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

2/26/2013

Genevieve Damico *Via E-Mail Notification*
United States Environmental Protection Agency
Mail Code: AR-18J
77 West Jackson Blvd.
Chicago, IL 60604-3507

RE: PROPOSED AIR POLLUTION TITLE V PERMIT
Facility Name: Valero Renewable Fuels Company, LLC
Facility ID: 0124000132
Permit Type: Initial
Permit Number: P0110386

Dear Ms. Damico:

A proposed OAC Chapter 3745-77 Title V permit for the referenced facility has been issued for review by U.S. EPA. This permit can be accessed electronically on the Division of Air Pollution Control (DAPC) Web page, www.epa.ohio.gov/dapc by clicking the "Search for Permits" link under the Permitting topic on the Programs tab. If U.S. EPA does not object to this proposed permit, the permit will be processed for issuance as a final action not less than 45 days from the date of this letter. Please contact me at (614) 644-3631 by the end of the 45 day review period if you wish to object to the proposed permit.

Sincerely,

Michael W. Ahern

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

Cc: Ohio EPA DAPC, Central District Office

PROPOSED

Division of Air Pollution Control
Title V Permit
for
Valero Renewable Fuels Company, LLC

Facility ID:	0124000132
Permit Number:	P0110386
Permit Type:	Initial
Issued:	2/26/2013
Effective:	To be entered upon final issuance
Expiration:	To be entered upon final issuance

Division of Air Pollution Control
Title V Permit
for
Valero Renewable Fuels Company, LLC

Table of Contents

Authorization 1
A. Standard Terms and Conditions 2
1. Federally Enforceable Standard Terms and Conditions 3
2. Monitoring and Related Record Keeping and Reporting Requirements 3
3. Scheduled Maintenance 6
4. Risk Management Plans 6
5. Title IV Provisions 7
6. Severability Clause 7
7. General Requirements 7
8. Fees 8
9. Marketable Permit Programs 8
10. Reasonably Anticipated Operating Scenarios 8
11. Reopening for Cause 9
12. Federal and State Enforceability 9
13. Compliance Requirements 9
14. Permit Shield 11
15. Operational Flexibility 11
16. Emergencies 11
17. Off-Permit Changes 11
18. Compliance Method Requirements 12
19. Insignificant Activities or Emissions Levels 12
20. Permit to Install Requirement 12
21. Air Pollution Nuisance 13
22. Permanent Shutdown of an Emissions Unit 13
23. Title VI Provisions 13
24. Reporting Requirements Related to Monitoring and Record Keeping Requirements Under State Law Only 14
25. Records Retention Requirements Under State Law Only 14
26. Inspections and Information Requests 14
27. Scheduled Maintenance/Malfunction Reporting 15
28. Permit Transfers 15

29. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations 15
B. Facility-Wide Terms and Conditions 16
C. Emissions Unit Terms and Conditions 22
1. F001, F001 23
2. J001, C0E09 25
3. P006, P006 33
4. P008, P008 41
5. P014, EU046 54
6. P015, P015 60
7. P801, P801 63
8. P901, EU001 82
9. P902, P902 90
10. P903, EU037 97
11. T003, T003 104
12. T004, T004 108
13. T005, T005 112
14. Emissions Unit Group -DDGS Dryers: P010,P011,P012,P013, ... 116
15. Emissions Unit Group -Denatured Ethanol Storage Tanks: T001,T002, ... 126
16. Emissions Unit Group -Hammermills 1 through 4: P001,P002,P003,P004, ... 130
17. Emissions Unit Group -Process Units P005, P007, & P009: P005,P007,P009, ... 138
18. Emissions Unit Group -Waste Heat Recovery Boilers: B001,B002, ... 147

Authorization

Facility ID:	0124000132
Facility Description:	Ethanol Production Facility
Application Number(s):	A0044560
Permit Number:	P0110386
Permit Description:	Initial Title V operating permit for an ethanol production facility.
Permit Type:	Initial
Issue Date:	2/26/2013
Effective Date:	To be entered upon final issuance
Expiration Date:	To be entered upon final issuance
Superseded Permit Number:	

This document constitutes issuance of an OAC Chapter 3745-77 Title V permit to:

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

Ohio Environmental Protection Agency (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 a Title V permit pursuant to Chapter 3745-77 of the Ohio Administrative Code. This permit and the authorization to operate the air contaminant sources (emissions units) at this facility shall expire at midnight on the expiration date shown above. You will be sent a notice approximately 18 months prior to the expiration date regarding the renewal of this permit. If you do not receive a notice, please contact the Ohio EPA DAPC, Central District Office. If a renewal permit is not issued prior to the expiration date, the permittee may continue to operate pursuant to OAC rule 3745-77-08(E) and in accordance with the terms of this permit beyond the expiration date, if a timely renewal application is submitted. A renewal application will be considered timely if it is submitted no earlier than 18 months (540 days) and no later than 6 months (180 days) prior to the expiration date.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Scott J. Nally
Director

A. Standard Terms and Conditions

1. Federally Enforceable Standard Terms and Conditions

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

(1) Standard Term and Condition A. 24., Reporting Requirements Related to Monitoring and Record Keeping Requirements of State-Only Enforceable Permit Terms and Conditions

(2) Standard Term and Condition A. 25., Records Retention Requirements for State-Only Enforceable Permit Terms and Conditions

(3) Standard Term and Condition A. 27., Scheduled Maintenance/Malfunction Reporting

(4) Standard Term and Condition A. 29., Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations

(Authority for term: ORC 3704.036(A))

2. Monitoring and Related Record Keeping and Reporting Requirements

a) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit), the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:

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

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

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

(4) The analytical techniques or methods used.

(5) The results of such analyses.

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

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(i))

b) Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

(Authority for term: OAC rule 3745-77-07(A)(3)(b)(ii))

c) The permittee shall submit required reports in the following manner:

(1) All reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations caused by malfunctions shall be submitted in the following manner:

Any malfunction, as defined in OAC rule 3745-15-06(B)(1), shall be promptly reported to the Ohio EPA in accordance with OAC rule 3745-15-06. In addition, to fulfill the OAC rule 3745-77-07(A)(3)(c) deviation reporting requirements for malfunctions, written reports that identify each malfunction that occurred during each calendar quarter (including each malfunction reported only verbally in accordance with OAC rule 3745-15-06) shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year in accordance with Standard Term and Condition A.2.c)(2) below; and each report shall cover the previous calendar quarter. An exceedance of the visible emission limitations specified in OAC rule 3745-17-07(A)(1) that is caused by a malfunction is not a violation and does not need to be reported as a deviation if the owner or operator of the affected air contaminant source or air pollution control equipment complies with the requirements of OAC rule 3745-17-07(A)(3)(c).

In accordance with OAC rule 3745-15-06, a malfunction reportable under OAC rule 3745-15-06(B) is a deviation of the federally enforceable permit requirements. Even though verbal notifications and written reports are required for malfunctions pursuant to OAC rule 3745-15-06, the written reports required pursuant to this term must be submitted quarterly to satisfy the prompt reporting provision of OAC rule 3745-77-07(A)(3)(c).

In identifying each deviation caused by a malfunction, the permittee shall specify the emission limitation(s) (or control requirement(s)) for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. For a specific malfunction, if this information has been provided in a written report that was submitted in accordance with OAC rule 3745-15-06, the permittee may simply reference that written report to identify the deviation. Nevertheless, all malfunctions, including those reported only verbally in accordance with OAC rule 3745-15-06, must be reported in writing on a quarterly basis.

Any scheduled maintenance, as referenced in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described above for malfunctions.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(2) Except as may otherwise be provided in the terms and conditions for a specific emissions unit (i.e., in section C. Emissions Unit Terms and Conditions of this Title V permit or, in some cases, in section B. Facility-Wide Terms and Conditions of this Title V permit), all reporting required in accordance with OAC rule 3745-77-07(A)(3)(c) for deviations of the emission limitations, operational restrictions, and control device operating parameter limitations shall be submitted in the following manner:

Written reports of (a) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, (b) the probable cause of such deviations, and (c) any corrective actions or preventive

measures taken, shall be promptly made to the appropriate Ohio EPA District Office or local air agency. Except as provided below, the written reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

In identifying each deviation, the permittee shall specify the emission limitation(s), operational restriction(s), and/or control device operating parameter limitation(s) for which the deviation occurred, describe each deviation, and provide the estimated magnitude and duration of each deviation.

