Ohio Environmental Protection Agency

Ted Strickland, Governor
Lee Fisher, Lt. Governor
Chris Korleski, Director

Certified Mail

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

12/2/2010

Victor Canter
Valero Renewable Fuels Company, LLC
3979 State Route 238 NE
Bloomingburg, OH 43106

RE: DRAFT AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0124000132
Permit Number: P0106079
Permit Type: Administrative Modification
County: Fayette

Dear Permit Holder:

A draft of the Ohio Administrative Code (OAC) Chapter 3745-31 Air Pollution Permit-to-Install and Operate (PTIO) for the referenced facility has been issued for the emissions unit(s) listed in the Authorization section of the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the permit. A public notice will appear in the Ohio EPA Weekly Review and the local newspaper, The Record Herald. A copy of the public notice and the draft permit are enclosed. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Issued Air Pollution Control Permits" link. Comments will be accepted as a marked-up copy of the draft permit or in narrative format. Any comments must be sent to the following:

Andrew Hall
Permit Review/Development Section
Ohio EPA, DAPC
122 South Front Street
Columbus, Ohio 43215

and

Ohio EPA DAPC, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049

Comments and/or a request for a public hearing will be accepted within 30 days of the date the notice is published in the newspaper. You will be notified in writing if a public hearing is scheduled. A decision on issuing a final permit-to-install will be made after consideration of comments received and oral testimony if a public hearing is conducted. Any permit fee that will be due upon issuance of a final Permit-to-Install is indicated in the Authorization section. Please do not submit any payment now. If you have any questions, please contact Ohio EPA DAPC, Central District Office at (614)728-3778.

Sincerely,

Michael W. Ahern

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

Cc: U.S. EPA Region 5 *Via E-Mail Notification*
Ohio EPA-CDO; Kentucky

Fayette County

PUBLIC NOTICE
Issuance of Draft Air Pollution Permit-To-Install and Operate
Valero Renewable Fuels Company, LLC

Issue Date: 12/2/2010
Permit Number: P0106079
Permit Type: Administrative Modification
Permit Description: VRFC is requesting this administrative modification pursuant to Action Item 2 in the Notice of Violation (NOV) issued by the Ohio EPA on May 14, 2009. This administrative modification is intended to address any unresolved findings in the NOV as well as address any inconsistencies between PTI 01-01306 and the as-built facility.
Facility ID: 0124000132
Facility Location: Valero Renewable Fuels Company, LLC
3979 State Route 238 NE,
Bloomingburg, OH 43106
Facility Description: Ethyl Alcohol Manufacturing

Chris Korleski, Director of the Ohio Environmental Protection Agency, 50 West Town Street, Columbus Ohio has issued a draft action of an air pollution control, federally enforceable permit-to-install and operate (PTIO) for the facility at the location identified above on the date indicated. Comments concerning this draft action, or a request for a public meeting, must be sent in writing no later than thirty (30) days from the date this notice is published. All comments, questions, requests for permit applications or other pertinent documentation, and correspondence concerning this action must be directed to Benjamin Halton at Ohio EPA DAPC, Central District Office, 50 West Town Street, 6th Floor P.O. Box 1049, Columbus, OH 43216-1049 or (614)728-3778. The permit can be downloaded from the Web page: www.epa.ohio.gov/dapc

Ohio | Environmental Protection Agency

DRAFT

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

Facility ID:	0124000132
Permit Number:	P0106079
Permit Type:	Administrative Modification
Issued:	12/2/2010
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Ohio Environmental Protection Agency

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

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Authorization

Facility ID: 0124000132
Application Number(s): A0039109
Permit Number: P0106079
Permit Description: VRFC is requesting this administrative modification pursuant to Action Item 2 in the Notice of Violation (NOV) issued by the Ohio EPA on May 14, 2009. This administrative modification is intended to address any unresolved findings in the NOV as well as address any inconsistencies between PTI 01-01306 and the as-built facility.
Permit Type: Administrative Modification
Permit Fee: $7,525.00 *DO NOT send payment at this time, subject to change before final issuance*
Issue Date: 12/2/2010
Effective Date: To be entered upon final issuance
Expiration Date: To be entered upon final issuance
Permit Evaluation Report (PER) Annual Date: To be entered upon final issuance

This document constitutes issuance to:

Valero Renewable Fuels Company, LLC
3979 State Route 238 NE
Bloomingburg, OH 43106

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

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

Ohio EPA DAPC, Central District Office
50 West Town Street, 6th Floor
P.O. Box 1049
Columbus, OH 43216-1049
(614)728-3778

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

Chris Korleski
Director

Authorization (continued)

Permit Number: P0106079
Permit Description: VRFC is requesting this administrative modification pursuant to Action Item 2 in the Notice of Violation (NOV) issued by the Ohio EPA on May 14, 2009. This administrative modification is intended to address any unresolved findings in the NOV as well as address any inconsistencies between PTI 01-01306 and the as-built facility.

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

Emissions Unit ID:	**F001**
Company Equipment ID:	F001
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**J001**
Company Equipment ID:	C0E09
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P006**
Company Equipment ID:	P006
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P008**
Company Equipment ID:	P008
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P014**
Company Equipment ID:	EU046
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P015**
Company Equipment ID:	P015
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P801**
Company Equipment ID:	P801
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P901**
Company Equipment ID:	EU001
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P902**
Company Equipment ID:	P902
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P903**
Company Equipment ID:	EU037
Superseded Permit Number:	01-01306

General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**T003**
Company Equipment ID:	T003
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**T004**
Company Equipment ID:	T004
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**T005**
Company Equipment ID:	T005
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable

Group Name: DDGS Dryers

Emissions Unit ID:	**P010**
Company Equipment ID:	EU039
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P011**
Company Equipment ID:	EU040
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P012**
Company Equipment ID:	EU042
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P013**
Company Equipment ID:	EU043
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable

Group Name: Denatured ethanol storage tanks

Emissions Unit ID:	**T001**
Company Equipment ID:	T001
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**T002**
Company Equipment ID:	T002
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable

Group Name: Hammermills 1 through 4

Emissions Unit ID:	**P001**
Company Equipment ID:	EU002
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P002**
Company Equipment ID:	EU003
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P003**

Company Equipment ID:	EU004
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P004**
Company Equipment ID:	EU005
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable

Group Name: **Process Units P005, P007 & P009**

Emissions Unit ID:	**P005**
Company Equipment ID:	P005
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P007**
Company Equipment ID:	P007
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P009**
Company Equipment ID:	P009
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable

Group Name: **Waste Heat Recovery Boilers**

Emissions Unit ID:	**B001**
Company Equipment ID:	C003
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**B002**
Company Equipment ID:	C006
Superseded Permit Number:	01-01306
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

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

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

2. Who is responsible for complying with this permit?

The person identified on the "Authorization" page, above, is responsible for complying with this permit until the permit is revoked, terminated, or transferred. "Person" means a person, firm, corporation, association, or partnership. The words "you," "your," or "permittee" refer to the "person" identified on the "Authorization" page above.
The permit applies only to the emissions unit(s) identified in the permit. If you install or modify any other equipment that requires an air permit, you must apply for an additional PTIO(s) for these sources.

3. What records must I keep under this permit?

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

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

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

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

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

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

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

This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.
If a complete renewal application is submitted before the expiration date, Ohio EPA considers this a timely application for purposes of ORC section 119.06, and you are authorized to continue operating the emissions unit(s) covered by this permit beyond the expiration date of this permit until final action is taken by Ohio EPA on the renewal application.

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

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

7. What reports must I submit under this permit?

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

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

If you are required to obtain a Title V permit under OAC Chapter 3745-77 in the future, the permit-to-operate portion of this permit will be superseded by the issued Title V permit. From the effective date of the Title V permit forward, this PTIO will effectively become a PTI (permit-to-install) in accordance with OAC rule 3745-31-02(B). The following terms and conditions will no longer be applicable after issuance of the Title V permit: Section B, Term 1.b) and Section C, for each emissions unit, Term a)(2).
The PER requirements in this permit remain effective until the date the Title V permit is issued and is effective, and cease to apply after the effective date of the Title V permit. The final PER obligation will cover operations up to the effective date of the Title V permit and must be submitted on or before the submission deadline identified in this permit on the last day prior to the effective date of the Title V permit.

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

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

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

If you have a reportable malfunction of any emissions unit(s) or any associated air pollution control system, you must report this to the Ohio EPA DAPC, Central District Office in accordance with OAC rule 3745-15-06(B). Malfunctions that must be reported are those that result in emissions that exceed permitted emission levels. It is your responsibility to evaluate control equipment breakdowns and operational upsets to determine if a reportable malfunction has occurred.
If you have a malfunction, but determine that it is not a reportable malfunction under OAC rule 3745-15-06(B), it is recommended that you maintain records associated with control equipment breakdown or process upsets. Although it is not a requirement of this permit, Ohio EPA recommends that you maintain records for non-reportable malfunctions.

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

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

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

Ohio EPA can terminate the permit terms associated with any permanently shut down emissions unit. "Shut down" means the emissions unit has been physically removed from service or has been altered in such a way that it can no longer operate without a subsequent "modification" or "installation" as defined in OAC Chapter 3745-31.
You should notify Ohio EPA of any emissions unit that is permanently shut down by submitting[1] a certification that identifies the date on which the emissions unit was permanently shut down. The certification must be submitted by an authorized official from the facility. You cannot continue to operate an emissions unit once the certification has been submitted to Ohio EPA by the authorized official.
You must comply with all recordkeeping and reporting for any permanently shut down emissions unit in accordance with the provisions of the permit, regulations or laws that were enforceable during the period of operation, such as the requirement to submit a PER, air fee emission report, or malfunction report. You must also keep all records relating to any permanently shutdown emissions unit, generated

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

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.

B. Facility-Wide Terms and Conditions

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

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

      (1) None.

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

      (1) c)(1)a., c)(2), e)(1), f)(2), g)(1), and g)(2)

   c) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V for HAPs)	See c)(2)a. and d)(1).

      (2) Additional Terms and Conditions

         a. This permit establishes the following federally enforceable limitations on emissions of hazardous air pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, for the purpose of avoiding Maximum Achievable Control Technology (MACT) regulations and Title V permitting requirements:

            i. The actual emissions from emissions units B001, B002, J001, P005, P006, P007, P008, P009, P010, P011, P012, P013, P014, P801, T001, T002, T003, T004, and T005 and all other emission sources at the facility, including but not limited to any de minimis emissions units as defined in OAC rule 3745-15-05, or any registration status and/or permit exempt/permit-by-rule emissions units pursuant to OAC rule 3745-31-03, combined, shall not exceed 9.9 tons for any single HAP, based upon a rolling, 12-month summation.

            ii. The actual emissions from emissions units B001, B002, J001, P005, P006, P007, P008, P009, P010, P011, P012, P013, P014, P801, T001, T002, T003, T004, and T005 and all other emission sources at the facility, including but not limited to any de minimis emissions units as defined in OAC rule 3745-15-05, or any registration status and/or permit

exempt/permit-by-rule emissions units pursuant to OAC rule 3745-31-03, combined, shall not exceed 24.9 tons for any combination of HAPs, based upon a rolling, 12-month summation.

d) Operational Restrictions

(1) None.

e) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for the purpose of calculating the rolling, 12-month summation of HAP emissions:

a. the total uncontrolled emissions of each individual HAP from any de minimis emissions units as defined in OAC rule 3745-15-05, any registration status and/or permit exempt/permit-by-rule emissions units pursuant to OAC rule 3745-31-03, in tons, calculated in accordance with g)(1)a.;

b. the total uncontrolled emissions of combined HAPs from any de minimis emissions units as defined in OAC rule 3745-15-05, any registration status and/or permit exempt/permit-by-rule emissions units pursuant to OAC rule 3745-31-03, in tons, calculated in accordance with g)(1)a.;

c. the total uncontrolled emissions of each individual HAP from emissions units P006(pressure relief valves), J001, P801, T001, T002, T003, T004, and T005, in tons, calculated in accordance with g)(1)b.;

d. the total uncontrolled emissions of combined HAPs from emissions units P006(pressure relief valves), J001, P801, T001, T002, T003, T004, and T005, in tons, calculated in accordance with g)(1)b.;

e. the total controlled emissions of each individual HAP from emissions units B001, B002, P005, P006(scrubber), P007, P008, P009, P010, P011, P012, P013, P014 and P014(bypass) in tons, calculated in accordance with g)(1)c.;

f. the total controlled emissions of combined HAPs from emissions units B001, B002, P005, P006(scrubber), P007, P008, P009, P010, P011, P012, P013, P014 and P014(bypass) in tons, calculated in accordance with g)(1)c.;

g. the rolling, 12-month summation of the actual individual HAP emissions from all emissions units operating at the facility, in tons; and

h. the rolling, 12-month summation of the actual total combined HAP emissions from all emissions units operating at the facility, in tons.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act, or can be obtained by contacting the Central District Office.

f) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. any exceedance of the rolling, 12-month individual HAP emission limitation for each HAP; and

ii. any exceedance of the rolling, 12-month total combined HAPs emission limitation.

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

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

g) Testing Requirements

(1) <u>Emissions Limitation:</u>

Emissions of any single HAP shall not exceed 9.9 tons per rolling, 12-month period.

Emissions of total combined HAPS shall not exceed 24.9 tons per rolling, 12-month period.

<u>Applicable Compliance Method:</u>

a. For any de minimis emissions units as defined in OAC rule 3745-15-05, any registration status and/or permit exempt/permit-by-rule emissions units pursuant to OAC rule 3745-31-03, the permittee shall calculate HAP emissions consistent with the information presented in the installation and/or operating permit

application using U.S. EPA approved emissions factors or emissions factors otherwise approved by Central District Office.

b. For emissions units P006(pressure relief valves), J001, P801, T001, T002, T003, T004, and T005 the permittee shall calculate HAP emissions consistent with the information presented in the installation and/or operating permit application using U.S. EPA approved emissions factors or emissions factors otherwise approved by Central District Office.

c. For emissions units B001, B002, P005, P006(scrubber), P007, P008, P009, P010, P011, P012, P013, P014 and P014(atmospheric stack) the permittee shall determine HAP emissions using site-specific HAP emissions factors established in accordance with g)(2).

