identified in OAC rule 3745-17-08. Therefore, pursuant to OAC rule 3745-17-08(A), this emissions unit is exempt from the requirements of OAC rule 3745-17-08(B).

c) Operational Restrictions

- (1) None.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall perform weekly checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack and for any visible emissions of fugitive dust from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:
  - a. the location and color of the emissions;
  - b. whether the emissions are representative of normal operations;
  - c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
  - d. the total duration of any visible emissions incident; and
  - e. any corrective actions taken to minimize or eliminate the visible emissions.

If visible emissions are present, a visible emissions incident has occurred. The observer does not have to document the exact start and end times for the visible emissions incident under item d)(1)d. above or continue the daily check until the incident has ended. The observer may indicate that the visible emissions incident was continuous

during the observation period (or, if known, continuous during the operation of the emissions unit). With respect to the documentation of corrective actions, the observer may indicate that no corrective actions were taken if the visible emissions were representative of normal operations, or specify the minor corrective actions that were taken to ensure that the emissions unit continued to operate under normal conditions, or specify the corrective actions that were taken to eliminate abnormal visible emissions.

e) Reporting Requirements

- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The 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 identify the following information in the annual permit evaluation report in accordance with the monitoring requirements for visible emissions in term number d)(1) above:
  - a. all instances during which any visible particulate emissions were observed from the stack serving this emissions unit;
  - b. all instances during which any visible emissions of fugitive dust were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit; and
  - c. any corrective actions taken to minimize or eliminate the visible particulate emissions from the stack and/or visible emissions of fugitive dust.

The above information shall be provided as an attachment to the PER. If there were no day(s) and/or instances to identify as required above, the permittee shall indicate within the "Additional Information and Corrections" section of the PER that no visible emissions were observed and no corrective actions were taken.

- (3) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

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:  
0.0045 grain PE/dscf; 0.46 ton PE/yr (stack)  
Applicable Compliance Method:  
Compliance with the allowable grain outlet concentration has been demonstrated by performance testing conducted on June 14, 2011.

If required, compliance with the grain/dscf emission limitation shall be determined in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was developed by multiplying the maximum outlet concentration of 0.0045 grain/dscf by a maximum volumetric air flow rate of 2,750 acfm by 60 min/hr, and applying a conversion factor of 1 lb/7000 grains, then multiplying by a maximum operating schedule of 8760 hrs/yr, then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the maximum grain outlet concentration, compliance with the annual limitation shall also be demonstrated.

b. Emission Limitation:

Visible stack PE shall not exceed 0% opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible PE limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.

c. Emission Limitation:

0.10 ton fugitive PE/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by multiplying an AP-42 emission factor of 0.0033 lb PE/ton of DDGS handling [Section 9.9.1 (5/98)] by a maximum annual grain throughput of 240,000 tons grain/yr\*, then dividing by 2000 lbs/ton and applying a 95% capture efficiency.

\*The annual DDGS throughput of 240,000 tons/yr has been calculated to be the maximum amount of DDGS that can be generated from this facility (which has an annual throughput restriction of 66,000,000 gallons of ethanol per year, see emissions unit J001) and; therefore, effectively restricts throughput in this emissions unit as well.

d. Emission Limitation:

Visible fugitive PE shall not exceed 5% opacity, as a three-minute average

Applicable Compliance Method:

If required, compliance with the visible fugitive emission limitation shall be determined in accordance with Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60, ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002 and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.



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g) Miscellaneous Requirements

(1) None.

**12. T003, Gasoline Denaturant Tank, 56,000 Gallons**

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

Gasoline Denaturant Tank, 56,000 Gallons

- 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)	1.0 ton volatile organic compounds (VOC)/yr  See b)(2)a.
b.	OAC rule 3745-21-09(L)	See b)(2)b. through b)(2)d. and d)(1)
c.	40 CFR, Part 60, Subpart Kb  40 CFR 60.112b 40 CFR 60.113b 40 CFR 60.115b 40 CFR 60.116b	See b)(2)e. through b)(2)m. and c)(2)  See d)(2) through d)(5) and e)(2)  See d)(6) through d)(7) and e)(3) through e)(5)  See d)(8) through d)(10) and e)(6)

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) requirements for this emissions unit have been determined to be the use of submerged fill and an internal floating roof and compliance with OAC rule 3745-21-09(L) and 40 CFR, Part 60, Subpart Kb.
- b. The fixed roof storage tank shall be equipped with an internal floating roof.
- c. The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.
- d. All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.
- e. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
- f. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
  - i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
  - ii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
  - iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- g. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