These written deviation reports shall satisfy the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations. Full compliance with OAC rule 3745-77-07(A)(3)(c) requires reporting of all other deviations of the federally enforceable requirements specified in the permit as required by such rule.

If an emissions unit has a deviation reporting requirement for a specific emission limitation, operational restriction, or control device operating parameter limitation that is not on a quarterly basis (e.g., within 30 days following the end of the calendar month, or within 30 or 45 days after the exceedance occurs), that deviation reporting requirement satisfies the reporting requirements specified in this Standard Term and Condition for that specific emission limitation, operational restriction, or control device parameter limitation. Following the provisions of that non-quarterly deviation reporting requirement will also satisfy (for the deviations so reported) the requirements of OAC rule 3745-77-07(A)(3)(c) pertaining to the submission of monitoring reports every six months and to the prompt reporting of all deviations, and additional quarterly deviation reports for that specific emission limitation, operational restriction, or control device parameter limitation are not required pursuant to this Standard Term and Condition.

See A.29 below if no deviations occurred during the quarter.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

(3) All reporting required in accordance with the OAC rule 3745-77-07(A)(3)(c) for other deviations of the federally enforceable permit requirements which are not reported in accordance with Standard Term and Condition A.2)c)(2) above shall be submitted in the following manner:

Unless otherwise specified by rule, written reports that identify deviations of the following federally enforceable requirements contained in this permit; Standard Terms and Conditions: A.3, A.4, A.5, A.7.e), A.8, A.13, A.15, A.19, A.20, A.21, and A.23 of this Title V permit, as well as any deviations from the requirements in section C. Emissions Unit Terms and Conditions of this Title V permit, and any monitoring, record keeping, and reporting requirements, which are not reported in accordance with Standard Term and Condition A.2.c)(2) above shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency by January 31 and July 31 of each year; and each report shall cover the previous six calendar months. Unless otherwise specified by rule, all other deviations from federally enforceable requirements identified in this permit shall be submitted annually as part of the annual compliance certification, including deviations of federally enforceable requirements not specifically addressed by permit or rule for the

insignificant activities or emissions levels (IEU) identified in section B. Facility-Wide Terms and Conditions of this Title V permit. Annual reporting of deviations is deemed adequate to meet the deviation reporting requirements for IEUs unless otherwise specified by permit or rule.

In identifying each deviation, the permittee shall specify the federally enforceable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation.

These semi-annual and annual written reports shall satisfy the reporting requirements of OAC rule 3745-77-07(A)(3)(c) for any deviations from the federally enforceable requirements contained in this permit that are not reported in accordance with Standard Term and Condition A.2.c)(2) above.

If no such deviations occurred during a six-month period, the permittee shall submit a semi-annual report which states that no such deviations occurred during that period.

(Authority for term: OAC rules 3745-77-07(A)(3)(c)(i) and (ii) and OAC rule 3745-77-07(A)(13)(b))

(4) Each written report shall be signed by a responsible official certifying that, "based on information and belief formed after reasonable inquiry, the statements and information in the report (including any written malfunction reports required by OAC rule 3745-15-06 that are referenced in the deviation reports) are true, accurate, and complete."

(Authority for term: OAC rule 3745-77-07(A)(3)(c)(iv))

(5) Reports of any required monitoring and/or record keeping information shall be submitted to Ohio EPA DAPC, Central District Office.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

3. Scheduled Maintenance

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. Except as provided in OAC rule 3745-15-06(A)(3), any scheduled maintenance necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s). Any scheduled maintenance, as defined in OAC rule 3745-15-06(A)(1), that results in a deviation from a federally enforceable emission limitation (or control requirement) shall be reported in the same manner as described for malfunctions in Standard Term and Condition A.2.c)(1) above.

(Authority for term: OAC rule 3745-77-07(A)(3)(c))

4. Risk Management Plans

If applicable, the permittee shall develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. § 7401 et seq. ("Act"); and, pursuant to 40 C.F.R. 68.215(a), the permittee shall submit either of the following:

a) a compliance plan for meeting the requirements of 40 C.F.R. Part 68 by the date specified in 40 C.F.R. 68.10(a) and OAC 3745-104-05(A); or

b) as part of the compliance certification submitted under 40 C.F.R. 70.6(c)(5), a certification statement that the source is in compliance with all requirements of 40 C.F.R. Part 68 and OAC Chapter 3745-104, including the registration and submission of the risk management plan.

(Authority for term: OAC rule 3745-77-07(A)(4))

5. Title IV Provisions

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

(Authority for term: OAC rule 3745-77-07(A)(5))

6. Severability Clause

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

(Authority for term: OAC rule 3745-77-07(A)(6))

7. General Requirements

a) The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and reissuance, or modification, or for denial of a permit renewal application.

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

c) This permit may be modified, reopened, revoked, or revoked and reissued, for cause, in accordance with Standard Term and Condition A.11 below. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.

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

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

Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

f) Except as otherwise indicated below, this Title V permit, or permit modification, is effective for five years from the original effective date specified in the permit. In the event that this facility becomes eligible for non-title V permits, this permit shall cease to be enforceable when:

(1) the permittee submits an approved facility-wide potential to emit analysis supporting a claim that the facility no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on the permanent shutdown and removal of one or more emissions units identified in this permit; or

(2) the permittee no longer meets the definition of a "major source" as defined in OAC rule 3745-77-01(W) based on obtaining restrictions on the facility-wide potential(s) to emit that are federally enforceable or legally and practically enforceable ; or

(3) a combination of (1) and (2) above.

The permittee shall continue to comply with all applicable OAC Chapter 3745-31 requirements for all regulated air contaminant sources once this permit ceases to be enforceable. The permittee shall comply with any residual requirements, such as quarterly deviation reports, semi-annual deviation reports, and annual compliance certifications covering the period during which this Title V permit was enforceable. All records relating to this permit must be maintained in accordance with law.

(Authority for term: OAC rule 3745-77-01(W), OAC rule 3745-77-07(A)(3)(b)(ii), OAC rule 3745-77(A)(7))

8. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78.

(Authority for term: OAC rule 3745-77-07(A)(8))

9. Marketable Permit Programs

No revision of this permit is required under any approved economic incentive, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for in this permit.

(Authority for term: OAC rule 3745-77-07(A)(9))

10. Reasonably Anticipated Operating Scenarios

The permittee is hereby authorized to make changes among operating scenarios authorized in this permit without notice to the Ohio EPA, but, contemporaneous with making a change from one operating scenario to another, the permittee must record in a log at the permitted facility the scenario under which the permittee is operating. The permit shield provided in these standard terms and conditions shall apply to all operating scenarios authorized in this permit.

(Authority for term: OAC rule 3745-77-07(A)(10))

11. Reopening for Cause

This Title V permit will be reopened prior to its expiration date under the following conditions:

a) Additional applicable requirements under the Act become applicable to one or more emissions units covered by this permit, and this permit has a remaining term of three or more years. Such a reopening shall be completed not later than eighteen (18) months after promulgation of the applicable requirement. No such reopening is required if the effective date of the requirement is later than the date on which the permit is due to expire, unless the original permit or any of its terms and conditions has been extended pursuant to paragraph (E)(1) of OAC rule 3745-77-08.

b) This permit is issued to an affected source under the acid rain program and additional requirements (including excess emissions requirements) become applicable. Upon approval by the Administrator, excess emissions offset plans shall be deemed to be incorporated into the permit, and shall not require a reopening of this permit.

c) The Director of the Ohio EPA or the Administrator of the U.S. EPA determines that the federally applicable requirements in this permit are based on a material mistake, or that inaccurate statements were made in establishing the emissions standards or other terms and conditions of this permit related to such federally applicable requirements.

d) The Administrator of the U.S. EPA or the Director of the Ohio EPA determines that this permit must be revised or revoked to assure compliance with the applicable requirements.