(2) 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 3 months after issuance of the permit.

b. The emission testing shall be conducted to demonstrate compliance with the facility-wide single HAP and combined HAP limitations.

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

Methods 18 or 320 from 40 CFR Part 60, Appendix A for HAPs (for, but not limited to, the compounds listed in the Midwest Scaling Protocol in Version 1.6 dated August 2004);

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

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.

C. Emissions Unit Terms and Conditions

1. F001, FS001

Operations, Property and/or Equipment Description:

paved 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 operations, property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and applicable emissions limitations and/or control measures are set forth 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.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)	Fugitive particulate emissions (PE) shall not exceed 0.57 tons per year (TPY). There shall be no visible PE except for one minute during any 60-minute period. The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See b)(2)a. through b)(2)i.

(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:

i. all paved road segments

ii. all paved parking areas

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 permit application, the permittee has committed to treat the paved roadways and parking areas by sweeping and/or vacuuming 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 a paved 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. 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 requirements of OAC rule 3745-31-05.

g. The permittee shall set the speed limit on all paved roads within the facility to 15 mph to ensure compliance with the above regulations.

h. Best available technology (BAT) control requirements for this emissions unit has been determined to be sweeping and watering of the road and parking surfaces at a frequency as required by this permit. BAT also includes compliance with the terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

i. The annual PE limitation for this emissions unit was established to reflect the potential to emit taking into consideration the BAT requirements identified above. The monitoring and/or recordkeeping requirements established in the following terms and conditions will ensure compliance with this limit.

j. For the purposes of this permit all PE is considered to be PM_{10}.

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 road segments and paved parking areas	daily

(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 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)(3)d. shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

e) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

Fugitive PE shall not exceed 0.57 TPY.

Applicable Compliance Method:

Compliance with fugitive PE limitation shall be determined using the emission factor equations in Section 13.2.1, in Compilation of Air Pollutant Emission Factors, AP-42, Fifth Edition, Volume 1 (revised 11/06) for paved roadways. Should further updates in AP-42 occur, the most current equations for paved roads shall be used. This emissions limitation reflects a maximum of 29,046 vehicle miles traveled per year, and 95% control efficiency for PE achieved through BAT practices.

b. Emission Limitation:

No visible PE from paved roadways and parking areas except for a period of time not to exceed one minute during any 60-minute observation period.

Applicable Compliance Method:

If required, compliance with the visible PE limitation 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, 1996, 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, C0E09

Operations, Property and/or Equipment Description:

ethanol loadout rack to truck and rail; equipped with 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. 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. b)(1)b., c)(1), d)(1), e)(3), and f)(1)c.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 4.89 lbs/hr. No visible emissions from the loadout flare stack except for periods not to exceed a total of 5 minutes during any 120 consecutive minutes. See b)(2)a. through b)(2)d.
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V for VOC)	VOC emissions shall not exceed 6.31 tons per rolling, 12-month period. See c)(1).

(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 top submerged fill or bottom fill and venting 100% of the vapors to a flare. BAT also includes compliance with the

terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. The hourly VOC emissions limitation was established to reflect the potential to emit for this emissions unit as vented to a flare. The monitoring and/or recordkeeping requirements for the flare as established in the following terms and conditions are sufficient to demonstrate compliance with this limitation.

c. Except where specifically identified for truck, the permittee shall comply with the following requirements during ethanol loadout to truck and rail:

i. During any transfer of material through the loading rack, 100% of the vapors displaced from the delivery vessel shall be vented to a flare;

ii. The loading rack shall utilize top submerged filling or bottom filling for the transfer of materials;

iii. All material loading lines, unloading lines and vapor lines shall be equipped with fittings which are vapor tight;

iv. A vapor tight lid shall be placed onto truck's fill point before loading operations; and

v. The vapor head space in the truck's tank shall be evacuated through a solid vapor line then routed to the flare.

d. The permittee shall monitor the flare to ensure that it is operated and maintained in conformance with its design and operations manual. The flare shall be operated at all times when emissions are vented to it and in compliance with the following requirements:

i. The flare shall be designed for and operated with no visible emissions as determined by U.S. EPA Method 22, except for periods not to exceed a total of 5 minutes during any 120 consecutive minutes.

(a) The flare shall be operated with either a pilot flame or an electric arc ignition system.

(i) If a pilot flame is employed, the flame shall be present at all times and shall be monitored with a thermocouple or other equivalent device to detect the presence of the pilot flame.

(ii) If an electric arc ignition system is employed, the arcing shall pulse continually and shall be monitored to detect any failure.

ii. The flare shall be steam-assisted, air-assisted or nonassisted.

iii. The net heating value of the gas being combusted in a steam-assisted or air-assisted flare shall be 300 Btu/scf or greater, as determined by the method specified in OAC rule 3745- 21-10(P)(2);

iv. The net heating value of the gas being combusted in a nonassisted flare shall be 200 Btu/scf or greater, as determined by the method specified in OAC rule 3745- 21-10(P)(2).

v. The flare shall be designed and operated with an actual exit velocity of less than 60 feet per second, as determined by the method specified in OAC rule 3734-21-10(P)(3), if the flare is steam-assisted or nonassisted; or shall be designed and operated with an actual exit velocity less than the maximum permitted velocity determined per OAC rule 3734-21-10(P)(4) if the flare is air-assisted; with the following exceptions where a steam-assisted or nonassisted flare meets both of the following requirements:

(a) the net heating value of the gas being combusted in the flare, as determined by the method specified in OAC rule 3745-21-10(P)(2), is greater than 1,000 Btu/scf; and

(b) the flare is designed and operated with an actual exit velocity, as determined by the method specified in OAC rule 3745-21-10(P)(3), less than 400 feet per second.

c) Operational Restrictions

(1) All of the emissions from this emissions unit shall be vented to a flare.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to a flare.

b. the rolling, 12-month summation of denatured ethanol loaded to truck, in gallons;

c. the rolling, 12-month summation of denatured ethanol loaded to rail, in gallons; and

d. the rolling, 12-month summation of VOC emissions from emissions unit J001, in tons, calculated in accordance with the testing requirements for this emissions unit.

(2) The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack 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 emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions.

(3) Modeling to demonstrate compliance with, the "Toxic Air Contaminant Statute", ORC 3704.03(F)(4)(b), was not necessary because the emissions unit's maximum annual emissions for each toxic air contaminant, as defined in OAC rule 3745-114-01, will be less than 1.0 ton per year. OAC Chapter 3745-31 requires permittees to apply for and obtain a new or modified PTIO prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any toxic air contaminant to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new PTIO.

e) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to a flare; and

ii. each rolling, 12-month period during which the VOC emissions for emissions unit J001 exceeded 6.31 tons;

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

(4) The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September),

unless an alternative schedule has been established and approved by the Director (Central District Office).

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

No visible emissions from the loadout flare stack except for periods not to exceed a total of 5 minutes during any 120 consecutive minutes.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22.

b. Emissions Limitation:

VOC emissions shall not exceed 4.89 lbs/hr.

Applicable Compliance Method:

Compliance may be demonstrated in accordance with the following equation:

$VOC = (VOC_t + VOC_r)(1-CE)$

where,

VOC = Total VOC emissions per hour from truck and rail loadout;

$VOC_t = L_t * Ef_t$

VOC_t = Total VOC emissions per hour from truck loadout;

L_t = Maximum truck loadout rate (36,000 gal/hr);

Ef_t = AP-42# emission factor for truck loadout (0.00509 lb VOC/gal);

$VOC_r = L_r * Ef_r$

VOC_r = Total VOC emissions per hour from rail loadout;

L_r = Maximum rail loadout rate (120,000 gal/hr);

Ef_r = AP-42# emission factor for rail loadout (0.00051 lb VOC/gal); and

CE = Loadout flare control efficiency (98%)

The VOC emission factors for truck and rail loadout were calculated according to equation 1 of AP-42, Chapter 5.2, *Transportation and Marketing of Petroleum Liquids* (June, 2006).

If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, method 18, 25 or 25A.

c. Emissions Limitation:

VOC emissions shall not exceed 6.31 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the recordkeeping required in d)(1) and the following equation:

$VOC = [(VOC_T + VOC_R) * (1-CE)]/2000$

where,

VOC = Total VOC emissions per rolling, 12-month period from truck and rail loadout;

VOC_T = VOC emissions per rolling, 12-month period from truck loadout;

$VOC_T = GAL_T * EF_T$

GAL_T = gallons of denatured ethanol loaded to truck per rolling, 12-month period; and

EF_T = AP-42# emissions factor for truck loadout (0.00509 lb VOC/gal);

VOC_R = VOC emissions per rolling, 12-month period from rail loadout;

$VOC_R = GAL_R * EF_R$

GAL_R = gallons of denatured ethanol loaded to rail per rolling, 12-month period; and

EF_R = AP-42# emissions factor for truck loadout (0.00051 lb VOC/gal); and

CE = Loadout flare control efficiency (98%)

The VOC emission factors for truck and rail loadout were calculated according to equation 1 of AP-42, Chapter 5.2, *Transportation and Marketing of Petroleum Liquids* (June, 2006).

g) Miscellaneous Requirements

(1) None.

3. P006, P006

Operations, Property and/or Equipment Description:

Fermentation Process consisting of fermenting units 1-7 (EU025-EU031) and beerwell (EU032) venting to a wet scrubber

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)(6) though 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. b)(1)b., c)(1), c)(2), d)(1), d)(2), d)(4, d)(5), e)(3), f)(1)b., and f)(2)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions from the wet scrubber serving this emissions unit shall not exceed 91.84 lbs/fermentation drop cycle. VOC emissions from the pressure relief valves utilized during the clean-in-place (CIP) process shall not exceed 1.23 lbs/hr. See b)(2)a., b)(2)b. and b)(2)c.
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V for VOC)	VOC emissions from the wet scrubber and pressure relief valves shall not exceed 45.28 tons per rolling, 12-month period. See c)(1) and c)(2).
c.	ORC rule 3704.03(F)	See d)(6) through d)(9).

(2) Additional Terms and Conditions

a. Best available technology (BAT) control requirements for this emissions unit has been determined to be use of a high efficiency wet scrubber (CO_2 scrubber) with a minimum control efficiency of 98.5% for VOC emissions. BAT also includes compliance with the terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. For the purpose of this permit, a "fermentation drop cycle" shall be defined as the cumulative time beginning with the release of fermentation liquid from a fermentation vessel into the beerwell and ending just before the next successive release of fermentation liquid from another fermentation vessel into the beerwell (approximately 9 hours).

c. The hourly VOC emissions limitation for the pressure relief valves utilized during the CIP process was established to reflect the potential to emit taking into consideration the federally enforceable limitation of 973 fermentation drop cycles per rolling, 12-month period. It is not necessary to develop monitoring and/or recordkeeping, reporting or testing requirements to demonstrate compliance with this limitation.

c) Operational Restrictions

(1) Except for emissions vented through the pressure relief valves during the CIP process, all of the emissions from this emissions unit shall be vented to the wet scrubber whenever the emissions unit is in operation.

(2) The emissions unit shall not exceed 973 fermentation drop cycles per rolling, 12-month period.

d) Monitoring and/or Recordkeeping Requirements

(1) The water flow rate shall be continuously maintained, while the emissions unit is in operation, at a value of not less than the minimum water flow rate established during the most recent emission test that demonstrated the emissions unit to be in compliance or as recommended by the scrubber manufacturer until such testing is completed.

(2) The bisulfite flow rate shall be continuously maintained, while the emissions unit is in operation, at a value of not less than the minimum bisulfite flow rate established during the most recent emission test that demonstrated the emissions unit to be in compliance or as recommended by the scrubber manufacturer until such testing is completed.

(3) The permittee shall properly install, operate and maintain equipment to continuously monitor and record the water flow rate and the bisulfite flow rate of the scrubber while the emissions unit is in operation. The monitoring equipment shall be calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s).

The permittee shall record the following operating parameters for the scrubber on a continuous basis:

a. the water flow rate, in gallons per minute; and

b. the bisulfite rate, in gallons per minute;

(4) The permittee shall collect and record the following information for this emissions unit on a daily basis:

a. Any period of time that the EU was operating and not venting emissions to the wet scrubber, except emissions vented to the pressure relief valves during the CIP process.

(5) The permittee shall collect and record the following information for this emissions unit on a monthly basis:

a. the cumulative period of time when the water flow rate was less than the minimum water flow rate established during the most recent emission test that demonstrated the emissions unit to be in compliance or as recommended by the scrubber manufacturer until such testing is completed.

b. the cumulative period of time when the bisulfite rate was less than the minimum bisulfite flow rate established during the most recent emission test that demonstrated the emissions unit to be in compliance or as recommended by the scrubber manufacturer until such testing is completed.

c. the number of fermentation drop cycles;

d. the total number of fermentation drop cycles per rolling, 12-month period;

e. the rolling, 12-month VOC emissions from scrubber [calculated by multiplying d)(5)d. by the lbs VOC/fermentation drop cycle emissions factor established during the most recent emission test that demonstrated the emissions unit to be in compliance and then dividing by 2000 to convert to tons];

f. the rolling, 12-month VOC emissions from pressure relief valves [calculated by multiplying d)(5)d. by the emission factor for the CIP process (1.23 lbs VOC/fermentation cycle) and then dividing by 2000 to convert to tons]; and

g. the total rolling, 12-month VOC emissions for emissions unit P006 [calculated by adding d)(5)e. and d)(5)f.].

(6) The FEPTIO application for emissions unit P006 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

   i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

   ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

   TLV/10 x 8/24 x 5/7 = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

   Toxic Contaminant: Acetaldehyde
   TLV (mg/m3): 45.04
   Maximum Hourly Emission Rate (lbs/hr): 1.18
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 8.266
   MAGLC (ug/m3): 1072.4

The permittee, has demonstrated that emissions of acetaldehyde from emissions unit P006 are calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

(7) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, 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 new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" 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 a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final FEPTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

(9) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum

ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

e) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.