- h. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
  - i. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
  - j. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
  - k. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
  - l. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
  - m. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
- c) Operational Restrictions
- (1) The permittee shall not exceed an annual material throughput rate of 1,650,000 gallons.
  - (2) The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.11 psia.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain records of the following information:
    - a. The types of petroleum liquids stored in the tank.
    - b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute. Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:
      - i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

- ii. For refined petroleum products the vapor pressure may be obtained by the following:
    - (a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Ohio EPA, Northwest District Office (NWDO) specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
    - (b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.
  - iii. For other liquids, the vapor pressure:
    - (a) May be obtained from standard reference texts, or
    - (b) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or
    - (c) Measured by an appropriate method approved by the OEPA, NWDO; or
    - (d) Calculated by an appropriate method approved by the OEPA, NWDO.
- (2) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
- (3) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the OEPA, NWDO in the inspection report required in e)(3). Such a request for an extension must document that alternate storage capacity is

unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

- (4) For vessels equipped with a double-seal system as specified in b)(2)f.ii:
    - a. visually inspect the vessel as specified in d)(5) at least every 5 years; or
    - b. visually inspect the vessel as specified in d)(3).
  - (5) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in d)(3) and d)(4)b. and at intervals no greater than 5 years in the case of vessels specified in d)(4)a.
  - (6) The owner or operator shall keep copies of all reports and records required in e)(2), e)(3), and e)(4), for at least 2 years.
  - (7) Keep a record of each inspect inspection performed as required by d)(2), d)(3), d)(4), and d)(5). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
  - (8) The owner or operator shall keep copies of all records required by d)(2) through d)(7) for at least 2 years.
  - (9) The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).
  - (10) The permittee shall maintain monthly records of the amount of (gallons per month and total gallons, to date for the calendar year) of material throughput for this emissions unit.
- e) Reporting Requirements
- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
  - (2) Notify the OEPA, NWDO in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by d)(2) and d)(5) to afford the OEPA, NWDO the opportunity to have an observer present. If the inspection required by d)(5) is

not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the OEPA, NWDO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the OEPA, NWDO at least 7 days prior to the refilling.

- (3) Furnish the OEPA, NWDO with a report that describes the control equipment and certifies that the control equipment meets the specifications of b)(2)e. through b)(2)m. and d)(2). This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
- (4) If any of the conditions described in d)(3) are detected during the annual visual inspection required by d)(3), a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
- (5) After each inspection required by d)(4) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in d)(4)b., a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of b)(2)e. through b)(2)m. or d)(4) and list each repair made.
- (6) If the permittee placed, stored, or held in this emissions unit any petroleum liquid with a true vapor pressure which was greater than 11.11 pounds per square inch absolute, the permittee shall notify the Ohio EPA Northwest District Office within 30 days of becoming aware of the occurrence.
- (7) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

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:

1.0 ton VOC/yr

Applicable Compliance Method:

The permittee shall demonstrate compliance by calculations as determined by U.S. EPA Tanks 4.0 program with a maximum annual material throughput of 1,650,000 gallons.



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**Facility ID:** 0302020341  
**Effective Date:** 4/5/2016

- g) Miscellaneous Requirements
  - (1) None.

**13. T004, Denatured Ethanol Tank, 2,016,000 Gallons**

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

Denatured Ethanol Tank, 2,016,000 Gallons

- 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)	0.30 ton volatile organic compounds (VOC)/yr  See b)(2)a. through b)(2)m.
b.	OAC rule 3745-21-09(L)	See b)(2)n.
c.	40 CFR, Part 60, Subpart Kb	See b)(2)o.

- a. The Best Available Technology (BAT) control requirements for this emissions unit have been determined to be the use of submerged fill and an internal floating roof.
- b. The fixed roof storage tank shall be equipped with an internal floating roof.
- c. The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

- d. All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.
- e. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
- f. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
  - i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
  - ii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
  - iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- g. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
- h. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
- i. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

- j. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
  - k. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
  - l. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
  - m. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
  - n. OAC rule 3745-21-09(L) is not applicable because this tank does not store petroleum liquids as defined in OAC rule 3745-21-01(E)(13).
  - o. The requirements specified by this rule are less stringent than or as stringent as the requirements established pursuant to OAC rule 3745-31-05(A)(3).
- c) **Operational Restrictions**
- (1) The permittee shall not exceed an annual material throughput rate of 67,650,000 gallons.
  - (2) The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 5.5 pound per square inch absolute.
- d) **Monitoring and/or Recordkeeping Requirements**
- (1) The permittee shall maintain records of the following information:
    - a. The types of petroleum liquids stored in the tank.
    - b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 5.5 pound per square inch absolute. Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:
      - i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
      - ii. For refined petroleum products the vapor pressure may be obtained by the following:

- (a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Ohio EPA, Northwest District Office (NWDO) specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
    - (b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa
  - iii. For other liquids, the vapor pressure:
    - (a) May be obtained from standard reference texts, or
    - (b) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or
    - (c) Measured by an appropriate method approved by the OEPA, NWDO; or
    - (d) Calculated by an appropriate method approved by the OEPA, NWDO.
- (2) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
- (3) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the OEPA, NWDO in the inspection report required in e)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

- (4) For vessels equipped with a double-seal system as specified in b)(2)f.ii.:
    - a. visually inspect the vessel as specified in d)(5) at least every 5 years; or
    - b. visually inspect the vessel as specified in d)(3).
  - (5) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in d)(3) and d)(4)b. and at intervals no greater than 5 years in the case of vessels specified in d)(4)a.
  - (6) The owner or operator shall keep copies of all reports and records required in e)(2), e)(3), and e)(4), for at least 2 years.
  - (7) Keep a record of each inspection performed as required by d)(2), d)(3), d)(4), and d)(5). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
  - (8) The owner or operator shall keep copies of all records required by d)(2) through d)(7) for at least 2 years.
  - (9) The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).
  - (10) The permittee shall maintain monthly records of the amount of (gallons per month and total gallons, to date for the calendar year) of material throughput for this emissions unit.
- e) Reporting Requirements
- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
  - (2) Notify the OEPA, NWDO in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by d)(2) and d)(5) to afford the OEPA, NWDO the opportunity to have an observer present. If the inspection required by d)(5) is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the OEPA, NWDO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by

telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the OEPA, NWDO at least 7 days prior to the refilling.

- (3) Furnish the OEPA, NWDO with a report that describes the control equipment and certifies that the control equipment meets the specifications of b)(2)e. through b)(2)m. and d)(2). This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
  - (4) If any of the conditions described in d)(3) are detected during the annual visual inspection required by d)(3), a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
  - (5) After each inspection required by d)(4) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in d)(4)b., a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of b)(2)e. through b)(2)m. or d)(4) and list each repair made.
  - (6) If the permittee placed, stored, or held in this emissions unit any petroleum liquid with a true vapor pressure which was greater than 5.5 pounds per square inch absolute, the permittee shall notify the Ohio EPA Northwest District Office within 30 days of becoming aware of the occurrence.
  - (7) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.
- 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:  
0.30 ton VOC/yr  
  
Applicable Compliance Method:  
  
The permittee shall demonstrate compliance by calculations as determined by U.S. EPA Tanks 4.0 program with a maximum annual material throughput of 67,650,000 gallons.
- g) **Miscellaneous Requirements**
- (1) None.

**14. Emissions Unit Group -63 mmBtu/hr NG Fired Boilers: B001,B002,B003**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
B001	63 mmBtu/hr Natural Gas fired Boiler with Low NOx Burners and Flue Gas Recirculation
B002	63 mmBtu/hr Natural Gas Fired Boiler with Low NOx Burners and Flue Gas Recirculation
B003	63 mmBtu/hr Natural Gas Fired Boiler With Low NOx Burners and Flue Gas Recirculation

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)(3).

(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)	<u>From each emissions unit individually:</u>  2.27 lbs nitrogen oxides (NOx)/hr; 9.94 tons NOx/yr  2.33 lbs carbon monoxide (CO)/hr; 10.21 tons CO/yr  0.47 lb particulate emissions (PE)/hr; 2.06 tons PE/yr  0.38 lb volatile organic compounds (VOC)/hr; 1.66 tons VOC/yr  Visible PE shall not exceed 10% opacity, as a six-minute average See b)(2)a.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
b.	OAC rule 3745-17-07(A)	See b)(2)b.
c.	OAC rule 3745-17-10(B)(1)	See b)(2)b.
d.	OAC rule 3745-18-06	See b)(2)c.
e.	40 CFR, Part 60, Subpart Dc	See d)(1)

(2) Additional Terms and Conditions

- a. The Best Available Technology (BAT) control requirements for these emissions units have been determined to be the use of low NOx burners with flue gas recirculation, compliance with the emission limitations specified in b)(1)a. and compliance with 40 CFR, Part 60, Subpart Dc.
- b. The emission limitation specified by this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
- c. These emissions units are exempt from the requirements of OAC rule 3745-18-06 pursuant to OAC rule 3745-18-06(A).

c) Operational Restrictions

- (1) The permittee shall burn only natural gas in these emissions units.