(Authority for term: OAC rules 3745-77-07(A)(12) and 3745-77-08(D))

12. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any of its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA, the State, and citizens under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

(Authority for term: OAC rule 3745-77-07(B))

13. Compliance Requirements

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

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

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

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with paragraph (E) of OAC rule 3745-77-03.

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

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

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

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

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

d) Compliance certifications concerning the terms and conditions contained in this permit that are federally enforceable emission limitations, standards, or work practices, shall be submitted to the Director (the appropriate Ohio EPA District Office or local air agency) and the Administrator of the U.S. EPA in the following manner and with the following content:

(1) Compliance certifications shall be submitted annually on a calendar year basis. The annual certification shall be submitted (i.e., postmarked) on or before April 30th of each year during the permit term.

(2) Compliance certifications shall include the following:

a. An identification of each term or condition of this permit that is the basis of the certification.

b. The permittee's current compliance status.

c. Whether compliance was continuous or intermittent.

d. The method(s) used for determining the compliance status of the source currently and over the required reporting period.

e. Such other facts as the Director of the Ohio EPA may require in the permit to determine the compliance status of the source.

(3) Compliance certifications shall contain such additional requirements as may be specified pursuant to sections 114(a)(3) and 504(b) of the Act.

(Authority for term: OAC rules 3745-77-07(C)(1),(2),(4) and (5) and ORC section 3704.03(L))

14. Permit Shield

a) Compliance with the terms and conditions of this permit (including terms and conditions established for alternate operating scenarios, emissions trading, and emissions averaging, but excluding terms and conditions for which the permit shield is expressly prohibited under OAC rule 3745-77-07) shall be deemed compliance with the applicable requirements identified and addressed in this permit as of the date of permit issuance.

b) This permit shield provision shall apply to any requirement identified in this permit pursuant to OAC rule 3745-77-07(F)(2), as a requirement that does not apply to the source or to one or more emissions units within the source.

(Authority for term: OAC rule 3745-77-07(F))

15. Operational Flexibility

The permittee is authorized to make the changes identified in OAC rule 3745-77-07(H)(1)(a) to (H)(1)(c) within the permitted stationary source without obtaining a permit revision, if such change is not a modification under any provision of Title I of the Act [as defined in OAC rule 3745-77-01(JJ)], and does not result in an exceedance of the emissions allowed under this permit (whether expressed therein as a rate of emissions or in terms of total emissions), and the permittee provides the Administrator of the U.S. EPA and the appropriate Ohio EPA District Office or local air agency with written notification within a minimum of seven days in advance of the proposed changes, unless the change is associated with, or in response to, emergency conditions. If less than seven days notice is provided because of a need to respond more quickly to such emergency conditions, the permittee shall provide notice to the Administrator of the U.S. EPA and the appropriate District Office of the Ohio EPA or local air agency as soon as possible after learning of the need to make the change. The notification shall contain the items required under OAC rule 3745-77-07(H)(2)(d).

(Authority for term: OAC rules 3745-77-07(H)(1) and (2))

16. Emergencies

The permittee shall have an affirmative defense of emergency to an action brought for noncompliance with technology-based emission limitations if the conditions of OAC rule 3745-77-07(G)(3) are met. This emergency defense provision is in addition to any emergency or upset provision contained in any applicable requirement.

(Authority for term: OAC rule 3745-77-07(G))

17. Off-Permit Changes

The owner or operator of a Title V source may make any change in its operations or emissions at the source that is not specifically addressed or prohibited in the Title V permit, without obtaining an amendment or modification of the permit, provided that the following conditions are met:

a) The change does not result in conditions that violate any applicable requirements or that violate any existing federally enforceable permit term or condition.

b) The permittee provides contemporaneous written notice of the change to the Director and the Administrator of the U.S. EPA, except that no such notice shall be required for changes that qualify as insignificant emissions levels or activities as defined in OAC rule 3745-77-01(U). Such written notice shall describe each such change, the date of such change, any change in emissions or pollutants emitted, and any federally applicable requirement that would apply as a result of the change.

c) The change shall not qualify for the permit shield under OAC rule 3745-77-07(F).

d) The permittee shall keep a record describing all changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under the permit, and the emissions resulting from those changes.

e) The change is not subject to any applicable requirement under Title IV of the Act or is not a modification under any provision of Title I of the Act.

Paragraph (I) of rule 3745-77-07 of the Administrative Code applies only to modification or amendment of the permittee's Title V permit. The change made may require a permit-to-install under Chapter 3745-31 of the Administrative Code if the change constitutes a modification as defined in that Chapter. Nothing in paragraph (I) of rule 3745-77-07 of the Administrative Code shall affect any applicable obligation under Chapter 3745-31 of the Administrative Code.

(Authority for term: OAC rule 3745-77-07(I))

18. Compliance Method Requirements

Nothing in this permit shall alter or affect the ability of any person to establish compliance with, or a violation of, any applicable requirement through the use of credible evidence to the extent authorized by law. Nothing in this permit shall be construed to waive any defenses otherwise available to the permittee, including but not limited to, any challenge to the Credible Evidence Rule (see 62 Fed. Reg. 8314, Feb. 24, 1997), in the context of any future proceeding.

(This term is provided for informational purposes only.)

19. Insignificant Activities or Emissions Levels

Each IEU that has one or more applicable requirements shall comply with those applicable requirements.

(Authority for term: OAC rule 3745-77-07(A)(1))

20. Permit to Install Requirement

Prior to the "installation" or "modification" of any "air contaminant source," as those terms are defined in OAC rule 3745-31-01, a permit to install must be obtained from the Ohio EPA pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-07(A)(1))

21. Air Pollution Nuisance

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

(Authority for term: OAC rule 3745-77-07(A)(1))

22. Permanent Shutdown of an Emissions Unit

The permittee may notify Ohio EPA of any emissions unit that is permanently shut down by submitting a certification from the responsible official that identifies the date on which the emissions unit was permanently shut down. Authorization to operate the affected emissions unit shall cease upon the date certified by the responsible official that the emissions unit was permanently shut down.

After the date on which an emissions unit is permanently shut down (i.e., that 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 and therefore ceases to meet the definition of an "emissions unit" as defined in OAC rule 3745-77-01(O)), rendering existing permit terms and conditions irrelevant, the permittee shall not be required, after the date of the certification and submission to Ohio EPA, to meet any Title V permit requirements applicable to that emissions unit, except for any residual requirements, such as the quarterly deviation reports, semi-annual deviation reports and annual compliance certification covering the period during which the emissions unit last operated. All records relating to the shutdown emissions unit, generated while the emissions unit was in operation, must be maintained in accordance with law.

No emissions unit certified by the responsible official as being permanently shut down may resume operation without first applying for and obtaining a permit to install pursuant to OAC Chapter 3745-31.

(Authority for term: OAC rule 3745-77-01)

23. Title VI Provisions

If applicable, the permittee shall comply with the standards for recycling and reducing emissions of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices specified in 40 CFR 82.156.

b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment specified in 40 CFR 82.158.

c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

(Authority for term: OAC rule 3745-77-01(H)(11))

24. Reporting Requirements Related to Monitoring and Record Keeping RequirementsUnder State Law Only

The permittee shall submit required reports in the following manner:

a) Reports of any required monitoring and/or record keeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

b) Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (i) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and record keeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. In identifying each deviation, the permittee shall specify the applicable requirement for which the deviation occurred, describe each deviation, and provide the magnitude and duration of each deviation. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

25. Records Retention RequirementsUnder State Law Only

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

26. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

(Authority for term: OAC rule 3745-77-07(C))

27. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

28. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

(Authority for term: OAC rule 3745-77-01(C))

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

If no emission limitation (or control requirement), operational restriction and/or control device parameter limitation deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

The permittee is not required to submit a quarterly report which states that no deviations occurred during that quarter for the following situations:

a) where an emissions unit has deviation reporting requirements for a specific emission limitation, operational restriction, or control device parameter limitation that override the deviation reporting requirements specified in Standard Term and Condition A.2.c)(2); or

b) where an uncontrolled emissions unit has no monitoring, record keeping, or reporting requirements and the emissions unit's applicable emission limitations are established at the potentials to emit; or

c) where the company's responsible official has certified that an emissions unit has been permanently shut down.