The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions, except for emissions vented through the pressure relief valves during the CIP process, were not vented to the wet scrubber;

ii. any period of time (start time and date, and end time and date) when the water flow rate was outside of the acceptable range;

iii. any period of time (start time and date, and end time and date) when the bisulfite flow rate was outside of the acceptable range;

iv. each rolling, 12-month period during which the number of fermentation drop cycles exceeded 973; and

v. each rolling, 12-month period during which the total VOC emissions from this emissions unit exceeded 45.28 tons.

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

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

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

VOC emissions from the pressure relief valves utilized during the clean-in-place (CIP) process shall not exceed 1.23 lbs/hr.

Applicable Compliance Method:

Compliance may be demonstrated in accordance with the following equation:

VOC emission from CIP = Number of CIP processes executed per hour * 1.23 lbs VOC per CIP process.

If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and Method 25 or Method 25A from 40 CFR Part 60, Appendix A.

b. Emissions Limitation:

VOC emissions from the wet scrubber serving this emissions unit shall not exceed 91.84 lbs/fermentation drop cycle.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the testing requirements identified in f)(2).

(2) 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 3 months after issuance of the permit and within 6 months prior to the permit expiration;

b. The emission testing shall be conducted to demonstrate compliance with the limitations identified in f)(1)b., the 98.5% VOC control efficiency requirement for the wet scrubber required by b)(2)a. and the facility wide HAP limitations identified in B.1.c);

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

i. Methods 1 through 4 from 40 CFR Part 60, Appendix A for velocity traverses, velocity and volumetric flow rates, gas analysis, and moisture content; and

ii. Method 25 or Method 25A from 40 CFR Part 60, Appendix A for VOC (as specified by the Midwest Scaling Protocol).

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

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

e. 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 3745-21-10 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.

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Central District Office's refusal to accept the results of the emission test(s).

g. Personnel from the Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

h. 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 Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Central District Office.

g) Miscellaneous Requirements

(1) None.

4. P008, P008

Operations, Property and/or Equipment Description:

Methanator Process consisting of 4 reactors venting to either the biomethanator flare (CE007) or Dryer A and waste heat recovery/boiler unit B001

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)(6) through 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. b)(1)b., c)(1), d)(1), d)(2), d)(3), e)(3), f)(1)d., and f)(2)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations, property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and applicable emissions limitations and/or control measures are set forth 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)	Visible particulate emissions from the stack serving emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed 10% opacity, as a six-minute average. No visible emissions from the biomethanator flare stack except for periods not to exceed a total of 5 minutes during any 120 consecutive minutes. See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V for VOC)	See b)(2)c., b)(2)d., and c)(1).
c.	ORC rule 3704.03(F)	See d)(6) through d)(9).

(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 thermal oxidizer or a flare. BAT also includes compliance with the terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

The following limitations apply to the combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack):

i. Nitrogen oxides (NO_X) emissions shall not exceed 1.60 pounds per thousand gallons of 200-proof ethanol produced (lbs/Kgal ethanol);

ii. Sulfur dioxide (SO_2) emissions shall not exceed 0.19 lbs/ Kgal ethanol;

iii. Volatile organic compounds (VOC) emissions shall not exceed 0.11 lbs/Kgal ethanol;

iv. Particulate emissions (PE) shall not exceed 0.11 lb/Kgal ethanol; and

v. Carbon monoxide (CO) emissions shall not exceed 0.35 lbs/Kgal ethanol.

b. The permittee shall monitor the flare to ensure that it is operated and maintained in conformance with its design and operations manual. The flare shall be operated at all times when emissions are vented to it and in compliance with the following requirements:

i. The flare shall be designed for and operated with no visible emissions as determined by U.S. EPA Method 22, except for periods not to exceed a total of 5 minutes during any 120 consecutive minutes.

(a) The flare shall be operated with either a pilot flame or an electric arc ignition system.

(i) If a pilot flame is employed, the flame shall be present at all times and shall be monitored with a thermocouple or other equivalent device to detect the presence of the pilot flame.

(ii) If an electric arc ignition system is employed, the arcing shall pulse continually and shall be monitored to detect any failure.

ii. The flare shall be steam-assisted, air-assisted or nonassisted.

iii. The net heating value of the gas being combusted in a steam-assisted or air-assisted flare shall be 300 Btu/scf or greater, as determined by the method specified in OAC rule 3745- 21-10(P)(2);

iv. The net heating value of the gas being combusted in a nonassisted flare shall be 200 Btu/scf or greater, as determined by the method specified in OAC rule 3745- 21-10(P)(2).

v. The flare shall be designed and operated with an actual exit velocity of less than 60 feet per second, as determined by the method specified in OAC rule 3734-21-10(P)(3), if the flare is steam-assisted or nonassisted; or shall be designed and operated with an actual exit velocity less than the maximum permitted velocity determined per OAC rule 3734-21-10(P)(4) if the flare is air-assisted; with the following exceptions where a steam-assisted or nonassisted flare meets both of the following requirements:

(a) the net heating value of the gas being combusted in the flare, as determined by the method specified in OAC rule 3745-21-10(P)(2), is greater than 1,000 Btu/scf; and

(b) the flare is designed and operated with an actual exit velocity, as determined by the method specified in OAC rule 3745-21-10(P)(3), less than 400 feet per second.

c. The following limitations apply to the combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack):

i. NO_X emissions shall not exceed 97.14 tons per rolling, 12-month period;

ii. SO_2 emissions shall not exceed 11.54 tons per rolling, 12-month period;

iii. VOC emissions shall not exceed 6.68 tons per rolling, 12-month period;

iv. PE shall not exceed 6.68 tons per rolling, 12-month period; and

v. CO emissions shall not exceed 21.25 tons per rolling, 12-month period.

These rolling, 12-month limitations were established to reflect the potential to emit taking into consideration the operational restrictions established for emissions unit T003. The requirements established in the following terms and conditions in conjunction with the requirements established for emissions unit T003 are sufficient to demonstrate compliance with this limit.

d. For the purposes of this permit all PE is considered to be PM_{10}.

c) Operational Restrictions

(1) All of the emissions from this emissions unit shall be vented to a thermal oxidizer or to a flare.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to a thermal oxidizer or to a flare.

(2) The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

(3) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer 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 modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

(4) The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack 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 emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions.

(5) On any during which the emissions from this emissions unit are directed to the biomethanator flare, the permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions

from the biomethanator flare stack. 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 emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions.

(6) The FEPTIO application for emissions units P005, P007, P008 and P009 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days

per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

TLV/10 x 8/24 x 5/7 = 4 TLV/XY = MAGLC

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Acetaldehyde
TLV (mg/m3): 45.04
Maximum Hourly Emission Rate (lbs/hr): 0.63
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.1724
MAGLC (ug/m3): 1072.4

Toxic Contaminant: Formaldehyde
TLV (mg/m3): 0.368
Maximum Hourly Emission Rate (lbs/hr): 0.48
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.1314
MAGLC (ug/m3): 8.77

Toxic Contaminant: Methanol
TLV (mg/m3): 262.09
Maximum Hourly Emission Rate (lbs/hr): 0.28
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.07665
MAGLC (ug/m3): 6240.1

The permittee, has demonstrated that emissions of acetaldehyde, formaldehyde and methanol from emissions units P005, P007, P008 and P009 are calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

(7) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, 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 new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" 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 a non-restrictive change to a parameter or process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final FEPTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(8) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

(9) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

e) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.

The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. each 3-hour block of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range; and

ii. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to a thermal oxidizer or to a flare.

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

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

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emissions Limitation:</u>

Visible PE from the stack serving emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed 10% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emissions Limitation:

No visible emissions from the biomethanator flare stack except for periods not to exceed a total of 5 minutes during any 120 consecutive minutes.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 22.

c. Emissions Limitation:

Combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed:

i. 1.60 lbs NO_X /Kgal ethanol;
ii. 0.19 lbs SO_2/Kgal ethanol;
iii. 0.11 lbs VOC/Kgal ethanol;
iv. 0.11 lb PE/Kgal ethanol; and
v. 0.35 lbs CO/Kgal ethanol.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the testing requirements identified in f)(2).

The permittee shall demonstrate continuous compliance with the lbs NO_X/Kgal ethanol limitation through the use of a continuous emissions monitor and the recordkeeping required for emissions unit T003.

d. Emissions Limitation:

Combined process and combustion emissions from emissions units B001, B002, P005, P007, P008 (except emissions vented to the biomethanator flare), P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed:

i. 97.14 tons NO_X per rolling, 12-month period;
ii. 11.54 tons SO_2 per rolling, 12-month period;
iii. 6.68 tons VOC per rolling, 12-month period;
iv. 6.68 tons PE per rolling, 12-month period; and
v. 21.25 tons CO per rolling, 12-month period;

Applicable Compliance Method:

The rolling, 12-month period limitations were established by multiplying the lbs/Kgal limitations from f)(1)c. by the operational restriction/production limitation of 121,422,000 gallons of 200-proof ethanol per rolling, 12-month period established for emissions unit T003.

(2) 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 3 months after issuance of the permit and within 6 months prior to the permit expiration. In accordance with f)(1)c., the permittee is required to demonstrate compliance with the lbs NO_X/Kgal ethanol limitation through the use of a continuous emissions monitor;

b. The emission testing shall be conducted to demonstrate compliance with the limitations identified in f)(1)c. and the facility wide HAP limitations identified in B.1.c);

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

i. Methods 1 through 4 from 40 CFR Part 60, Appendix A for velocity traverses, velocity and volumetric flow rates, gas analysis, and moisture content;

ii. Method 5 from 40 CFR Part 60, Appendix A for PE/PM10, total filterable particulate;

iii. Method 6C from 40 CFR Part 60, Appendix A for SO_2;

iv. Method 7E from 40 CFR Part 60, Appendix A for NO_X;

v. Method 10 from 40 CFR Part 60, Appendix A for CO; and

vi. Method 25 or Method 25A from 40 CFR Part 60, Appendix A for VOC (as specified by the Midwest Scaling Protocol).

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

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

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Central District Office's refusal to accept the results of the emission test(s).

f. Personnel from the Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Central District Office.

g) Miscellaneous Requirements

(1) None.

5. P014, P014

Operations, Property and/or Equipment Description:

DDGS Cooling Drum and product collection system (CE008) vented to waste heat recovery/boiler units B001 and B002 and the cooling drum atmospheric stack

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. b)(1)b., c)(1), d)(1), d)(2), d)(3), e)(3), f)(1)d., f)(1)e., and f)(2)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations, property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and applicable emissions limitations and/or control measures are set forth 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)	Particulate Emissions (PE) from emissions unit P014 venting to the cooling drum atmospheric stack shall not exceed 0.005 grain per dry standard cubic feet (gr/dscf). Visible particulate emissions from the stack serving emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed 10% opacity, as a six-minute average. Visible particulate emissions from emissions unit P014 venting to the cooling drum atmospheric stack shall not exceed 0% opacity.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Volatile organic compound (VOC) emissions from emissions unit P014 venting to the cooling drum atmospheric stack shall not exceed 0.08 lb/Kgal ethanol. See b)(2)a.
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V for PE and VOC)	PE from emissions unit P014 venting to the cooling drum atmospheric stack shall not exceed 9.37 tons per rolling, 12-month period. VOC emissions from emissions unit P014 venting to the cooling drum atmospheric stack shall not exceed 4.86 tons per rolling, 12-month period. See b)(2)b. and b)(2)c.

(2) Additional Terms and Conditions

a. The following limitations apply to the combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack):

i. Nitrogen oxides (NO_X) emissions shall not exceed 1.60 pounds per thousand gallons of 200-proof ethanol produced (lbs/Kgal ethanol);

ii. Sulfur dioxide (SO_2) emissions shall not exceed 0.19 lbs/ Kgal ethanol;

iii. VOC emissions shall not exceed 0.11 lbs/Kgal ethanol;

iv. PE shall not exceed 0.11 lb/Kgal ethanol; and

v. Carbon monoxide (CO) emissions shall not exceed 0.35 lbs/Kgal ethanol.

BAT also includes compliance with the terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. The following limitations apply to the combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack):

i. NO_X emissions shall not exceed 97.14 tons per rolling, 12-month period;

ii. SO_2 emissions shall not exceed 11.54 tons per rolling, 12-month period;

iii. VOC emissions shall not exceed 6.68 tons per rolling, 12-month period;

iv. PE shall not exceed 6.68 tons per rolling, 12-month period; and

v. CO emissions shall not exceed 21.25 tons per rolling, 12-month period.

These rolling, 12-month limitations were established to reflect the potential to emit taking into consideration the operational restrictions established for emissions unit T003. The requirements established in the following terms and conditions in conjunction with the requirements established for emissions unit T003 are sufficient to demonstrate compliance with this limit.

c. For the purposes of this permit all PE is considered to be PM_{10}.

c) Operational Restrictions

(1) Except for emissions designed to vent to the cooling drum atmospheric stack, all of the emissions from this emissions unit shall be vented to a thermal oxidizer whenever the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions, except for emissions designed to vent to the cooling drum atmospheric stack, were not vented to a thermal oxidizer.

(2) The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

(3) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer 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 modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

(4) The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from both stacks 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 emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions.

e) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. each 3-hour block of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range.

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

(4) The quarterly reports shall be submitted, electronically through Ohio EPA Air Services, each year by January 31 (covering October to December), April 30 (covering January to March), July 31 (covering April to June), and October 31 (covering July to September),

unless an alternative schedule has been established and approved by the Director (Central District Office).

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Visible PE from the stack serving emissions units B001, B002, P005, P007, P008 (except emissions vented to the biomethanator flare), P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed 10% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emissions Limitation:

Visible PE from emissions unit P014 venting to the cooling drum atmospheric stack shall not exceed 0% opacity.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

c. Emissions Limitation:

Combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed:

i. 1.60 lbs NO_X /Kgal ethanol;
ii. 0.19 lbs SO_2/Kgal ethanol;
iii. 0.11 lbs VOC/Kgal ethanol;
iv. 0.11 lb PE/Kgal ethanol; and
v. 0.35 lbs CO/Kgal ethanol.