d) Monitoring and/or Recordkeeping Requirements

- (1) The permittee shall maintain monthly records of the type and quantity of fuel burned in each emissions unit.
- (2) For each day during which the permittee burns a fuel other than natural gas the permittee shall maintain a record of the type and quantity of fuel burned in each emissions unit.
- (3) This PTIO application for these emissions units, B001-B003, was evaluated based on the actual materials and the design parameters of each emissions unit's exhaust system, as specified by the permittee in the PTIO 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 PTIO application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 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:** Hexane  
TLV (mg/m<sup>3</sup>): 176.23  
Maximum Hourly Emission Rate (lbs/hr): 0.33  
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m<sup>3</sup>): 8.011  
MAGLC (ug/m<sup>3</sup>): 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 toxic air contaminant listed in OAC rule 3745-114-01 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 emissions of any toxic air contaminant listed in OAC rule 3745-114-01 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 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 provisions 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 still satisfy the "Air Toxic Policy:"

- d. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
- e. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
- f. 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 District Office or Local Air Agency by the due date identified in the Authorization section

of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.

- (2) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

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:

2.27 lbs NO<sub>x</sub>/hr; 9.94 tons NO<sub>x</sub>/yr from each emissions unit individually:

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying the vendor supplied emission factor of 0.036 lb NO<sub>x</sub>/mmBtu by the maximum heat input of 63.0 mmBtu/hr.

If required, compliance with the hourly emission limitation shall be determined in accordance with Methods 1-4 and 7 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was determined by multiplying the hourly emission limitation by a maximum operating schedule of 8760 hrs/yr, then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

b. Emission Limitations:

2.33 lbs CO/hr; 10.21 tons CO/yr from each emissions unit individually

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying the vendor supplied emission factor of 0.037 lb CO/mmBtu by the maximum heat input of 63.0 mmBtu/hr.

If required, compliance with the hourly emission limitation shall be determined in accordance with Methods 1-4 and 10 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was determined by multiplying the hourly emission limitation by a maximum operating schedule of 8760 hrs/yr, then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

c. Emission Limitations:

0.47 lb PE/hr; 2.06 tons PE/yr from each emissions unit individually

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying the emission factor from AP-42, "Compilation of Air Pollutant Emission Factors", 5<sup>th</sup> edition, section 1.4 (7/98) of 7.6 lbs PE/10<sup>6</sup>scf for natural gas and dividing by a conversion factor of 1020 Btu/scf, then multiplying by a maximum heat input of 63.0 mmBtu/hr.

If required, compliance with the hourly emission limitation shall be determined in accordance with Methods 1-5 of 40 CFR, Part 60, Appendix A.

The annual emission limitation was determined by multiplying the hourly emission limitation by a maximum operating schedule of 8760 hrs/yr, then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

d. Emission Limitations:

0.38 lb VOC/hr; 1.66 tons VOC/yr

Applicable Compliance Method:

Compliance with the hourly emission limitation shall be determined by multiplying the vender supplied emission factor of 0.006 lb VOC/mmBtu by the maximum heat input of 63.0 mmBtu/hr.

If required, compliance with the hourly emission limitation shall be determined in accordance with Methods 1-4 and 18, 25 or 25A, as appropriate of 40 CFR, Part 60, Appendix A.

The annual emission limitation was determined by multiplying the hourly emission limitation by a maximum operating schedule of 8760 hrs/yr, then dividing by 2000 lbs/ton. Therefore, provided compliance is shown with the hourly emission limitation, compliance with the annual emission limitation shall also be demonstrated.

e. Emission Limitation:

Visible PE shall not exceed 10% opacity, as a six-minute average

Applicable Compliance Method:

If required, compliance with the visible emission limitation shall be determined in accordance with Method 9 of 40 CFR, Part 60, Appendix A.



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Guardian Lima, LLC  
**Permit Number:** P0120003  
**Facility ID:** 0302020341  
**Effective Date:** 4/5/2016

- g) Miscellaneous Requirements
  - (1) None.

**15. Emissions Unit Group –Ethanol Day Tanks: T001,T002,T005**

<b>EU ID</b>	<b>Operations, Property and/or Equipment Description</b>
T001	200-Proof Ethanol Day Tank No 1, 96,000 Gallons
T002	200-Proof Ethanol Day Tank No 2, 96,000 Gallons
T005	200-Proof Ethanol Day Tank No 3, 96,000 Gallons

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.