B. Facility-Wide Terms and Conditions

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

   a) None.

2. The following emissions units contained in this permit are subject to the Standards of Performance for New Stationary Sources (NSPS) 40 CFR Part 60,SubpartVVa: P801. 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.

3. The following emissions units contained in this permit are subject to the Standards of Performance for New Stationary Sources (NSPS) 40 CFR Part 60,SubpartKb: T001, T002, T003, T004, and T005. 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.

4. The following emissions units contained in this permit are subject to the Standards of Performance for New Stationary Sources (NSPS) 40 CFR Part 60,SubpartDb: B001 and B002. 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.

5. The following insignificant emissions units at this facility must comply with all applicable State and federal regulations, as well as any emissions limitations and/or control requirements contained within the identified permit to install for the emissions unit. The insignificant emissions units listed below are subject to one or more applicable requirements contained in a permit-to-install or in the SIP approved versions of OAC Chapters 3745-17, 3745-18, and 3745-21, and/or 40 CFR Part 60 or 63:

EU ID	Operations, Property and/or Equipment Description	
B003	Fire pump rated at 295 hp (2.07 MMBtu) utilizing No. 2 fuel oil	PBR07665
P016	Storage pad for wet and/or modified DDGS cake	PTI P0106080

6. Applicable Emissions Limitations and/or Control Requirements

   a) 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 major source status for HAPs)	See 6.b)(1)

b) Additional Terms and Conditions

(1) 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 theClean Air Act, for the purpose of avoiding Maximum Achievable Control Technology (MACT) regulations and Title V permitting requirements:

a. 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.

b. 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.

c) Operational Restrictions

(1) None.

d) 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 f)(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 f)(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 f)(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 f)(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 f)(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 f)(1)c.;

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

h. the rolling, 12-month summation of the 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.

e) Reporting Requirements

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

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

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. anyexceedance 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.

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) <u>Emissions Limitations:</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.

Applicable Compliance Method:

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 f)(2).

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

a. The 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 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; and

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.

g) Miscellaneous Requirements

(1) None.

C. Emissions Unit Terms and Conditions

1. F001, F001

Operations, Property and/or Equipment Description:

paved roadways and parking areas

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) (PTI P0111916)	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.

(2) Additional Terms and Conditions

a. None.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) None.

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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

f) Testing Requirements

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

a. Emission Limitations:

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 listed above shall be determined in accordance with Test Method 22 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996, and the modifications listed in paragraphs (B)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

2. J001, C0E09

Operations, Property and/or Equipment Description:

ethanolloadout rack to truck and rail; equipped with a vapor combustion unit

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

(1) b)(1)e. and d)(3)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001 (PTI P0112203)	Nitrogen oxide (NO_X) emissions shall not exceed 0.84 pound per hour (lb/hr) and 3.68 tons per year (TPY). See b)(2)a. and b)(2)c.
b.	OAC 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006 (PTI P0108710)	See b)(2)b.
c.	ORC 3704.03(T) (PTI P0112203)	Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million British thermal unit (lb/MMBtu). The VOC emissions limitation established by this rule is equivalent to the VOC emissions limitation established pursuant to OAC rule 3745-31-05(D). See b)(2)d.
d.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD for VOC)	Volatile organic compound (VOC) emissions shall not exceed 41.68 tons per rolling, 12-month period. No visible emissions from the loadoutvapor combustion unit (VCU) stack except for periods not to exceed a total of 5 minutes during any 120 consecutive minutes.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)e., b)(2)f., and c)(1)
e.	ORC 3704.03(F)	See d)(3)

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for emissions units that have the potential to emit less than ten tons per year for pollutants to which National Ambient Air Quality Standards (NAAQS) apply. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. When U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emissions limitations/control measures will no longer apply.

b. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:

i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the NO_X emissions from this air contaminant source because the calculated annual emission rate for NO_X is less than 10 TPY.

c. The hourly and annual NO_Xemissions limitations were established to reflect the potential to emit for this emissions unit. It is not necessary to develop monitoring, recordkeeping, or reporting requirements to ensure compliance with these limitations.

d. The lb/MMBtu COemissions limitation was established to reflect the potential to emit for this emissions unit. It is not necessary to develop monitoring, recordkeeping, or reporting requirements to ensure compliance with this limitation.

e. 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 VCU;

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 designed to be 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 (impermeable) vapor line then routed to the VCU.

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

i. The VCU 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 VCU 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.

c) Operational Restrictions

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

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(A)(1)]

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 VCU.

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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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 PTI 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 PTI.

[Authority for term: ORC 3704.03(F)(4)(b) and OAC rule 3745-77-07(C)(1)]

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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

(2) 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 VCU; and

ii. each rolling, 12-month period during which the VOC emissions for emissions unit J001 exceeded 41.68 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.

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).

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-03(B)(1)(a), and OAC rule 3745-15-03(C)]

f) Testing Requirements

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

a. Emissions Limitations:

NO_X emissionsshall not exceed 0.84lb/hr and 3.68 TPY (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

Applicable Compliance Method:

Compliance with the hourlyNO_Xemissions limitation may be determined by multiplying the maximum heating capacity (12.4MMBtu/hr) by the following AP-42 emission factor:

Pollutant	Emissions Factor*
NO_X	0.068lb/MMBtu

Compliance with the annual NO_X emissions limitation was determined by multiplying the hourly emissions limitation by 8,760 hours per year and dividing by 2,000 pounds per ton.

* AP-42, Volume I, Fifth Edition, Section 13.5, "Industrial Flares", Table 13.5-1, September 1991.

If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, method 7.

b. Emissions Limitation:

CO emissions shall not exceed 0.37 lb/MMBtu.

Applicable Compliance Method:

Compliance shall be demonstrated using the emissions factor for CO from USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 13.5 Table 13.5-1 (9/91).

If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, method 10.

c. Emissions Limitation:

VOC emissions shall not exceed 41.68 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:

$VOC = VOC_T + VOC_R$

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 = (Fugitive VOC_T + Stack VOC_T)/2000

where,

Fugitive $VOC_T = (GAL_T * EF_T) * (1 – CapE)$

where,

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

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

CapE = loading rack capture efficiency (90%); and

Stack $VOC_T = (GAL_T * EF_T) * CapE * (1 – CE)$

where,

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

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

CapE = loading rack capture efficiency (90%); and

CE = LoadoutVCU control efficiency (98%)

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

VOC_R = (Fugitive VOC_R + Stack VOC_R)/2000

where,

Fugitive VOC_R = (GAL_R* EF_R) * (1 – CapE)

where,

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

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

CapE = loading rack capture efficiency (90%); and

Stack VOC_R = (GAL_R* EF_R) * CapE * (1 – CE)

where,

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

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

CapE = loading rack capture efficiency (90%); and

CE = LoadoutVCU control efficiency (98%)

The VOC emissions 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, 2008).

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

d. Emissions Limitation:

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

Applicable Compliance Method:

If required, compliance with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

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

(1) b)(1)c., and d)(6) through d)(9)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) (PTI P0108710)	VOC emissions, excluding emissions from the pressure relief valves utilized during the clean-in-place (CIP) process, shall be controlled by a high efficiency wet scrubber (CO_2 scrubber) at all times that the emissions unit is operating.
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD for VOC)	VOC emissions, including emissions from the pressure relief valves utilized during the CIP process, shall not exceed 90.27 pounds per fermentation drop cycle. VOC emissions, including emissions from the pressure relief valves utilized during the CIP process, shall not exceed 55.34 tons per rolling, 12-month period. See b)(2)a. and c)(1).
c.	ORC 3704.03(F)	See d)(6) through d)(9)

(2) Additional Terms and Conditions

a. 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.