Process emissions from emissions unit P014 venting to the cooling drum atmospheric stack shall not exceed:

vi. 0.08 lb VOC/Kgal ethanol.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the testing requirements identified in f)(2).

The permittee shall demonstrate continuous compliance with the lbs NO_X/Kgal ethanol limitation through the use of a continuous emissions monitor and the recordkeeping required for emissions unit T003.

d. Emissions Limitation:

Combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed:

i. 97.14 tons NO_X per rolling, 12-month period;
ii. 11.54 tons SO_2 per rolling, 12-month period;
iii. 6.68 tons VOC per rolling, 12-month period;
iv. 6.68 tons PE per rolling, 12-month period; and
v. 21.25 tons CO per rolling, 12-month period;

Process emissions from emissions unit P014 venting to the cooling drum atmospheric stack shall not exceed:

vi. 4.86 tons VOC per rolling, 12-month period.

Applicable Compliance Method:

The rolling, 12-month period limitations were established by multiplying the lbs/Kgal limitations from f)(1)c. by the operational restriction/production limitation of 121,422,000 gallons of 200-proof ethanol per rolling, 12-month period established for emissions unit T003.

e. Emissions Limitation:

PE from emissions unit P014 venting to the cooling drum atmospheric stack shall not exceed 0.005 gr/dscf and 9.37 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the grain loading limitation shall be demonstrated in accordance with the testing requirements identified in f)(2). Compliance with the rolling, 12-month period PE limitation may be demonstrated by the following equation:

PE = AOC * EV * (60min/hr) * (1 lb/7000 gr) * (8,760 hours per rolling 12-month period) * (1 ton/2000 lbs)

where;

AOC = the actual outlet concentration measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in gr/dscf;

EV = the stack exit velocity measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in dscf/min; and

(2) 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 3 months after issuance of the permit and within 6 months prior to the permit expiration. In accordance with f)(1)c., the permittee is required to demonstrate compliance with the lbs NO_X/Kgal ethanol limitation through the use of a continuous emissions monitor;

b. The emission testing shall be conducted to demonstrate compliance with the limitations identified in f)(1)c. and the facility wide HAP limitations identified in B.1.c);

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) for combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack):

i. Methods 1 through 4 from 40 CFR Part 60, Appendix A for velocity traverses, velocity and volumetric flow rates, gas analysis, and moisture content;

ii. Method 5 from 40 CFR Part 60, Appendix A for PE/PM10, total filterable particulate;

iii. Method 6C from 40 CFR Part 60, Appendix A for SO_2;

iv. Method 7E from 40 CFR Part 60, Appendix A for NO_X;

v. Method 10 from 40 CFR Part 60, Appendix A for CO; and

vi. Method 25 or Method 25A from 40 CFR Part 60, Appendix A for VOC (as specified by the Midwest Scaling Protocol).

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

d. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s) for emissions vented to the cooling drum atmospheric stack:

i. Methods 1 through 4 from 40 CFR Part 60, Appendix A for velocity traverses, velocity and volumetric flow rates, gas analysis, and moisture content;

ii. Method 5 from 40 CFR Part 60, Appendix A for PE/PM10, total filterable particulate; and

iii. Method 25 or Method 25A from 40 CFR Part 60, Appendix A for VOC (as specified by the Midwest Scaling Protocol).

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

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

f. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Central District Office's refusal to accept the results of the emission test(s).

g. Personnel from the Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

h. 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 Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Central District Office.

g) Miscellaneous Requirements

(1) None.

6. P015, P015

Operations, Property and/or Equipment Description:

Cooling Tower equipped with a drift eliminator

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 operations, property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and applicable emissions limitations and/or control measures are set forth 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)	Particulate emissions (PE) shall not exceed 2.75 pounds per hour (lbs/hr) and 12.05 tons per year (TPY). Visible PE from the stack serving this emissions unit shall not exceed 10% opacity, as a 6-minute average. See b)(2)a., b)(2)b., and b)(2)c.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) control requirements for this emissions unit has been determined to be use of a high efficiency drift eliminator with a minimum drift elimination rate of 0.005% and a maximum circulating water total dissolved solids content of 2,000 parts per million (ppm). BAT also includes compliance with the terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. The hourly PE limitation was established to reflect the potential to emit for this emissions unit employing a high efficiency drift eliminator. The monitoring and recordkeeping requirements established in the following terms and conditions are sufficient to ensure compliance with these limits.

c. For the purposes of this permit all PE is considered to be PM_{10}.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall test and record the total dissolved solids content, in ppm, for this emissions unit on a monthly basis.

For the purpose of measuring the total dissolved solids content of the process water utilized in this emissions unit, a sample shall be collected directly upstream of the cooling tower.

(2) The permittee shall determine the average dissolved solids content, in ppm, on an annual basis.

(3) The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack 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 emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions.

e) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Visible PE from the stack serving this emissions unit shall not exceed 10% opacity, as a 6-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emissions Limitation:

PE shall not exceed 2.75 lbs/hr and 12.05 TPY.

Applicable Compliance Method:

Compliance shall be based upon the records required in d)(1) and d)(2) and the following equation:

$PE = WF * dH_2O * \%D * (TDS/1,000,000)$

where,

WF = maximum circulating water flow (3,300,000 gal/hr);

dH_2O = density of water (8.34 lb/gal);

%D = percent drift (0.005%);

TDS = the total dissolved solids concentration, in ppm, averaged annually in accordance with the requirements in d)(2).

If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

g) Miscellaneous Requirements

(1) None.

7. P801, P801

Operations, Property and/or Equipment Description:

Fugitive VOC Emissions (leaks)

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

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

a. None.

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

a. b)(1)c., b)(1)d., c)(1), d)(1), e)(5), and f)(4)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 7.10 tons per year (TPY). The requirements established pursuant to this rule are equivalent to the requirements of OAC rule 3745-21-09(DD). See b)(2)a.
b.	OAC rule 3745-21-09(DD)	See b)(2)a. and b)(2)c.
c.	40 CFR Part 60, subpart VVa	See b)(2)b. and b)(2)c.
d.	40 CFR Part 60, subpart A	See b)(2)d.

(2) Additional Terms and Conditions

a. Best available technology (BAT) for this emissions unit is determined to be the development and implementation of a site specific Leak Detection and Repair (LDAR) program in accordance with OAC rule 3745-21-09(DD)(2). 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 and recordkeeping requirements, reporting requirements, and testing requirements) of OAC rule 3745-21-09(DD). BAT also includes compliance with the terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. 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 of 40 CFR, Part 60 are also federally enforceable.

c. This emissions unit is subject to the requirements 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 for Which Construction, Reconstruction or Modification Commenced After November 7, 2006". In the event that the permittee is subject to overlapping requirements under these regulations, a single LDAR program may be developed and implemented for the purpose of demonstrating compliance with both of these regulations, provided that the more stringent requirement is met.

d. The complete 40 CFR Part 60 requirements, including the General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Central District Office. 40 CFR Part 60, subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.

c) Operational Restrictions

(1) Operational restrictions necessary to demonstrate compliance with 40 CFR Part 60, subpart VVa and 40 CFR Part 60, subpart A.

d) Monitoring and/or Recordkeeping Requirements

(1) Monitoring and/or recordkeeping requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart VVa and 40 CFR Part 60, subpart A.

e) Reporting Requirements

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

(2) The permittee shall submit semi-annual reports in accordance with OAC rule 3745-21-09(DD)(2)(m).

(3) If required, the permittee shall submit compliance test reports in accordance with OAC rule 3745-21-09(DD)(15).

(4) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.

(5) Reporting requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart VVa and 40 CFR Part 60, subpart A.

f) Testing Requirements

(1) Except as otherwise provided in OAC rules 3745-21-09(DD)(2)(c) and 3745-21-09(DD)(2)(d), all equipment shall be monitored for leaks in accordance with the method specified in OAC rule 3745-21-10(F).

In accordance with OAC rule 3745-21-10(F)(4), leak detection instrument(s) shall be calibrated before use on each day of its use.

(2) If required, the permittee shall conduct compliance tests in accordance with OAC rules 3745-21-09(DD)(4)(c), 3745-21-09(DD)(7)(c) and 3745-21-09(DD)(9)(c).

(3) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emissions Limitation:</u>

VOC emissions shall not exceed 7.10 TPY.

<u>Applicable Compliance Method:</u>

Compliance with the annual emission limitation has been determined by the permittee using the estimated component count based on similar ethanol plants and emission factors from 'Protocol for Equipment Leak Emission Estimates', EPA-453/R-95-017, Table 5-2. Testing may be requested pursuant to OAC rule 3745-15-04(A). Such testing would be required to comply with methods described in OAC rule 3745-21-10 for volatile organic compounds.

(4) Testing requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart VVa and 40 CFR Part 60, subpart A.

g) Miscellaneous Requirements

(1) None.

8. P901, EU001

Operations, Property and/or Equipment Description:

Grain Receiving, Transferring and Conveying vented to a 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. b)(1)b., c)(1), d)(1), d)(2), d)(3), e)(3), f)(1)b., f)(1)c., and f)(2)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations, property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and applicable emissions limitations and/or control measures are set forth 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.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)	Particulate emissions (PE) from this emissions unit shall not exceed 1.29 pounds per hour (lbs/hr). Visible PE from the baghouse stack shall not exceed 0% opacity, as a six-minute average. Visible emissions of fugitive dust shall not exceed 0% opacity as a 3-minute average. See b)(2)a., b)(2)b., and c)(1).
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V for PE)	The baghouse for this emissions unit shall achieve an outlet emission rate of not greater than 0.005 grain of PE per dry standard cubic foot of exhaust gases (gr/dscf). PE shall not exceed 5.65 tons per rolling,

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		12-month period. See b)(2)c. and c)(1).
c.	OAC rule 3745-17-07(A)	The emissions limitation established by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)	The emissions limitation established by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The permittee shall employ best available control measures for the emissions unit for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to maintain enclosures and vent all the particulate emissions to a baghouse to ensure compliance. Best available technology (BAT) also includes compliance with the terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. The hourly PE limitation was established to reflect the potential to emit for this emissions unit, as vented to a baghouse. The monitoring, recordkeeping and testing requirements for the baghouse as established in the following terms and conditions are sufficient to demonstrate compliance with this limit.

c. For the purposes of this permit all PE is considered to be PM_{10}.

c) Operational Restrictions

(1) The emissions from this emissions unit shall be vented to the baghouse at all times the emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. the hours of operation for the baghouse;

b. the particulate emissions for emissions units P901, in tons, calculated according to the following equation:

PE = AOC * EV * (60/HO) * (1 lb/7000 gr) * (ton/2000 lbs)

where;

AOC = the actual outlet concentration measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in gr/dscf;

EV = the stack exit velocity measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in dscf/min; and

HO = the actual monthly hours of operation for the baghouse recorded in accordance with d)(1)a.;

c. the rolling, 12-month summation of particulate emissions for emissions units P901, in tons.

(2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.1 to 6.0 inches of water.

(3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range 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:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action was implemented; and

f. 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.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Central District Office (CDO). The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). 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 perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack 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 color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

(5) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from any egress points (i.e. building windows, hatches, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible 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. 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 emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions.

e) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;

ii. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse; and

iii. each rolling, 12-month period when the PE for this emissions unit exceeded 5.65 tons.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

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

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

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Particulate emissions shall not exceed 1.29 lbs/hr.

Applicable Compliance Method:

Compliance with the allowable lb PE/hr limitation shall be determined through the performance testing as described in f)(2) below.

b. Emissions Limitation:

Particulate emissions shall not exceed 5.65 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined through the recordkeeping required in d)(1).

c. Emissions Limitation:

The baghouse for this emissions unit shall achieve an outlet emission rate of not greater than 0.005 gr/dscf.

Applicable Compliance Method:

Compliance with the allowable grain outlet concentration shall be determined through the performance testing as described in f)(2) below.

d. Emissions Limitation:

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

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

e. Emissions Limitation:

Visible emissions of fugitive dust shall not exceed 0% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(2) The permittee shall conduct, or have conducted, emission testing for emissions unit P901 in accordance with the following requirements:

a. The permittee demonstrated compliance with the limitations identified in f)(1)a., f)(1)b. and f)(1)c. above through emissions tests conducted on July 31, 2008. Emission testing shall be conducted within 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the following limitations:

i. Particulate emissions from this emissions unit shall not exceed 1.29 lbs/hr; and

ii. The baghouse for this emissions unit shall achieve an outlet emission rate of not greater than 0.005 gr/dscf.

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

i. Methods 1-5 of 40 CFR Part 60, Appendix A

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

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

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

f. Personnel from CDO 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 CDO 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 CDO.

g) Miscellaneous Requirements

(1) None.