	<b>Applicable Rules/Requirements</b>	<b>Applicable Emissions Limitations/Control Measures</b>
a.	OAC rule 3745-31-05(A)(3)	0.40 ton volatile organic compounds (VOC)/yr from each emissions unit individually  See b)(2)a. through b)(2)m.
b.	OAC rule 3745-21-09(L)	See b)(2)o.
c.	40 CFR, Part 60, Subpart Kb	See b)(2)n.

a. The Best Available Technology (BAT) control requirements for these emissions units have been determined to be the use of submerged fill and an internal floating roof.

b. The fixed roof storage tank shall be equipped with an internal floating roof.

c. The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided,

shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

- d. All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.
- e. The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
- f. Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
  - i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
  - ii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
  - iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
- g. Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
- h. Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

- i. Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
  - j. Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
  - k. Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
  - l. Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
  - m. Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
  - n. The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
  - o. OAC rule 3745-21-09(L) is not applicable because these tanks do not store petroleum liquids as defined in OAC rule 3745-21-01(E)(13).
- c) Operational Restrictions
- (1) The permittee shall not exceed an annual material throughput rate of 66,000,000 gallons for each emissions unit individually.
  - (2) The maximum true vapor pressure of organic liquid stored in these storage tanks shall not exceed 0.754 pound per square inch absolute.
- d) Monitoring and/or Recordkeeping Requirements
- (1) The permittee shall maintain records of the following information:
    - a. The types of petroleum liquids stored in each tank.
    - b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 0.754 pound per square inch absolute. Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:
      - i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

- ii. For refined petroleum products the vapor pressure may be obtained by the following:
  - (a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Ohio EPA, Northwest District Office (NWDO) specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
  - (b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa
- iii. For other liquids, the vapor pressure:
  - (a) May be obtained from standard reference texts, or
  - (b) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or
  - (c) Measured by an appropriate method approved by the OEPA, NWDO; or
  - (d) Calculated by an appropriate method approved by the OEPA, NWDO.
- (2) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
- (3) For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the OEPA, NWDO in the inspection report required in e)(4). Such a request for an extension must document that alternate storage capacity is

unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

- (4) For vessels equipped with a double-seal system as specified in b)(2)f.ii.:
    - a. visually inspect the vessel as specified in d)(5) at least every 5 years; or
    - b. visually inspect the vessel as specified in d)(3).
  - (5) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in d)(3) and d)(4)b. and at intervals no greater than 5 years in the case of vessels specified in d)(4)a.
  - (6) The owner or operator shall keep copies of all reports and records required in e)(2), e)(3), e)(4) and e)(5), for at least 2 years.
  - (7) Keep a record of each inspection performed as required by d)(2), d)(3), d)(4), and d)(5). Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).
  - (8) The owner or operator shall keep copies of all reports and records required by d)(2) through d)(7) for at least 2 years.
  - (9) The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).
  - (10) The permittee shall maintain monthly records of the amount of (gallons per month and total gallons, to date for the calendar year) of material throughput for each emissions unit individually.
- e) Reporting Requirements
- (1) The permittee shall submit an annual Permit Evaluation Report (PER) to the Ohio EPA District Office or Local Air Agency by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve months for each air contaminant source identified in this permit.
  - (2) Notify the OEPA, NWDO in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by d)(2) and d)(5) to afford the OEPA, NWDO the opportunity to have an observer present. If the inspection required by d)(5) is

not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the OEPA, NWDO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the OEPA, NWDO at least 7 days prior to the refilling.

- (3) Furnish the OEPA, NWDO with a report that describes the control equipment and certifies that the control equipment meets the specifications of b)(2)e. through b)(2)m. and d)(1). This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.
- (4) If any of the conditions described in d)(3) are detected during the annual visual inspection required by d)(3), a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
- (5) After each inspection required by d)(4) that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in d)(4)b., a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of b)(2)e. through b)(2)m. or d)(4) and list each repair made.
- (6) If the permittee placed, stored, or held in this emissions unit any petroleum liquid with a true vapor pressure which was greater than 0.754 pounds per square inch absolute, the permittee shall notify the Ohio EPA Northwest District Office within 30 days of becoming aware of the occurrence.
- (7) The reports required by this permit may be submitted through the Ohio EPA's eBusiness Center: Air Services online web portal; or they may be mailed as a hard copy to the appropriate district office or local air agency.

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:

0.40 ton VOC/yr from each emissions unit individually

Applicable Compliance Method:

The permittee shall demonstrate compliance by calculations as determined by U.S. EPA Tanks 4.0 program with a maximum annual material throughput of 66,000,000 gallons.



**Final Permit-to-Install and Operate**  
Guardian Lima, LLC  
**Permit Number:** P0120003  
**Facility ID:** 0302020341  
**Effective Date:** 4/5/2016

- g) Miscellaneous Requirements
  - (1) None.