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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The scrubber 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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(2) The scrubber additive flow rate shall be continuously maintained, while the emissions unit is in operation, at a value of not less than the minimum additive 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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(3) The permittee shall properly install, operate and maintain equipment to continuously monitor and record the water flow rate and the additive 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. theadditive rate, in milliliters per minute.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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 emissions unit was operating and not venting emissions to the wet scrubber, except emissions vented to the pressure relief valves during the CIP process.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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 scrubber 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 scrubber additive rate was less than the minimum additive 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.].

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(6) The PTI 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 acetaldehydefrom emissions unit P006are 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).

[Authority for term: ORC 3704.03(F)(4)(b) and OAC rule 3745-77-07(C)(1)]

(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 PTI 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.

[Authority for term: ORC 3704.03(F)(4)(b) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: ORC 3704.03(F)(4)(b) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: ORC 3704.03(F)(4)(b) and OAC rule 3745-77-07(C)(1)]

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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

(2) 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 scrubber 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 scrubber additive flow rate was outside of the acceptable range; and

iv. each rolling, 12-month period during which the total VOC emissions from this emissions unit exceeded 55.34 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.

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).

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-03(B)(1)(a), and OAC rule 3745-15-03(C)]

f) Testing Requirements

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

a. Emissions Limitation:

VOC emissions, including emissions from the pressure relief valves utilized during the CIP process, shall not exceed 90.27 pounds per fermentation drop cycle.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the testing requirements identified in f)(2) and the following calculations:

Total VOC = VOC emissions from CIP + VOC emissions from scrubber stack

where,

VOC emissions from CIP = Number of CIP processes executed per hour * 1.23 lbs VOC per CIP process; and

VOC emissions from scrubber stack = lbs VOC/fermentation drop cycle emissions factor established during the most recent emission test that demonstrated the emissions unit to be in compliance.

b. Emissions Limitation:

VOC emissions shall not exceed 55.34 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with the recordkeeping required in d)(5).

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

a. The 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 limitations identified in f)(1)and the facility wide HAP limitations identified in B.6.b)(1);

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; and

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.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

4. P008, P008

Operations, Property and/or Equipment Description:

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

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

(1) b)(1)e. and d)(6) through d)(9)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001 (PTI P0108710)	Volatile organic compound (VOC) emissions shall not exceed 0.21 pound per hour (lb/hr). Nitrogen oxide (NO_X) emissions shall not exceed 0.44 lb/hr and 1.93 tons per year (TPY). Sulfur dioxide (SO_2) emissions shall not exceed 1.74 lbs/hr and 7.48 TPY. See b)(2)a. and b)(2)c.
b.	OAC 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006 (PTI P0108710)	See b)(2)b.
c.	ORC 3704.03(T) (PTI P0108710)	Carbon monoxide (CO) emissions shall not exceed 0.37 pound per million British thermal unit (lb/MMBtu). See b)(2)d.
d.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD for VOC)	No visible emissions from the biomethanator flare stack except for periods not to exceed a total of 5 minutes during any 120 consecutive minutes. VOC emissions from the biomethanator flare shall not exceed 0.92 tons per

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		rolling, 12-month period. See b)(2)e., b)(2)f., and c)(1)
e.	ORC 3704.03(F)	See d)(6) through d)(9)

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for emissions units that have the potential to emit less than ten tons per year for pollutants to which National Ambient Air Quality Standards (NAAQS) apply. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. When U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emissions limitations/control measures will no longer apply.

b. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:

i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC, NO_X, and SO_2 emissions from this air contaminant source because the calculated annual emission rate for each pollutant is less than 10 TPY, taking into consideration the federally enforceable rule limitations and operational restrictions established under OAC rule 3745-31-05(D).

c. The hourly VOCemissions limitation was established to reflect the potential to emit for this emissions unit as vented to a thermal oxidizer or to a flare. The monitoring, recordkeeping, reporting, and testing requirements for the thermal oxidizer and flare as established in the following terms and conditions are sufficient to demonstrate compliance with this limitation.

The hourly and annual NO_X and hourly SO_2emissions limitations were established to reflect the potential to emit for this emissions unit. It is not necessary to develop monitoring, recordkeeping, or reporting requirements to ensure compliance with these limitations.

d. The lb/MMBtu COemissions limitation was established to reflect the potential to emit for this emissions unit. It is not necessary to develop monitoring, recordkeeping, or reporting requirements to ensure compliance with this limitation.

e. The following limitations apply to the 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):

i. VOC emissions shall not exceed 0.12 pounds per thousand gallons of 200-proof ethanol produced (lbs/Kgal ethanol) and 8.16 tons per rolling, 12-month period.

f. 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 OACrule 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 OACrule 3745- 21-10(P)(2).

v. The flare shall be designed and operated with an actual exit velocityof 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 perOAC 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 OACrule 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 OACrule 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 thermal oxidizer or to a flare.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(A)(1)]

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;

b. the total number of hours when the emissions unit(s) was/were in operation and the process emissions were vented to the biomethanator flare;

c. the total number of hours, per rolling, 12-month period when the emissions unit(s) was/were in operation and the process emissions were vented to the biomethanator flare; and

d. the rolling 12-month summation of VOC emissions from the biomethanator flare, in tons, calculated in accordance with f)(1).

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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 month:

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

c. the rolling, 12-month summation of VOC emissions for 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), in tons, calculated in accordance with the testing requirements established for each emissions unit.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(3) 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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(4) 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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(5) On any day 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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(6) The PTI application for emissions units P005, P007, P008 and P009was 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 methanolfrom emissions units P005, P007, P008 and P009are 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).

[Authority for term: ORC 3704.03(F)(4)(b) and OAC rule 3745-77-07(C)(1)]

(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 PTI 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.

[Authority for term: ORC 3704.03(F)(4)(b) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: ORC 3704.03(F)(4)(b) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: ORC 3704.03(F)(4)(b) and OAC rule 3745-77-07(C)(1)]

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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

(2) 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;

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;

iii. each rolling, 12-month period during which the VOC emissions from the biomethanator flare exceeded 0.92 tons; and

iv. each rolling, 12-month period during which the VOC 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) exceeded 8.16 tons.

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

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

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-03(B)(1)(a), and OAC rule 3745-15-03(C)]

f) Testing Requirements

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

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

VOC emissionsshall not exceed 0.21lb/hr(as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

<u>Applicable Compliance Method:</u>

Compliance with the hourlyVOCemissions limitation may be determined by multiplying the maximum hourly biogas production rate (3,696 standard cubic feet per hour) by the conversion factor of 359 cubic feet per pound mole and an overall control efficiency for the flare of 98%.

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

b. Emissions Limitations:

NO_X emissionsshall not exceed 0.44lb/hr and 1.93 TPY (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

Applicable Compliance Method:

Compliance with the hourlyNO_Xemissions limitation may be determined by multiplying the maximum heating capacity (6.4MMBtu/hr) by the following AP-42 emission factor:

Pollutant	Emissions Factor*
NO_X	0.068lb/MMBtu

Compliance with the annual NO_X emissions limitation was determined by multiplying the hourly emissions limitation by 8,760 hours per year and dividing by 2,000 pounds per ton.

* AP-42, Volume I, Fifth Edition, Section 13.5, "Industrial Flares", Table 13.5-1, September 1991.

If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, method 7.

c. Emissions Limitation:

SO_2 emissionsshall not exceed 1.74lbs/hr and 7.48 TPY (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

Applicable Compliance Method:

Compliance with the hourly SO_2 emissions limitation shall be determined in accordance with the following equation:

$SO_2 = (MaxE_h * Ef)$

where,

$MaxE_h$ = the maximum, hourly 200-proof ethanol production rate (17,443gal);

Ef = the SO_2 emissions factor from stack tests performed on April 13, 2011 (0.10 lb/Kgal ethanol); and

Compliance with the annual SO_2 emissions limitation shall be determined in accordance with the following equation:

SO_2 = (ActualE * Ef)/2,000

where,

ActualE = the actual, rolling, 12-month 200-proof ethanol production rate; and

Ef = the SO_2 emissions factor from stack tests performed on April 13, 2011 (0.10 lb/Kgal ethanol).