9. P902, P902

Operations, Property and/or Equipment Description:

DDGS Handling and Transfer (EU036) and Storage (EU035) vented to a 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. b)(1)b., c)(1), d)(1), d)(2), d)(3), e)(3), f)(1)b., f)(1)c., and f)(2)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations, property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and applicable emissions limitations and/or control measures are set forth 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.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)	Combined particulate emissions (PE) from the stack serving emissions units P902 and P903 shall not exceed 0.39 pound per hour (lb/hr). Fugitive PE shall not exceed 0.36 ton per year. Visible PE from the baghouse stack serving emissions units P902 and P903 shall not exceed 0% opacity, as a six-minute average. Visible emissions of fugitive dust from DDGS handling, transfer and storage operations shall not exceed 5% opacity, as a 3-minute average. See b)(2)a., b)(2)b., b)(2)c., and c)(1).
b.	OAC rule 3745-31-05(D)	The baghouse for emissions units P902

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	(Synthetic minor to avoid Title V for PE)	and P903 shall achieve an outlet emission rate of not greater than 0.005 grain of PE per dry standard cubic foot of exhaust gases (gr/dscf). Combined PE from the stack serving emissions units P902 and P903 shall not exceed 1.71 tons per rolling, 12-month period. See b)(2)d. and c)(1).
c.	OAC rule 3745-17-07(A)	The emissions limitation established by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)	The emissions limitation established by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

(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 partial enclosure and the use of a baghouse with a maximum grain loading of 0.005 gr/dscf. BAT also includes compliance with the terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. The hourly PE limitation from the baghouse stack was established to reflect the potential to emit for emissions units P902 and P903, as vented to a baghouse. The monitoring, recordkeeping and testing requirements for the baghouse as established in the following terms and conditions are sufficient to demonstrate compliance with this limit.

c. The annual fugitive PE limitation was established to reflect the potential to emit for this emissions unit. It is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

d. For the purposes of this permit all PE is considered to be PM_{10}.

c) Operational Restrictions

(1) The baghouse serving emissions units P902 and P903 shall be operated at all times when either emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. the hours of operation for the baghouse;

b. the particulate emissions for the stack serving emissions units P902 and P903, in tons, calculated according to the following equation:

PE = AOC * EV * (60/HO) * (1 lb/7000 gr)*(ton/2000 lbs)

where;

AOC = the actual outlet concentration measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in gr/dscf;

EV = the stack exit velocity measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in dscf/min; and

HO = the actual monthly hours of operation for the baghouse recorded in accordance with d)(1)a.;

c. the rolling, 12-month summation of particulate emissions from the stack serving emissions units P902 and P903, in tons.

(2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.1 to 6.0 inches of water.

(3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range 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:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action was implemented; and

f. 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.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Central District Office (CDO). The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). 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 perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack 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 color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

(5) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from any egress points (i.e. building windows, hatches, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible 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. 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 emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions.

e) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;

ii. any period of time (start time and date, and end time and date) when the baghouse was not operated while the emissions unit(s) was/were in operation; and

iii. each rolling, 12-month period when the PE from the stack serving emissions units P902 and P903 exceeded 1.71 tons.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

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

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

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Combined particulate emissions from the stack serving emissions units P902 and P903 shall not exceed 0.39 lb/hr.

Applicable Compliance Method:

Compliance with the allowable lb PE/hr limitation shall be determined through the performance testing as described in f)(2) below.

b. Emissions Limitation:

Combined particulate emissions from the stack serving emissions units P902 and P903 shall not exceed 1.71 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined through the recordkeeping required in d)(1).

c. Emissions Limitation:

The baghouse for emissions units P902 and P903 shall achieve an outlet emission rate of not greater than 0.005 gr/dscf.

Applicable Compliance Method:

Compliance with the allowable grain outlet concentration shall be determined through the performance testing as described in f)(2) below.

d. Emissions Limitation:

Fugitive PE shall not exceed 0.36 ton per year.

Applicable Compliance Method:

Compliance shall be determined using the following equation:

(82.6 tons/hr)x(0.001 lb PE/ton)x(8760 hr/yr)x(1 ton/2000 lbs) = 0.36 ton of fugitive PE per year.

where:

0.001 lb PE/ton is the calculated AP-42 emissions factor for storage piles; Chapter 13.4.2, Equation 1 (November, 2006).

e. Emissions Limitation:

Visible PE from the baghouse stack serving emissions units P902 and P903 shall not exceed 0% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

f. Emissions Limitation:

Visible emissions of fugitive dust from DDGS handling, transfer and storage operations shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(2) The permittee shall conduct, or have conducted, emission testing for emissions units P902 and P903 in accordance with the following requirements:

a. The permittee demonstrated compliance with the limitations identified in f)(1)a., f)(1)b. and f)(1)c. above through emissions tests conducted on July 31, 2008. Emission testing shall be conducted within 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the following limitations:

i. Combined particulate emissions from the stack serving emissions units P902 and P903 shall not exceed 0.39 lb/hr.; and

ii. The baghouse for emissions units P902 and P903 shall achieve an outlet emission rate of not greater than 0.005 gr/dscf.

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

i. Methods 1-5 of 40 CFR Part 60, Appendix A

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

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

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

f. Personnel from CDO 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 CDO 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 CDO.

g) Miscellaneous Requirements

(1) None.

10. P903, EU037

Operations, Property and/or Equipment Description:

DDGS Loadout to truck and rail equipped with a 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. b)(1)b., c)(1), d)(1), d)(2), d)(3), e)(3), f)(1)b., f)(1)c., and f)(2)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations, property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and applicable emissions limitations and/or control measures are set forth 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.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)	Combined particulate emissions (PE) from the stack serving emissions units P902 and P903 shall not exceed 0.39 pound per hour (lb/hr). Fugitive PE shall not exceed 0.61 ton per year. Visible PE from the baghouse stack serving emissions units P902 and P903 shall not exceed 0% opacity, as a six-minute average. Visible emissions of fugitive dust from DDGS loadout operations shall not exceed 5% opacity, as a 3-minute average. See b)(2)a., b)(2)b., b)(2)c., and c)(1).
b.	OAC rule 3745-31-05(D)	The baghouse for emissions units P902

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	(Synthetic minor to avoid Title V for PE)	and P903 shall achieve an outlet emission rate of not greater than 0.005 grain of PE per dry standard cubic foot of exhaust gases (gr/dscf). Combined PE from the stack serving emissions units P902 and P903 shall not exceed 1.71 tons per rolling, 12-month period. See b)(2)d. and c)(1).
c.	OAC rule 3745-17-07(A)	The emissions limitation established by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)	The emissions limitation established by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

(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 partial enclosure and the use of a baghouse with a maximum grain loading of 0.005 gr/dscf. BAT also includes compliance with the terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. The hourly PE limitation from the baghouse stack was established to reflect the potential to emit for emissions units P902 and P903, as vented to a baghouse. The testing requirements and parametric monitoring requirements of the baghouse as established in the following terms and conditions will ensure compliance with this limit.

c. The annual TPY fugitive PE limitation was established to reflect the potential to emit for this emissions unit. It is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

d. For the purposes of this permit all PE is considered to be PM_{10}.

c) Operational Restrictions

(1) The baghouse serving emissions units P902 and P903 shall be operated at all times when either emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. the hours of operation for the baghouse;

b. the particulate emissions for the stack serving emissions units P902 and P903, in tons, calculated according to the following equation:

PE = AOC * EV * (60/HO) * (1 lb/7000 gr)*(ton/2000 lbs)

where;

AOC = the actual outlet concentration measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in gr/dscf;

EV = the stack exit velocity measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in dscf/min; and

HO = the actual monthly hours of operation for the baghouse recorded in accordance with d)(1)a.;

c. the rolling, 12-month summation of particulate emissions from the stack serving emissions units P902 and P903, in tons.

(2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.1 to 6.0 inches of water.

(3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range 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:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action was implemented; and

f. 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.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Central District Office (CDO). The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). 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 perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack 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 color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

(5) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from any egress points (i.e. building windows, hatches, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible 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. 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 emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions.

e) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;

ii. any period of time (start time and date, and end time and date) when the baghouse was not operated while the emissions unit(s) was/were in operation; and

iii. each rolling, 12-month period when the PE from the stack serving emissions units P902 and P903 exceeded 1.71 tons.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

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

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

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Combined particulate emissions from the stack serving emissions units P902 and P903 shall not exceed 0.39 lb/hr.

Applicable Compliance Method:

Compliance with the allowable lb PE/hr limitation shall be determined through the performance testing as described in f)(2) below.

b. Emissions Limitation:

Combined particulate emissions from the stack serving emissions units P902 and P903 shall not exceed 1.71 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined through the recordkeeping required in d)(1).

c. Emissions Limitation:

The baghouse for emissions units P902 and P903 shall achieve an outlet emission rate of not greater than 0.005 gr/dscf.

Applicable Compliance Method:

Compliance with the allowable grain outlet concentration shall be determined through the performance testing as described in f)(2) below.

d. Emissions Limitation:

Fugitive PE shall not exceed 0.61 ton per year.

Applicable Compliance Method:

Compliance shall be determined using the following equation:

(42.3 tons/hr)x(0.0033 lb PE/ton)x(8760 hr/yr)x(1 ton/2000 lbs) = 0.61 ton of fugitive PE per year.

where:

0.0033 lb PE/ton is the AP-42 emissions factor for feed shipping; Table 9.9.1-2, (March, 2003).

e. Emissions Limitation:

Visible PE from the baghouse stack serving emissions units P902 and P903 shall not exceed 0% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

f. Emissions Limitation:

Visible emissions of fugitive dust from DDGS loadout operations shall not exceed 5% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(2) The permittee shall conduct, or have conducted, emission testing for emissions units P902 and P903 in accordance with the following requirements:

a. The permittee demonstrated compliance with the limitations identified in f)(1)a., f)(1)b. and f)(1)c. above through emissions tests conducted on July 31, 2008. Emission testing shall be conducted within 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the following limitations:

i. Combined particulate emissions from the stack serving emissions units P902 and P903 shall not exceed 0.39 lb/hr.; and

ii. The baghouse for emissions units P902 and P903 shall achieve an outlet emission rate of not greater than 0.005 gr/dscf.

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

i. Methods 1-5 of 40 CFR Part 60, Appendix A

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

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

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

f. Personnel from CDO 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 CDO 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 CDO.

g) Miscellaneous Requirements

(1) None.

11. T003, T003

Operations, Property and/or Equipment Description:

200,000 gal, 200-proof ethanol storage 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. 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. b)(1)b., b)(1)c., b)(1)d., c)(1), c)(2), d)(1), d)(2), d)(3), d)(4), e)(3), f)(1)b., and f)(2)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations, property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and applicable emissions limitations and/or control measures are set forth 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.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 0.0084 pounds per thousand gallons of 200-proof ethanol produced (lbs/Kgal ethanol). See b)(2)a. and b)(2)b.
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V for VOC)	VOC emissions shall not exceed 0.51 tons per rolling, 12-month period. See c)(1).
c.	40 CFR Part 60, subpart Kb	See b)(2)c. and b)(2)d.
d.	40 CFR Part 60, subpart A	See b)(2)e.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) control requirements for this emissions unit has been determined to be the use of submerged fill and an internal floating roof. BAT also includes compliance with the terms and conditions of this permit.

Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. The lbs/Kgal ethanol emissions limitation was established to reflect the potential to emit for this emissions unit as determined by using the U.S. EPA Tanks4.0 program and the information provided in the permit application. It is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limitation.

c. 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 of 40 CFR, Part 60 are also federally enforceable.

d. The permittee shall demonstrate compliance with the applicable standards monitoring and recordkeeping requirements, reporting requirements and testing requirements identified in 40 CFR Part 60, subpart Kb.

In accordance with 40 CFR 60.110b(a) and 60.110b(b), this emissions unit is determined to be a part of the affected facility to which 40 CFR Part 60, subpart Kb applies because it stores volatile organic liquids (VOL), construction of this source commenced after July 23, 1984, the capacity of the source is greater than 151 m^3 and it stores a liquid with a maximum true vapor pressure greater than 3.5 kPa .

e. The complete 40 CFR Part 60 requirements, including the General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA Central District Office. 40 CFR Part 60, subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.

c) Operational Restrictions

(1) Production of 200-proof ethanol shall not exceed 121,422,000 gallons per rolling, 12-month period.

(2) Operational restrictions necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. the number of gallons of 200-proof ethanol produced, in gallons;

b. the rolling, 12-month summation of 200-proof ethanol production, in gallons; and

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of 200-proof ethanol production, upon issuance of this permit.

c. the rolling 12-month summation of VOC emissions for emissions unit T003, in tons, calculated in accordance with f)(1).

This emissions unit has been in operation for more than 12 months and, as such, the permittee has existing records to generate the rolling, 12-month summation of VOC emissions, upon issuance of this permit.

(2) In accordance with the requirements established for emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014, the permittee shall collect and record the following information each day:

a. the rolling, 30-day NO_X emissions, in pounds;

b. the rolling, 30-day 200-proof ethanol production, in thousands of gallons (Kgal); and

c. the rolling, 30-day NO_X emissions, in pounds per Kgal of 200-proof ethanol.

(3) In accordance with the requirements established for emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014, the permittee shall collect and record the following information each month:

a. the rolling, 12-month summation of NO_X emissions for emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014, in tons, calculated in accordance with the testing requirements established for each emissions unit and the recordkeeping requirement established in d)(1);

b. the rolling, 12-month summation of SO_2 emissions for emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014, in tons, calculated in accordance with the testing requirements established for each emissions unit and the recordkeeping requirement established in d)(1);

c. the rolling, 12-month summation of VOC emissions for emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack), in tons, calculated in accordance with the testing requirements established for each emissions unit and the recordkeeping requirement established in d)(1);

d. the rolling, 12-month summation of PE for emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack), in tons, calculated in accordance with the testing requirements established for each emissions unit and the recordkeeping requirement established in d)(1);

e. the rolling, 12-month summation of CO emissions for emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014, in tons,

calculated in accordance with the testing requirements established for each emissions unit and the recordkeeping requirement established in d)(1);

f. the rolling, 12-month summation of VOC emissions for emissions unit P014 vented to the cooling drum atmospheric stack, in tons, calculated in accordance with the testing requirements established for emissions unit P014 and the recordkeeping requirement established in d)(1); and

g. the rolling, 12-month summation of PE emissions for emissions unit P014 vented to the cooling drum atmospheric stack, in tons, calculated in accordance with the testing requirements established for emissions unit P014 and the recordkeeping requirement established in d)(1).