If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, method 6.

d. Emissions Limitation:

CO emissions shall not exceed 0.37 lb/MMBtu.

Applicable Compliance Method:

Compliance shall be demonstrated using the emissions factor for CO from USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 13.5 Table 13.5-1 (9/91).

If required, compliance shall be determined in accordance with 40 CFR Part 60, Appendix A, method 10.

e. 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 with the stack visible particulate emissions limitation shall be determined through visible emissions observations performed in accordance with U.S. EPA Method 9.

f. Emissions Limitation:

VOC emissions from the biomethanator flare shall not exceed 0.92 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month VOCemissions limitation shall be determined in accordance with the following equation:

VOC emissions from the biomethanator flare = [BP * HR * CF * (1 – CE)]/2,000

where,

BP = the maximum hourly biogas production rate (3,696 standard cubic feet)

HR = the total number of hours, per rolling, 12-month period when the emissions unit(s) was/were in operation and the process emissions were vented to the biomethanator flare;

CF = the conversion factor of 1 lb VOC per 359 standard cubic feet; and

CE = the combustion flare control efficiency (98%).

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

g. Emissions Limitations:

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. 0.12 lbs VOC/Kgal ethanol and 8.16 tons VOC per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the lbs VOC/Kgal ethanol limitation shall be demonstrated in accordance with the testing requirements identified in f)(2).

Compliance with the rolling, 12-month VOC emissions limitation shall be determined by multiplying the actual gallons of 200-proof ethanol production per rolling, 12-month period by the lbs VOC/Kgal emissions rate determined in accordance with the testing requirements identified in f)(2).

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

a. The 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 limitations identified in f)(1)g. and the facility wide HAP limitations identified in B.6.b)(1);

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

i. 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; and

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.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

5. P014, EU046

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T) (PTI P0108710)	Particulate emissions (PE) shall not exceed 11.03 tons per rolling, 12-month period. Volatile organic compound (VOC) emissions from emissions unit P014 venting to the cooling drum atmospheric stack shall not exceed 5.98 tons per rolling, 12-month period. See b)(2)b.
b.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD for VOC)	See b)(2)a. and c)(1).

(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 (except emissions vented to the biomethanator flare), P009, P010, P011, P012, P013 and P014 (except emissions vented to the cooling drum atmospheric stack):

i. VOC emissions shall not exceed 0.12 pounds per thousand gallons of 200-proof ethanol produced (lbs/Kgal ethanol) and 8.16 tons per rolling, 12-month period.

b. 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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(A)(1)]

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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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 month:

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;

c. the VOC emissions for 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), in tons, calculated in accordance with the testing requirements established for each emissions unit; and

d. the rolling, 12-month summation of VOC emissions for 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), in tons, calculated in accordance with the testing requirements established for each emissions unit.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(3) 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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(4) 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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

(2) 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 thermal oxidizer;

ii. 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

iii. each rolling, 12-month period during which the VOC 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) exceeded 8.16 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.

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).

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-03(B)(1)(a), and OAC rule 3745-15-03(C)]

f) Testing Requirements

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

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

PE shall not exceed 11.03 tons per rolling, 12-month period.

<u>Applicable Compliance Method:</u>

Compliance with the rolling, 12-month PE limitation shall be determined in accordance with the following equation:

PE = PE combined stack + PE atmospheric stack

where,

PE combined stack = (ActualE * Ef)/2,000

where,

ActualE = the actual, rolling, 12-month 200-proof ethanol production rate;

Ef = the uncontrolled particulate emissions factor from the combined stack (0.11 lb/Kgal ethanol); and

PE atmospheric stack = (0.64 lb/hr * 8,760 hr/yr)/2,000

The 0.64 lb/hr emissions rate was established by multiplying the DDGS baghouse grain loading rate (0.005 grains/dscf) by the blower capacity (15,000 acfm) and the conversion factor of one pound per 7,000 grains and 60 minutes per hour.

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

b. Emissions Limitation:

VOC emissions from emissions unit P014 venting to the cooling drum atmospheric stack shall not exceed 5.98 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month VOC emissions limitation shall be determined in accordance with the following equation:

VOC = VOC atmospheric stack

where,

VOC atmospheric stack = (ActualE * Ef)/2,000

where,

ActualE = the actual, rolling, 12-month 200-proof ethanol production rate; and

Ef = the uncontrolled VOC emissions factor from the atmospheric stack (0.08 lb/Kgal ethanol).

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

c. Emissions Limitations:

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. 0.12 lbs VOC/Kgal ethanol and 8.16 tons VOC per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the lbs VOC/Kgal ethanol limitation shall be demonstrated in accordance with the testing requirements identified in f)(2).

Compliance with the rolling, 12-month VOC emissions limitation shall be determined by multiplying the actual gallons of 200-proof ethanol production per rolling, 12-month period by the lbs VOC/Kgal emissions rate determined in accordance with the testing requirements identified in f)(2).

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

a. The 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 limitations identified in f)(1)c. and the facility wide HAP limitations identified in B.6.b)(1);

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

i. 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; and

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.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

6. P015, P015

Operations, Property and/or Equipment Description:

Cooling Tower equipped with a drift eliminator

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3) (PTI P0106079)	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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

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

[Authority for term: OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

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.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

7. P801, P801

Operations, Property and/or Equipment Description:

Fugitive VOC Emissions (leaks)

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	ORC 3704.03(T)	Volatile organic compound (VOC) emissions shall not exceed 39.31tons per rolling, 12-month period. See b)(2)a.
b.	OAC rule 3745-21-09(DD)	The requirements established by this rule are less stringent than the requirements established pursuant to 40 CFR Part 60, subpart VVa and subpart A.
c.	40 CFR Part 60, subpart VVa	See b)(2)b.
d.	40 CFR Part 60, subpart A	See b)(2)c.

(2) Additional Terms and Conditions

a. The rolling, 12-month VOC emissions limitationfor this emissions unit was established to reflect the potential-to-emit in accordance with the information provided in the PTI application and taking into consideration the implementation of a leak detection and repair (LDAR) program sufficient to demonstrate compliance with 40 CFR Part 60, subpart VVa. The monitoring, recordkeeping, reporting, and testing requirements associated with the LDAR program as established in the following terms and conditions are sufficient to demonstrate compliance with this limitation.

b. This emissions unit is subject to the requirements of 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”. The permittee shall comply with the applicable Leak Detection and Repair (LDAR)

requirements identified in 40 CFR Part 60, subpart VVa. The complete 40 CFR Part 60 requirements, including the General Provisions may be accessed via theinternet from the Electronic Code of Federal Regulations (e-CFR) website http://ecfr.gpoaccess.gov or by contacting the Central District Office.

c. The permittee shall demonstrate compliance with the applicable requirements established in 40 CFR Part 60, subpart VVa in accordance with the provisions established in 40 CFR Part 60, subpart A. The complete 40 CFR Part 60 requirements, including the General Provisions may be accessed via theinternet 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) When a leak is detected a weatherproof identification tag with the equipment identification number and the date detected shall be attached to the leaking equipment, valve, or seal. A record of the date the leak was first detected, the date of any attempted repair, and the date of final repair shall be entered into a log maintained for this purpose. Repair of a leak shall be attempted as soon as possible after it is detected.

[Authority for term:40 CFR 60.486a(b) and (c)]

(2) Each compressor that is not equipped with a closed vent system capable of capturing and transporting any leakage from the drive shaft to a process, fuel gas system, or control device shall be equipped with a barrier fluid system to prevent VOC leakage to the atmosphere. Each barrier fluid system shall be equipped with a sensor that will detect failure of the seal and barrier fluid system; and the sensor shall be equipped with an audible alarm if it cannot be checked daily.

[Authority for term:40 CFR 60.482-3a]

(3) Except during pressure releases, each pressure relief device shall be operated with “no detectable emissions”, as indicated by an instrument reading of less than 500 ppm above background, as measured by Method 21 in 40 CFR 60 Appendix A and in accordance with 40 CFR 60.485a(c). A pressure relief device shall be returned to a condition of “no detectable emissions” as soon as practicable following a pressure release, but no later than 5 days after the release. Any pressure relief device that is equipped with a closed-vent system capable of capturing and transporting leakage through the pressure relief device to a control device, the pipeline, process heater, or flare is excluded from these requirements.