(4) Monitoring and/or recordkeeping requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

e) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. each rolling, 12-month period during which the 200-proof ethanol production for emissions unit T003 exceeded 121,422,000 gallons;

ii. each rolling, 12-month period during which the VOC emissions from emissions unit T003 exceeded 0.51 tons;

iii. each rolling, 12-month period during which the NO_X emissions for emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 exceeded 97.14 tons;

iv. each rolling, 12-month period during which the SO_2 emissions for emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 exceeded 11.54 tons;

v. each rolling, 12-month period during which the VOC emissions for emissions units B001, B002, P005, P007, P008, P009, P010, P011,

P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) exceeded 6.68 tons;

vi. each rolling, 12-month period during which the CO emissions for emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 exceeded 21.25 tons;

vii. each rolling, 12-month period during which the PE for emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) exceeded 6.68 tons;

viii. each rolling, 12-month period during which the VOC emissions for emissions unit P014 vented to the cooling drum atmospheric stack exceeded 10.93 tons; and

ix. each rolling, 12-month period during which the PE for emissions unit P014 vented to the cooling drum atmospheric stack exceeded 9.37 tons;

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

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

(5) Reporting requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emissions Limitation:</u>

VOC emissions shall not exceed 0.0084 lbs/Kgal ethanol.

<u>Applicable Compliance Method:</u>

Compliance shall be determined in accordance with the methods and formulas specified in AP-42, 5th Edition, Chapter 7.1, Storage of Organic Liquids or based upon the most recent version of the U.S. EPA Tanks program.

b. <u>Emissions Limitation:</u>

VOC emissions shall not exceed 0.51 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined by multiplying the lbs/Kgal ethanol emissions factor from f)(1)a. (0.0084 lbs/Kgal) by the rolling, 12-month summation of ethanol production from emission unit T003 required by d)(1)b.

(2) Testing requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

g) Miscellaneous Requirements

(1) None.

12. T004, T004

Operations, Property and/or Equipment Description:

200,000 gal denaturant storage 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. 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. b)(1)c., b)(1)d., c)(2), d)(3), e)(3), and f)(2)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations, property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and applicable emissions limitations and/or control measures are set forth 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.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 2.06 tons per year (TPY). See b)(2)a. and b)(2)b.
b.	OAC rule 3745-21-09(L)	See c)(1).
c.	40 CFR Part 60, subpart Kb	See b)(2)c. and b)(2)d.
d.	40 CFR Part 60, subpart A	See b)(2)e.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) control requirements for this emissions unit has been determined to be the use of submerged fill and an internal floating roof. BAT also includes compliance with the terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. The annual VOC emissions limitation was established to reflect the potential to emit for this emissions unit as determined by using the U.S. EPA Tanks4

program (version 4.09d) and the information provided in the permit application. It is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

c. 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 of 40 CFR, Part 60 are also federally enforceable.

d. The permittee shall demonstrate compliance with the applicable standards monitoring and recordkeeping requirements, reporting requirements and testing requirements identified in 40 CFR Part 60, subpart Kb.

In accordance with 40 CFR 60.110b(a) and 60.110b(b), this emissions unit is determined to be a part of the affected facility to which 40 CFR Part 60, subpart Kb applies because it stores volatile organic liquids (VOL), construction of this source commenced after July 23, 1984, the capacity of the source is greater than 151 m^3 and it stores a liquid with a maximum true vapor pressure greater than 3.5 kPa .

e. The complete 40 CFR Part 60 requirements, including the General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA Central District Office. 40 CFR Part 60, subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.

c) Operational Restrictions

(1) The permittee shall install the following control equipment and shall maintain tank vents, seals, and or covers as follows:

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

b. The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports;

c. The rim vents, if present, shall be set to open or at the manufacturer's recommended setting when the roof is being floated off the roof leg supports; and

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.

(2) Operational restrictions necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain records of the following information for the fixed roof tank:

a. the types of petroleum liquids stored in the tank; and

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each petroleum liquid that has a maximum true vapor pressure greater than 1.52 pound per square inch absolute.

These records shall be maintained for at least 5 years and shall be made available to the Director or his representative upon verbal or written request.

(2) The permittee shall maintain a record of any period of time in which the automatic bleeder vents, rim vents, and all openings other than stub drains were not maintained as required in this permit and per the rules.

(3) Monitoring and/or recordkeeping requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

e) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) Reporting requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emissions Limitation:</u>

VOC emissions shall not exceed 2.06 TPY.

<u>Applicable Compliance Method:</u>

Compliance shall be determined in accordance with the methods and formulas specified in AP-42, 5th Edition, Chapter 7.1, Storage of Organic Liquids or based upon the most recent version of the U.S. EPA Tanks program.

(2) Testing requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

g) Miscellaneous Requirements

(1) None.

13. T005, T005

Operations, Property and/or Equipment Description:

200,000 gal, 190-proof ethanol storage 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. 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. b)(1)b., b)(1)c., c)(1), d)(1), e)(3), and f)(2)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations, property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and applicable emissions limitations and/or control measures are set forth 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.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 0.62 tons per year (TPY). See b)(2)a. and b)(2)b.
b.	40 CFR Part 60, subpart Kb	See b)(2)c. and b)(2)d.
c.	40 CFR Part 60, subpart A	See b)(2)e.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) control requirements for this emissions unit has been determined to be the use of submerged fill and an internal floating roof. BAT also includes compliance with the terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. The annual VOC emissions limitation was established to reflect the potential to emit for this emissions unit as determined by using the U.S. EPA Tanks4.0 program and the information provided in the permit application. It is not

necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

c. 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 of 40 CFR, Part 60 are also federally enforceable.

d. The permittee shall demonstrate compliance with the applicable standards monitoring and recordkeeping requirements, reporting requirements and testing requirements identified in 40 CFR Part 60, subpart Kb.

In accordance with 40 CFR 60.110b(a) and 60.110b(b), this emissions unit is determined to be a part of the affected facility to which 40 CFR Part 60, subpart Kb applies because it stores volatile organic liquids (VOL), construction of this source commenced after July 23, 1984, the capacity of the source is greater than 151 m^3 and it stores a liquid with a maximum true vapor pressure greater than 3.5 kPa .

e. The complete 40 CFR Part 60 requirements, including the General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA Central District Office. 40 CFR Part 60, subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.

c) Operational Restrictions

(1) Operational restrictions necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

d) Monitoring and/or Recordkeeping Requirements

(1) Monitoring and/or recordkeeping requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

e) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) Reporting requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

VOC emissions shall not exceed 0.62 TPY.

Applicable Compliance Method:

Compliance shall be determined in accordance with the methods and formulas specified in AP-42, 5th Edition, Chapter 7.1, Storage of Organic Liquids or based upon the most recent version of the U.S. EPA Tanks program.

(2) Testing requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

g) Miscellaneous Requirements

(1) None.

14. Emissions Unit Group - DDGS Dryers: P010, P011, P012, P013,

EU ID	Operations, Property and/or Equipment Description
P010	38 MMBtu natural gas and biogas DDGS Dryer A equipped with four integral multiclones venting to waste heat recovery/boiler unit B001
P011	38 MMBtu natural gas DDGS Dryer B equipped with four integral multiclones venting to waste heat recovery/boiler unit B001
P012	38 MMBtu natural gas DDGS Dryer C equipped with four integral multiclones venting to waste heat recovery/boiler unit B002
P013	38 MMBtu natural gas DDGS Dryer D equipped with four integral multiclones venting to waste heat recovery/boiler unit B002

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. b)(1)b., c)(1), d)(1), d)(2), d)(3), e)(3), f)(1)c. and f)(2)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations, property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and applicable emissions limitations and/or control measures are set forth 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)	Visible particulate emissions from the stack serving emissions units B001, B002, P005, P007, P008 (except emissions vented to the biomethanator flare), P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed shall not exceed 10% opacity as a six-minute average. See b)(2)a.
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V for	See b)(2)b., b)(2)c. and c)(1).

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	VOC and NO_X)	
c.	OAC rule 3745-17-10(B)(1)	The emissions limitation established by this rule is equivalent to the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-18-06(E)(2)	Emissions units P011, P012 and P013 are exempt from the requirements of OAC rule 3745-18-06(E)(2) pursuant to OAC rule 3745-18-06(A). The emissions limitation established by this rule for P010 is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

(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 thermal oxidizer. BAT also includes compliance with the terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

The following limitations apply to the combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack):

i. Nitrogen oxides (NO_X) emissions shall not exceed 1.60 pounds per thousand gallons of 200-proof ethanol produced (lbs/Kgal ethanol);

ii. Sulfur dioxide (SO_2) emissions shall not exceed 0.19 lbs/ Kgal ethanol;

iii. Volatile organic compounds (VOC) emissions shall not exceed 0.11 lbs/Kgal ethanol;

iv. Particulate emissions (PE) shall not exceed 0.11 lb/Kgal ethanol; and

v. Carbon monoxide (CO) emissions shall not exceed 0.35 lbs/Kgal ethanol.

b. The following rolling, 12-month limitations apply to the combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack):

i. NO_X emissions shall not exceed 97.14 tons per rolling, 12-month period;

ii. SO_2 emissions shall not exceed 11.54 tons per rolling, 12-month period;

iii. VOC emissions shall not exceed 6.68 tons per rolling, 12-month period;

iv. PE shall not exceed 6.68 tons per rolling, 12-month period; and

v. CO emissions shall not exceed 21.25 tons per rolling, 12-month period.

These limitations were established to reflect the potential to emit taking into consideration the operational restrictions established for emissions unit T003. The requirements established in the following terms and conditions in conjunction with the requirements established for emissions unit T003 are sufficient to demonstrate compliance with this limit.

c. For the purposes of this permit all PE is considered to be PM_{10}.

c) Operational Restrictions

(1) All of the emissions from this emissions unit shall be vented to a thermal oxidizer.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to a thermal oxidizer;

(2) The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

(3) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer 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 modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

(4) The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack

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 emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions.

e) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. each 3-hour block of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range; and

ii. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to a thermal oxidizer.

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

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

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Visible PE from the stack serving emissions units B001, B002, P005, P007, P008 (except emissions vented to the biomethanator flare), P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed 10% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emissions Limitation:

Combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed:

i. 1.60 lbs NO_X /Kgal ethanol;
ii. 0.19 lbs SO_2/Kgal ethanol;
iii. 0.11 lbs VOC/Kgal ethanol;
iv. 0.11 lb PE/Kgal ethanol; and
v. 0.35 lbs CO/Kgal ethanol.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the testing requirements identified in f)(2).

The permittee shall demonstrate continuous compliance with the lbs NO_X/Kgal ethanol limitation through the use of a continuous emissions monitor and the recordkeeping required for emissions unit T003.

c. Emissions Limitation:

Combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed:

i. 97.14 tons NO_X per rolling, 12-month period;
ii. 11.54 tons SO_2 per rolling, 12-month period;
iii. 6.68 tons VOC per rolling, 12-month period;
iv. 6.68 tons PE per rolling, 12-month period; and
v. 21.25 tons CO per rolling, 12-month period;

Applicable Compliance Method:

The rolling, 12-month period limitations were established by multiplying the lbs/Kgal limitations from f)(1)b. by the operational restriction/production limitation of 121,422,000 gallons of 200-proof ethanol per rolling, 12-month period established for emissions unit T003.

(2) 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 3 months after issuance of the permit and within 6 months prior to the permit expiration. In accordance with f)(1)c., the permittee is required to demonstrate compliance with the lbs NO_X/Kgal ethanol limitation through the use of a continuous emissions monitor;

b. The emission testing shall be conducted to demonstrate compliance with the limitations identified in f)(1)b and the facility wide HAP limitations identified in B.1.c);

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

i. Methods 1 through 4 from 40 CFR Part 60, Appendix A for velocity traverses, velocity and volumetric flow rates, gas analysis, and moisture content;

ii. Method 5 from 40 CFR Part 60, Appendix A for PE/PM10, total filterable particulate;

iii. Method 6C from 40 CFR Part 60, Appendix A for SO_2;

iv. Method 7E from 40 CFR Part 60, Appendix A for NO_X;

v. Method 10 from 40 CFR Part 60, Appendix A for CO; and

vi. Method 25 or Method 25A from 40 CFR Part 60, Appendix A for VOC (as specified by the Midwest Scaling Protocol).

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

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

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Central District Office's refusal to accept the results of the emission test(s).

f. Personnel from the Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Central District Office.

g) Miscellaneous Requirements

(1) None.

15. Emissions Unit Group – Denatured ethanol storage tanks: T001, T002,

EU ID	Operations, Property and/or Equipment Description
T001	1.5 MMgal denatured ethanol storage tank
T002	1.5 MMgal denatured ethanol storage tank

a) This permit document constitutes a permit-to-install issued in accordance with ORC Section 3704.03(F) and a permit-to-operate issued in accordance with ORC Section 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. b)(1)b., b)(1)c., c)(1), d)(1), e)(3), and f)(2)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations, property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and applicable emissions limitations and/or control measures are set forth 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.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)	Combined volatile organic compound (VOC) emissions for emissions units T001 and T002 shall not exceed 0.80 tons per year (TPY). See b)(2)a. and b)(2)b.
b.	40 CFR Part 60, subpart Kb	See b)(2)c. and b)(2)d.
c.	40 CFR Part 60, subpart A	See b)(2)e.

(2) Additional Terms and Conditions

a. The Best Available Technology (BAT) control requirements for this emissions unit has been determined to be the use of submerged fill and an internal floating roof. BAT also includes compliance with the terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. The combined annual VOC emissions limitation was established to reflect the potential to emit for these emissions units as determined by using the U.S. EPA

Tanks4.0 program and the information provided in the permit application. It is not necessary to develop record keeping and/or reporting requirements to ensure compliance with this limit.

c. 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 of 40 CFR, Part 60 are also federally enforceable.

d. The permittee shall demonstrate compliance with the applicable standards monitoring and recordkeeping requirements, reporting requirements and testing requirements identified in 40 CFR Part 60, subpart Kb.

In accordance with 40 CFR 60.110b(a) and 60.110b(b), emissions units T001 and T002 are determined to be a part of the affected facility to which 40 CFR Part 60, subpart Kb applies because they store volatile organic liquids (VOL), construction of these sources commenced after July 23, 1984, the capacity of each of these sources is greater than 151 m^3 and they store a liquid with a maximum true vapor pressure greater than 3.5 kPa .

e. The complete 40 CFR Part 60 requirements, including the General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Ohio EPA Central District Office. 40 CFR Part 60, subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.

c) Operational Restrictions

(1) Operational restrictions necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

d) Monitoring and/or Recordkeeping Requirements

(1) Monitoring and/or recordkeeping requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

e) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) Reporting requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Combined VOC emissions for emissions units T001 and T002 shall not exceed 0.80 TPY.

Applicable Compliance Method:

Compliance shall be determined in accordance with the methods and formulas specified in AP-42, 5th Edition, Chapter 7.1, Storage of Organic Liquids or based upon the most recent version of the U.S. EPA Tanks program.

(2) Testing requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

g) Miscellaneous Requirements

(1) None.

16. Emissions Unit Group - Hammermills 1 through 4: P001, P002, P003, P004,

EU ID	Operations, Property and/or Equipment Description
P001	hammermill no. 1 vented to a baghouse
P002	hammermill no. 2 vented to a baghouse
P003	hammermill no. 3 vented to a baghouse
P004	hammermill no. 4 vented to a 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. b)(1)b., c)(1), d)(1), d)(2), d)(3), e)(3), f)(1)b., f)(1)c., and f)(2)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations, property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and applicable emissions limitations and/or control measures are set forth 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.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3)	Combined particulate emissions (PE) from the stack serving emissions units P001, P002, P003 and P004 shall not exceed 1.29 pounds per hour (lbs/hr). Visible PE from the baghouse stack shall not exceed 0% opacity, as a six-minute average. Visible emissions of fugitive dust shall not exceed 0% opacity, as a 3-minute average. See b)(2)a., b)(2)b., and c)(1).
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V for PE)	The baghouse for emissions units P001, P002, P003 and P004 shall achieve an outlet emission rate of not greater than

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		0.005 grain of PE per dry standard cubic foot of exhaust gases (gr/dscf). Combined PE from the stack serving emissions units P001, P002, P003 and P004 shall not exceed 5.65 tons per rolling, 12-month period. See b)(2)c. and c)(1).
c.	OAC rule 3745-17-07(A)	The emissions limitation established by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	OAC rule 3745-17-11(B)	The emissions limitation established by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

(2) Additional Terms and Conditions

a. The permittee shall employ best available control measures for the emissions unit for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's permit application, the permittee has committed to maintain enclosures and vent all the particulate emissions to a baghouse to ensure compliance. Best available technology (BAT) also includes compliance with the terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

b. The 1.29 lbs/hr PE limitation was established to reflect the potential to emit for emissions units P001, P002, P003 and P004, as vented to a baghouse. The monitoring, recordkeeping and testing requirements for the baghouse as established in the following terms and conditions are sufficient to demonstrate compliance with this limit.

c. For the purposes of this permit all PE is considered to be PM_{10}.

c) Operational Restrictions

(1) The emissions from emissions units P001, P002, P003 and P004 shall be vented to the baghouse at all times the emissions units are in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. the hours of operation for the baghouse;

b. the particulate emissions from emissions units P001, P002, P003 and P004, in tons, calculated according to the following equation:

PE = AOC * EV * (60/HO) * (1 lb/7000 gr)*(ton/2000 lbs)

where;

AOC = the actual outlet concentration measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in gr/dscf;

EV = the stack exit velocity measured during the most recent compliance demonstration that demonstrated compliance with the 0.005 gr/dscf limitation, in dscf/min; and

HO = the actual monthly hours of operation for the baghouse recorded in accordance with d)(1)a.;

c. the rolling, 12-month summation of particulate emissions from emissions units P001, P002, P003 and P004, in tons.

(2) In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable range established for the pressure drop across the baghouse is between 0.1 to 6.0 inches of water.

(3) The permittee shall properly install, operate, and maintain equipment to continuously monitor the pressure drop, in inches of water, across the baghouse when the controlled emissions unit(s) is/are in operation, including periods of startup and shutdown. The permittee shall record the pressure drop across the baghouse on a daily basis. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s), with any modifications deemed necessary by the permittee.

Whenever the monitored value for the pressure drop deviates from the limit or range established in accordance with this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:

a. the date and time the deviation began;

b. the magnitude of the deviation at that time;

c. the date the investigation was conducted;

d. the name(s) of the personnel who conducted the investigation; and

e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range 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:

a. a description of the corrective action;

b. the date corrective action was completed;

c. the date and time the deviation ended;

d. the total period of time (in minutes) during which there was a deviation;

e. the pressure drop readings immediately after the corrective action was implemented; and

f. 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.

This range or limit on the pressure drop across the baghouse is effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the Central District Office (CDO). The permittee may request revisions to the permitted limit or range for the pressure drop based upon information obtained during future testing that demonstrate compliance with the allowable particulate emission rate for the controlled emissions unit(s). 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 perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack 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 color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

(5) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive emissions from any egress points (i.e. building windows, hatches, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible 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. 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 emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions.

e) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. each period of time (start time and date, and end time and date) when the pressure drop across the baghouse was outside of the acceptable range;

ii. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to the baghouse; and

iii. each rolling, 12-month period when the PE from emissions units P001, P002, P003 and P004 exceeded 5.65 tons.

b. the probable cause of each deviation (excursion);

c. any corrective actions that were taken to remedy the deviations (excursions) or prevent future deviations (excursions); and

d. the magnitude and duration of each deviation (excursion).

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

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

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Combined particulate emissions (PE) from the stack serving emissions units P001, P002, P003 and P004 shall not exceed 1.29 lbs/hr.

Applicable Compliance Method:

Compliance with the allowable lb PE/hr limitation shall be determined through the performance testing as described in f)(2) below.

b. Emissions Limitation:

Combined particulate emissions from the stack serving emissions units P001, P002, P003 and P004 shall not exceed 1.71 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be determined through the recordkeeping required in d)(1).

c. Emissions Limitation:

The baghouse for emissions units P001, P002, P003 and P004 shall achieve an outlet emission rate of not greater than 0.005 gr/dscf.

Applicable Compliance Method:

Compliance with the allowable grain outlet concentration shall be determined through the performance testing as described in f)(2) below.

d. Emissions Limitation:

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

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

e. Emissions Limitation:

Visible emissions of fugitive dust shall not exceed 0% opacity, as a 3-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

(2) The permittee shall conduct, or have conducted, emission testing for emissions units P001, P002, P003 and P004 in accordance with the following requirements:

a. The permittee demonstrated compliance with the limitations identified in f)(1)a., f)(1)b. and f)(1)c. above through emissions tests conducted on July 31, 2008. Emission testing shall be conducted within 6 months prior to the permit expiration.

b. The emission testing shall be conducted to demonstrate compliance with the following limitations:

i. Combined particulate emissions from emissions units P001, P002, P003 and P004 shall not exceed 1.29 lbs /hr; and

ii. The baghouse for emissions units P001, P002, P003 and P004 shall achieve an outlet emission rate of not greater than 0.005 gr/dscf.

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

i. Methods 1-5 of 40 CFR Part 60, Appendix A

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

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

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

f. Personnel from CDO 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 CDO 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 CDO.

g) Miscellaneous Requirements

(1) None.

17. Emissions Unit Group - Process Units P005, P007 & P009: P005, P007, P009,

EU ID	Operations, Property and/or Equipment Description
P005	Cook-Mash process consisting of one process-mixer (EU006), slurry tanks 1 (EU007) and 2 (EU008), two cook tubes (EU010), one flash tank (EU009), liquefaction tanks 1 (EU011) and 2 (EU012) and yeast tanks 1 (EU016) and 2 (EU015) vented to waste heat recovery/boiler units B001 and B002
P007	Distillation Process consisting of beer column (EU017), side stripper (EU018), rectifier column (EU019) and 190-proof condenser (EU020) vented to waste heat recovery/boiler units B001 and B002
P009	Molecular Sieve Process consisting of two sets of three mole-sieve bottles (EU021), sieve vaporizer (ET-4620), evap 1 (ET-4101, evap 2 (ET-4102), 200 proof flash receiver (TP-4611), 200 proof flash vessel (TP-4613), cooler and 200 proof filters vented to waste heat recovery/boiler units B001 and B002

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)(5) through d)(8)

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

a. b)(1)b., c)(1), d)(1), d)(2), d)(3), e)(3), f)(1)c., and f)(2)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations, property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and applicable emissions limitations and/or control measures are set forth 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)	Visible particulate emissions from the stack serving emissions units B001, B002, P005, P007, P008 (except emissions vented to the biomethanator flare), P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed 10% opacity, as a six-minute average.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)a.
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V for VOC)	See b)(2)b., b)(2)c., and c)(1).
c.	ORC rule 3704.03(F)	See d)(5) through d)(8).

(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 thermal oxidizer. BAT also includes compliance with the terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

The following limitations apply to the combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack):

i. Nitrogen oxides (NO_X) emissions shall not exceed 1.60 pounds per thousand gallons of 200-proof ethanol produced (lbs/Kgal ethanol);

ii. Sulfur dioxide (SO_2) emissions shall not exceed 0.19 lbs/ Kgal ethanol;

iii. Volatile organic compounds (VOC) emissions shall not exceed 0.11 lbs/Kgal ethanol;

iv. Particulate emissions (PE) shall not exceed 0.11 lb/Kgal ethanol; and

v. Carbon monoxide (CO) emissions shall not exceed 0.35 lbs/Kgal ethanol.

b. The following limitations apply to the combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack):

i. NO_X emissions shall not exceed 97.14 tons per rolling, 12-month period;

ii. SO_2 emissions shall not exceed 11.54 tons per rolling, 12-month period;

iii. VOC emissions shall not exceed 6.68 tons per rolling, 12-month period;

iv. PE shall not exceed 6.68 tons per rolling, 12-month period; and

v. CO emissions shall not exceed 21.25 tons per rolling, 12-month period.

These rolling, 12-month limitations were established to reflect the potential to emit taking into consideration the operational restrictions established for emissions unit T003. The requirements established in the following terms and

conditions in conjunction with the requirements established for emissions unit T003 are sufficient to demonstrate compliance with this limit.

c. For the purposes of this permit all PE is considered to be PM_{10}.

c) Operational Restrictions

(1) All of the emissions from this emissions unit shall be vented to a thermal oxidizer.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall collect and record the following information each month for this emissions unit:

a. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to a thermal oxidizer;

(2) The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

(3) The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the thermal oxidizer 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 modifications deemed necessary by the permittee.

The permittee shall collect and record the following information for each day:

a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emission test that demonstrated the emissions unit was in compliance.

b. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

(4) The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack 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 emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions.

(5) The FEPTIO application for emissions units P005, P007, P008 and P009 was evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The "Toxic Air Contaminant Statute", ORC 3704.03(F), was applied to this/these emissions unit(s) for each toxic air contaminant listed in OAC rule 3745-114-01, using data from the permit application; and modeling was performed for each toxic air contaminant(s) emitted at over one ton per year using an air dispersion model such as SCREEN3, AERMOD, or ISCST3, or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the approved air dispersion model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as described in the Ohio EPA guidance document entitled "Review of New Sources of Air Toxic Emissions, Option A", as follows:

a. the exposure limit, expressed as a time-weighted average concentration for a conventional 8-hour workday and a 40-hour workweek, for each toxic compound(s) emitted from the emissions unit(s), (as determined from the raw materials processed and/or coatings or other materials applied) has been documented from one of the following sources and in the following order of preference (TLV was and shall be used, if the chemical is listed):

i. threshold limit value (TLV) from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; or

ii. STEL (short term exposure limit) or the ceiling value from the American Conference of Governmental Industrial Hygienists' (ACGIH) "Threshold Limit Values for Chemical Substances and Physical Agents Biological Exposure Indices"; the STEL or ceiling value is multiplied by 0.737 to convert the 15-minute exposure limit to an equivalent 8-hour TLV.

b. The TLV is divided by ten to adjust the standard from the working population to the general public (TLV/10).

c. This standard is/was then adjusted to account for the duration of the exposure or the operating hours of the emissions unit(s), i.e., "24" hours per day and "7" days per week, from that of 8 hours per day and 5 days per week. The resulting calculation was (and shall be) used to determine the Maximum Acceptable Ground-Level Concentration (MAGLC):

$$TLV/10 \times 8/24 \times 5/7 = 4\ TLV/XY = MAGLC$$

d. The following summarizes the results of dispersion modeling for the significant toxic contaminants (emitted at 1 or more tons/year) or "worst case" toxic contaminant(s):

Toxic Contaminant: Acetaldehyde
TLV (mg/m3): 45.04
Maximum Hourly Emission Rate (lbs/hr): 0.63
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.1724
MAGLC (ug/m3): 1072.4

Toxic Contaminant: Formaldehyde
TLV (mg/m3): 0.368
Maximum Hourly Emission Rate (lbs/hr): 0.48
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.1314
MAGLC (ug/m3): 8.77

Toxic Contaminant: Methanol
TLV (mg/m3): 262.09
Maximum Hourly Emission Rate (lbs/hr): 0.28
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 0.07665
MAGLC (ug/m3): 6240.1

The permittee, has demonstrated that emissions of acetaldehyde, formaldehyde and methanol from emissions units P005, P007, P008 and P009 are calculated to be less than eighty per cent of the maximum acceptable ground level concentration (MAGLC); any new raw material or processing agent shall not be applied without evaluating each component toxic air contaminant in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F).

(6) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration", the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, 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 new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV 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 modeled from the initial (or last) application; and

c. physical changes to the emissions unit(s) or its/their exhaust parameters (e.g., increased/ decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Toxic Air Contaminant Statute" 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 a non-restrictive change to a parameter or

process operation, where compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), has been documented. If the change(s) meet(s) the definition of a "modification", the permittee shall apply for and obtain a final FEPTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level concentration; and he/she may require the permittee to submit a permit application for the increased emissions.