[Authority for term:40 CFR 60.482-4a]

(4) A first attempt at repair of a leak shall be made no later than 5 days after each leak is detected. The leak shall be repaired as soon as practicable, but (with the exception of a pressure relief device, requiring repair within 5 days of release), not later than 15 days after it is detected unless meeting the requirements of 40 CFR 60.482-9a, for delay of repair.

[Authority for term:40 CFR 60.482-2a(c) for pumps, 40 CFR 60.482-3a(g) for compressors, 40 CFR 60.482-4a(b) for pressure relief devices, 40 CFR 60.482-7a(d) for valves, 40 CFR 60.482-8a(c) for pumps/valves/connectors, 40 CFR 60.482-10a(g) for closed vent systems & control device, and 40 CFR 60.482-11a(d) for connectors]

(5) Each open ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve which shall seal the open end at all times, except during operations requiring process fluid flow. If equipped with a second valve, the valve on the process fluid end shall be closed before the second valve is closed. Where a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves, but shall seal the open end at all other times.

[Authority for term:40 CFR 60.482-6a]

d) Monitoring and/or Recordkeeping Requirements

(1) The following information shall be recorded in a log that is kept in a readily accessible location.

	Applicable Rule	Requirements
a.	40 CFR 60.486a	Recordkeeping requirements
b.	40 CFR 60.486a(b)	Requirements to attach a weatherproof identification tag to leaking equipment
c.	40 CFR 60.486a(c)	Requirements to maintain a log of each leak detected for 2 years and the information to be maintained
d.	40 CFR 60.486a(d)	Required records for the design for the closed vent systems and control devices and period of time when they were not in operation as required
e.	40 CFR 60.486a(e)	Required records for equipment identification and records for each leak test conducted (dates and results)
f.	40 CFR 60.486a(f)	Required records for valves and pumps identified as unsafe or difficult to monitor
g.	40 CFR 60.486a(g)	Records required for valves where complying with 40 CFR 60.483-2a for skip leak detection and repair
h.	40 CFR 60.486a(h)	Records required for design criteria for the seal for pumps and compressors, i.e., the barrier fluid system and sensor
i.	40 CFR 60.480a(d); and 40 CFR 60.486a(i) and (j)	Records required for exemptions from the leak detection requirements, the analysis/data demonstrating that a piece of equipment is “not in VOC service” and the analysis demonstrating the design capacity of the process unit.

(2) The ancillary equipment, compressors, pumps, pressure relief devices, sampling connection systems, open end valves or lines, valves, flanges, and any other connectors in VOC service, shall be monitored to demonstrate that there are “no detectable emissions” using Method 21, 40 CFR Part 60, Appendix A; and the records of these inspections shall be maintained for 2 years following the date of inspection and shall be made available upon request.

[Authority for term: 40 CFR 60.485a(b) and 40 CFR 60.486a(c)]

(3) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with "no detectable emissions", as indicated by an instrument reading of less than 500 ppm above background, measured by Method 21 from 40 CFR 60 Appendix A. After each pressure release, the pressure release device shall be returned to a condition of "no detectable emissions" as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in 40 CFR 60.482-9a for delay of repair. Each pressure relief device in gas/vapor service shall be monitored in accordance with Method 21 unless it is routed to a process or fuel gas system, or is equipped with a closed-vent-system that captures and transports leakage through a pressure release device to a control device meeting the requirements of 40 CFR 60.482-10a.

The pressure relief device shall be monitored to confirm conditions of "no detectable emissions" no later than 5 days after the pressure release. As soon as practicable, but no later than 5 calendar days after each pressure release (except as allowed per 40 CFR 60.482-9a for delay or repair), the pressure relief device shall be returned to a condition of "no detectable emissions", as indicated by a reading of less than 500 ppm above background.

Where there is a rupture disk upstream of the pressure relief device, a new rupture disk shall be installed no later than 5 calendar days after the pressure release, unless meeting the requirements of 40 CFR 60.482-9a for delay of repair.

[Authority for term:40 CFR 60.482-4a]

(4) Each pump in light liquid service shall be <u>monitored monthly</u> for leaks, in accordance with Method 21 at 40 CFR 60 Appendix A, <u>except</u> where it can be demonstrated that:

a. The pump and barrier fluid system meet all of the following requirements:

i. The pump is equipped with a dual mechanical seal system that is:

(a) operated with a barrier fluid that is maintained, at all times, at a pressure that is greater than the pump stuffing box pressure; or

(b) is equipped with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device meeting the requirements of 40 CFR 60.482-10a; or

(c) is equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions; and

ii. the barrier fluid system is in heavy liquid service or is not in VOC service; and

iii. the barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both; and

iv. each pump is checked by visual inspection each calendar week for indications of liquids dripping from the pump seals; and if there is evidence of leakage is monitored within 5 days following the inspection using Method 21; and

v. each sensor is checked daily or is equipped with an audible alarm; or

b. the pump is designated for "no detectable emissions", as indicated by a reading of less than 500 ppm above background, using Method 21, and the pump has no external actuated shaft penetrating the pump housing and is monitored (in accordance with Method 21) initially upon designation, annually, and upon request of the Director; or

c. the pump is routed to a process or fuel gas system or connected by a closed vent system to a control device meeting the requirements of 40 CFR 60.482-10a; or

d. the pump is designated as unsafe-to-monitor and has been demonstrated to meet the requirements of this determination as required in 40 CFR 60.482-2a(g).

Each pump in light liquid service shall be visually inspected each calendar week for indications of liquids dripping from the pump seal, except as provided in 40 CFR 60.482-1a(f) for a batch process. A pump located at an unmanned plant site is exempt from the weekly visual inspections; however each pump must be visually inspected as often as practicable and at least monthly.

For a pump, an instrument reading of 2,000 ppm or greater is a "leak detected". When a leak is detected or a visual inspection determines liquids dripping from the pump, it shall be repaired as soon as practicable, but not later than 15 days after it is detected unless meeting the requirements of 40 CFR 60.482-9a for delay of repair. A first attempt repair of a detected leak shall be made within 5 days of detection.

[Authority for term: 40 CFR 60.482-2a(a) through (h)]

(5) Each compressor shall be equipped with a seal system and a barrier fluid system equipped with a sensor that will detect failure of the seal and/or barrier fluid system, except where meeting the requirements for a closed-vent-system in 40 CFR 60.482-10a, that captures and transports leakage from the compressor drive shaft to a process or fuel gas system or control device, or is designed and designated for "no detectable emissions". The seal/barrier fluid system must meet the requirements of 40 CFR 60.482-3a(a) through (d) and must be visually inspected <u>daily</u>or be equipped a sensor with an <u>audible alarm</u>. A leak is detected when the sensor indicates a failure of the seal/barrier systems. A compressor that can be demonstrated to operate with "no detectable emissions", as indicated by a reading of less than 500 ppm above background, in accordance with 40 CFR 60.485a(c), can be monitored initially upon designation and <u>annually</u> thereafter; otherwise, <u>monthly</u>* monitoring, in accordance with 40 CFR 60.485a(b), will be required.

When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 days after it is detected unless meeting the requirements of 40 CFR 60.482-9a for delay

of repair. A first attempt repair of a detected leak shall be made within 5 days of detection.

[Authority for term: 40 CFR 60.482-3a(a) through (i), and ORC 3704.03(T), freq. not identified]

(6) Each valve in gas/vapor service and light liquid service shall be monitored monthly, in accordance with 40 CFR 60.485a(b) for leaks, with the following exception:

a. the valve is designated for "no detectable emissions", as indicated by a reading of less than 500 ppm above background in accordance with 40 CFR 60.485a(c), and has no external actuating mechanism in contact with the process fluids, it may be monitored initially upon designation and annually in accordance with 40 CFR 60.485a(c) thereafter; or

b. alternative standards can be implemented for valve leak detection, in accordance with 40 CFR 60.483-1a, based on 2.0% of valves leaking and where this option has been approved, by the regulating authority; or

c. the valve has been designated as unsafe-to-monitor as described in 40 CFR 60.486a(f)(1) and in accordance with 40 CFR 60.482-7a(g); or

d. the valve has been designated as difficult-to-monitor as described in 40 CFR 60.486a(f)(2) and in accordance with 40 CFR 60.482-7a(h).