(7) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F):

a. a description of the parameters/values used in each compliance demonstration and the parameters or values changed for any re-evaluation of the toxic(s) modeled (the composition of materials, new toxic contaminants emitted, change in stack/exhaust parameters, etc.);

b. the Maximum Acceptable Ground-Level Concentration (MAGLC) for each significant toxic contaminant or worst-case contaminant, calculated in accordance with the "Toxic Air Contaminant Statute", ORC 3704.03(F);

c. a copy of the computer model run(s), that established the predicted 1-hour maximum ground-level concentration that demonstrated the emissions unit(s) to be in compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), initially and for each change that requires re-evaluation of the toxic air contaminant emissions; and

d. the documentation of the initial evaluation of compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), and documentation of any determination that was conducted to re-evaluate compliance due to a change made to the emissions unit(s) or the materials applied.

(8) The permittee shall maintain a record of any change made to a parameter or value used in the dispersion model, used to demonstrate compliance with the "Toxic Air Contaminant Statute", ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration. The record shall include the date and reason(s) for the change and if the change would increase the ground-level concentration.

e) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director 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.

The permittee shall include any changes made to a parameter or value used in the dispersion model, that was used to demonstrate compliance with the Toxic Air Contaminant Statute, ORC 3704.03(F), through the predicted 1-hour maximum ground-level concentration, in the annual Permit Evaluation Report (PER). If no changes to the emissions, emissions unit(s), or the exhaust stack have been made, then the report shall include a statement to this effect.

(3) The permittee shall submit quarterly deviation (excursion) reports that identify:

a. all deviations (excursions) of the following emission limitations, operational restrictions and/or control device operating parameter limitations that restrict the potential to emit (PTE) of any regulated air pollutant and have been detected by the monitoring, record keeping and/or testing requirements in this permit:

i. each 3-hour block of time (start time and date, and end time and date) when the average combustion temperature within the thermal oxidizer was outside of the acceptable range; and

ii. any period of time (start time and date, and end time and date) when the emissions unit(s) was/were in operation and the process emissions were not vented to a thermal oxidizer.

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

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

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. <u>Emissions Limitation:</u>

Visible PE from the stack serving emissions units B001, B002, P005, P007, P008 (except emissions vented to the biomethanator flare), P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed 10% opacity, as a six-minute average.

<u>Applicable Compliance Method:</u>

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emissions Limitation:

Combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed:

i. 1.60 lbs NO_X /Kgal ethanol;
ii. 0.19 lbs SO_2/Kgal ethanol;
iii. 0.11 lbs VOC/Kgal ethanol;
iv. 0.11 lb PE/Kgal ethanol; and
v. 0.35 lbs CO/Kgal ethanol.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the testing requirements identified in f)(2).

The permittee shall demonstrate continuous compliance with the lbs NO_X/Kgal ethanol limitation through the use of a continuous emissions monitor and the recordkeeping required for emissions unit T003.

c. Emissions Limitation:

Combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed:

i. 97.14 tons NO_X per rolling, 12-month period;
ii. 11.54 tons SO_2 per rolling, 12-month period;
iii. 6.68 tons VOC per rolling, 12-month period;
iv. 6.68 tons PE per rolling, 12-month period; and
v. 21.25 tons CO per rolling, 12-month period;

Applicable Compliance Method:

The rolling, 12-month period limitations were established by multiplying the lbs/Kgal limitations from f)(1)b. by the operational restriction/production limitation of 121,422,000 gallons of 200-proof ethanol per rolling, 12-month period established for emissions unit T003.

(2) 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 3 months after issuance of the permit and within 6 months prior to the permit expiration. In accordance with f)(1)c., the permittee is required to demonstrate compliance with the lbs NO_X/Kgal ethanol limitation through the use of a continuous emissions monitor;

b. The emission testing shall be conducted to demonstrate compliance with the limitations identified in f)(1)b. and the facility wide HAP limitations identified in B.1.c);

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

i. Methods 1 through 4 from 40 CFR Part 60, Appendix A for velocity traverses, velocity and volumetric flow rates, gas analysis, and moisture content;

ii. Method 5 from 40 CFR Part 60, Appendix A for PE/PM10, total filterable particulate;

iii. Method 6C from 40 CFR Part 60, Appendix A for SO_2;

iv. Method 7E from 40 CFR Part 60, Appendix A for NO_X;

v. Method 10 from 40 CFR Part 60, Appendix A for CO; and

vi. Method 25 or Method 25A from 40 CFR Part 60, Appendix A for VOC (as specified by the Midwest Scaling Protocol).

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

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

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Central District Office's refusal to accept the results of the emission test(s).

f. Personnel from the Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

g. A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Central District Office.

g) Miscellaneous Requirements

(1) None.

18. Emissions Unit Group - Waste Heat Recovery Boilers: B001, B002,

EU ID	Operations, Property and/or Equipment Description
B001	143 MMBtu/hr natural gas thermal oxidizer/heat recovery boiler unit
B002	143 MMBtu/hr natural gas thermal oxidizer/heat recovery boiler unit

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. b)(1)b., b)(1)d., b)(1)e., d)(2), d)(3), e)(3), f)(1)c., f)(1)d., and f)(2)

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations, property, and/or equipment that constitute each emissions unit along with the applicable rules and/or requirements and applicable emissions limitations and/or control measures are set forth 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)	Visible particulate emissions from the stack serving emissions units B001, B002, P005, P007, P008 (except emissions vented to the biomethanator flare), P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed 10% opacity, as a six-minute average. See b)(2)a.
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V for NO_X)	See b)(2)b. and b)(2)c.
c.	OAC rule 3745-17-10(B)(1)	The emissions limitation established by this rule is equivalent to the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).
d.	40 CFR Part 60, subpart Db (40	NO_X emissions shall not exceed 0.10 lb

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	CFR 60.40b-60.49b)	NO_X per million british thermal units (MMBtu) of actual heat input. See b)(2)d.
e.	40 CFR Part 60, subpart A (40 CFR 60.1-60.18)	See b)(2)e. and b)(2)f.

(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 low NO_X burners. BAT also includes compliance with the terms and conditions of this permit. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

The following limitations apply to the combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack):

i. Nitrogen oxides (NO_X) emissions shall not exceed 1.60 pounds per thousand gallons of 200-proof ethanol produced (lbs/Kgal ethanol);

ii. Sulfur dioxide (SO_2) emissions shall not exceed 0.19 lbs/ Kgal ethanol;

iii. Volatile organic compounds (VOC) emissions shall not exceed 0.11 lbs/Kgal ethanol;

iv. Particulate emissions (PE) shall not exceed 0.11 lb/Kgal ethanol; and

v. Carbon monoxide (CO) emissions shall not exceed 0.35 lbs/Kgal ethanol.

b. The following limitations apply to the combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack):

i. NO_X emissions shall not exceed 97.14 tons per rolling, 12-month period;

ii. SO_2 emissions shall not exceed 11.54 tons per rolling, 12-month period;

iii. VOC emissions shall not exceed 6.68 tons per rolling, 12-month period;

iv. PE shall not exceed 6.68 tons per rolling, 12-month period; and

v. CO emissions shall not exceed 21.25 tons per rolling, 12-month period.

These rolling, 12-month limitations were established to reflect the potential to emit taking into consideration the operational restrictions established for

emissions unit T003. The requirements established in the following terms and conditions in conjunction with the requirements established for emissions unit T003 are sufficient to demonstrate compliance with this limit.

c. For the purposes of this permit all PE is considered to be PM_{10}.

d. The permittee shall demonstrate compliance with the applicable emissions limitations identified in 40 CFR Part 60, subpart Db, including the following sections:

40 CFR 60.44b	Standard for nitrogen oxides (NO_X)

e. The permittee shall demonstrate compliance with the applicable requirements identified in 40 CFR Part 60, subpart Db in accordance with 40 CFR Part 60, subpart A, including the following sections:

40 CFR 60.1	Applicability.
40 CFR 60.6	Review of plans.
40 CFR 60.7	Notification and record keeping.
40 CFR 60.8	Performance tests.
40 CFR 60.11	Compliance with standards and maintenance.
40 CFR 60.12	Circumvention.
40 CFR 60.13	Monitoring requirements.
40 CFR 60.14	Modification.
40 CFR 60.15	Reconstruction.
40 CFR 60.18	General control device requirements.

The complete NSPS requirements, including the NSPS General Provisions may be accessed via the internet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Central District Office. 40 CFR Part 60, subpart A provides applicability provisions, definitions, and other general provisions that are pertinent to emissions units affected by 40 CFR Part 60.

f. In accordance with 40 CFR Part 60, Appendix F, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous NO_X monitoring system, designed to ensure continuous valid and representative readings of NO_X emissions in units of the applicable standard(s). The quality

assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack 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 emission incident; and

e. any corrective actions taken to eliminate the abnormal visible emissions.

(2) The permittee shall demonstrate compliance with the applicable monitoring requirements identified in 40 CFR Part 60, subpart Db, including the following sections:

40 CFR 60.48b	Emission monitoring for particulate matter and nitrogen oxides.
40 CFR 60.49b	Reporting and recordkeeping requirements.

(3) The permittee shall install, operate, and maintain equipment to continuously monitor and record NO_X emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

The permittee shall maintain records of data obtained by the continuous NO_X monitoring system including, but not limited to:

a. emissions of NO_X, in parts per million, on an instantaneous (one-minute) basis;

b. the stack gas flow rate, in dry standard cubic feet per minute, on an instantaneous (one-minute) basis; and

c. emissions of NO_X, in pounds per hour and in all units of the applicable standard(s), in the appropriate averaging period.

Each continuous NO_X monitoring system shall be certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6. At least 45 days before commencing certification testing of the continuous NO_X monitoring system(s), the permittee shall develop and maintain a written quality assurance/quality control plan designed to ensure continuous valid and representative readings of NO_X emissions from the continuous monitor(s), in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NO_x monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

The permittee shall operate and maintain equipment to continuously monitor and record the fuel flow rate in order to stoichiometrically calculate emissions of NO_X, in pounds per hour. Fuel heat content values for each fuel burned, as applied in the stoichiometric calculations, shall also be recorded. The permittee shall maintain records of data obtained by the fuel flow monitor/meter, including the dates and results of each calibration check and the magnitude of calibration adjustments; periods of downtime and malfunction of the fuel flow monitor/meter; as well as, the reason (if known) and the corrective actions taken (if any) for each such event.

e) Reporting Requirements

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

(2) Annual Permit Evaluation Report (PER) forms will be mailed to the permittee at the end of the reporting period specified in the Authorization section of this permit. The permittee shall submit the PER in the form and manner provided by the director by the due date identified in the Authorization section of this permit. The permit evaluation report shall cover a reporting period of no more than twelve-months for each air contaminant source identified in this permit.

(3) The permittee shall demonstrate compliance with the applicable reporting requirements identified in 40 CFR Part 60, subpart Db, including the following sections:

40 CFR 60.49b	Reporting and recordkeeping requirements.

f) Testing Requirements

(1) Compliance with the emissions limitations in b)(1) of these terms and conditions shall be determined in accordance with the following methods:

a. Emissions Limitation:

Visible PE from the stack serving emissions units B001, B002, P005, P007, P008 (except emissions vented to the biomethanator flare), P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed 10% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

b. Emissions Limitation:

Combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed:

i. 1.60 lbs NO_X /Kgal ethanol;
ii. 0.19 lbs SO_2/Kgal ethanol;
iii. 0.11 lbs VOC/Kgal ethanol;
iv. 0.11 lb PE/Kgal ethanol; and
v. 0.35 lbs CO/Kgal ethanol.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the testing requirements identified in f)(2).

The permittee shall demonstrate continuous compliance with the lbs NO_X/Kgal ethanol limitation through the use of a continuous emissions monitor and the recordkeeping required for emissions unit T003.

c. Emissions Limitation:

Combined process and combustion emissions from emissions units B001, B002, P005, P007, P008, P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack) shall not exceed:

i. 97.14 tons NO_X per rolling, 12-month period;
ii. 11.54 tons SO_2 per rolling, 12-month period;
iii. 6.68 tons VOC per rolling, 12-month period;
iv. 6.68 tons PE per rolling, 12-month period; and
v. 21.25 tons CO per rolling, 12-month period;

Applicable Compliance Method:

The rolling, 12-month period limitations were established by multiplying the lbs/Kgal limitations from f)(1)b. by the operational restriction/production limitation of 121,422,000 gallons of 200-proof ethanol per rolling, 12-month period established for emissions unit T003.

d. Emissions Limitation:

NO_X emissions shall not exceed 0.10 lb NO_X per MMBtu of actual heat input.

Applicable Compliance Method:

The permittee shall demonstrate compliance through an initial compliance demonstration performed in accordance with 40 CFR 60.46b and 40 CFR 60.8.

The permittee shall demonstrate continuous compliance through the use of a continuous emissions monitor required by d)(3) and in accordance with 40 CFR 60.48b and 40 CFR 60.13.

(2) 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 3 months after issuance of the permit and within 6 months prior to the permit expiration. In accordance with f)(1)c., the permittee is required to demonstrate compliance with the lbs NO_X/Kgal ethanol limitation through the use of a continuous emissions monitor;

b. The emission testing shall be conducted to demonstrate compliance with the limitations identified in f)(1)b. and the facility wide HAP limitations identified in B.1.c);

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

i. Methods 1 through 4 from 40 CFR Part 60, Appendix A for velocity traverses, velocity and volumetric flow rates, gas analysis, and moisture content;

ii. Method 5 from 40 CFR Part 60, Appendix A for PE/PM10, total filterable particulate;

iii. Method 6C from 40 CFR Part 60, Appendix A for SO_2;

iv. Method 7E from 40 CFR Part 60, Appendix A for NO_X;

v. Method 10 from 40 CFR Part 60, Appendix A for CO; and

vi. Method 25 or Method 25A from 40 CFR Part 60, Appendix A for VOC (as specified by the Midwest Scaling Protocol).

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

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

e. Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Central District Office's refusal to accept the results of the emission test(s).

f. Personnel from the Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

(3) 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 Central District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Central District Office.

g) Miscellaneous Requirements

(1) None.