Any valve for which a leak is not detected for 2 consecutive months may be monitored the first month of every quarter, beginning with the next quarter, and until a leak is detected, where monitoring shall again be required monthly until another successive 2 months of no leakage has been documented. As an alternative to monitoring the first month of every quarter, the owner/operator may subdivide the process units into 2 or 3 subgroups of valves and monitor each subgroup in a different month of the quarter provided each group is monitored every 3 months and records are maintained of the subgroups; if a leak is detected, the valve must be monitored monthly until a leak is not detected for 2 successive months.

An instrument reading of 500 ppm or greater is a "leak detected". If a leak is detected it shall be repaired as soon as practicable, but not later than 15 days after it is detected, unless meeting the requirements of 40 CFR 60.482-9a for delay of repair. A first attempt repair of a detected leak shall be made within 5 days of detection and would include (but not be limited to) work practices identified in 40 CFR 60.482-7a(e).

[Authority for term: 40 CFR 60.482-7a(a) through (h)]

(7) Each connector in gas/vapor service and in light liquid service shall be monitored for leaks within 12 months after initial startup, following any process change for the connectors involved, and in accordance with 40 CFR 60.482-11a. Except as required for closed-vent-systems, all such connectors shall be monitored according to the following schedule:

a. if the percent of leaking connectors in the process unit was greater than or equal to 0.5%, then subsequent monitoring to detect leaks must be conducted within 12 months; or

b. if the percent of leaking connectors in the process unit was greater than or equal to 0.25% but less than 0.5%, then subsequent monitoring to detect leaks must be conducted within 4 years, with the option to monitor at least 40% of the connectors within 2 years of the start of the monitoring period, provided all the connectors are monitored by the end of the 4-years; or

c. if the percent of leaking connectors in the process unit was less than 0.25%, the frequency of monitoring shall/may follow the schedule calculated in accordance with 40 CFR 60.482-11a(b)(3)(iii); and

d. records must be maintained for the start date and end date of each monitoring period, and the monitoring results to support the scheduled used.

If an instrument reading greater than or equal to 500 ppm is measured, a leak is detected.

[Authority for term: 40 CFR 60.482-11a]

(8) Each sampling connection system shall be equipped with a closed-purge, closed-loop, or closed-vent system meeting the requirements of 40 CFR 60.482-5a(b), except in situ sampling systems and sampling systems without purges are exempt from these requirements.

[Authority for term: 40 CFR 60.482-5a]

(9) Closed-vent-systems and control devices shall be operated in compliance with the following provision:

a. Vapor recovery systems (e.g., condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95% or greater, or to an exit concentration of 20 ppmv, whichever is less stringent.

b. Enclosed combustion devices shall be designed and operated to reduce VOC emissions vented to them with an efficiency of 95% or greater, or to an exit concentration of 20 ppmv, on a dry basis, corrected to 3% oxygen, whichever is less stringent; or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C.

c. Flares shall comply with the requirements of 40 CFR 60.18 and 40 CFR 60.485a(g).

d. Each control device shall be monitored to ensure they are operated and maintained in conformance with their design.

e. Each closed-vent-system shall be inspected initially and <u>annually</u> thereafter in accordance with 40 CFR 60.482-10a(f) and monitored in accordance with 40

CFR 60.485a(b). A vapor recovery system or closed-vent-system is exempt from this inspection requirement if operated under a vacuum.

f. Leaks, as indicated by an instrument reading of 500 ppmv above background or by visual inspection, shall be repaired as soon as practicable, but not later than 15 days after it is detected, unless meeting the requirements of delay of repair in accordance with 40 CFR 60.482-10a(h). A first attempt repair of a detected leak shall be made within 5 days of detection.

g. Closed-vent-systems and control devices shall be operated at all times when emissions may be vented to them.

[Authority for term: 40 CFR 60.482-10a]

(10) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection methods at pumps, valves, and/or connectors in heavy liquid service; and pressure relief devices in light liquid or heavy liquid service; and the evidence is not eliminated within 5 days of detection, the permittee shall follow these procedures:

a. Monitor the equipment within 5 days by the appropriate method specified in 40 CFR 60.485a. An instrument reading of 10,000 ppm or greater is a “leak detected”.

b. If a leak is detected it shall be repaired as soon as practicable, but not later than 15 days after it is detected unless meeting the requirements of 40 CFR 60.482-9a. A first attempt at repair shall be made within 5 days of detection and would include (but not be limited to) work practices identified in 40 CFR 60.482-2a(c)(2) and 40 CFR 60.482-7a(e).

[Authority for term: 40 CFR 60.482-8a]

(11) The permittee may monitor at any time during the specified (per rule) monitoring period (i.e., monthly, quarterly, annually) which is a reasonable interval after completion of the previous monitoring event, as long as the time interval meets these requirements:

a. when monitoring is conducted quarterly, monitoring events must be separated by at least 30 calendar days;

b. when monitoring is conducted annually, monitoring events must be separated by at least 120 calendar days;

c. when monitoring is conducted 3 quarters per year, monitoring events must be separated by at least 90 calendar days; and

d. when qualified and monitoring is conducted semiannually (every 2 quarters), monitoring events must be separated by at least 60 calendar days.

[Authority for term: 40 CFR 60.482-1a(f)(3)]

(12) The permittee shall record and maintain all of the records required to document visual inspections and monitoring of all ancillary equipment, compressors, pumps, pressure relief devices, sampling connection systems, open end valves or lines, valves, flanges, and any other connectors in VOC service, as identified above, using a list of equipment identification numbers assigned to each potential point of leakage. The permittee shall also comply with the recordkeeping requirements and maintain the records identified in 40 CFR 60.486a, including the date each leak was detected and dates of attempted and final repairs.

[Authority for term: 40 CFR 60.486a]

(13) Any determination that a piece of ancillary equipment is unsafe or difficult to monitor shall be documented to meet the appropriate requirements identified in Part 60, Subpart VVa, e.g., as identified in: 40 CFR 60.482-2a(g) for pumps; 40 CFR 60.482-6a(d) or (e) for open-ended valves or lines; 40 CFR 60.482-7a(g) and (h) for valves; 40 CFR 60.482-10a(j), (k), or (l) for closed-vent-systems; and 40 CFR 60.482-11a(e) for connectors. Records must be maintained for each determination, in accordance with 40 CFR 60.486a(f). Any delay of repair shall meet the requirements of 40 CFR 60.482-9a.

[Authority for term: 40 CFR 60.482-2a through 11a]

(14) The permittee shall maintain a record of the following information for each monitoring event required to demonstrate compliance with the standards for pumps in light liquid service in 40 CFR 60.482–2a; compressors in 40 CFR 60.482–3a; valves in gas/vapor and light liquid service in 40 CFR 60.482–7a; pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid and heavy liquid service in 40 CFR 60.482–8a; connectors in gas/vapor and light liquid service in 40 CFR 60.482–11a; and valves in 40 CFR 60.483–2a:

a. monitoring instrument identification;

b. operator identification;

c. equipment identification;

d. date of monitoring; and

e. instrument reading.

[Authority for term: 40 CFR 60.486a(a)(3)]

(15) When each leak is detected as specified in 40 CFR 60.482–2a for pumps in light liquid service; 40 CFR 60.482–3a for compressors; 40 CFR 60.482–7a for valves in gas/vapor and light liquid service; 40 CFR 60.482–8a for pumps, valves, and connectors in heavy liquid service and pressure relief devices in light liquid and heavy liquid service; 40 CFR 60.482–11a for connectors in gas/vapor and light liquid service; and 40 CFR 60.483–2a for valves, the following requirements apply:

a. the leaking equipment shall be marked with a clearly visible, weatherproof tag showing the equipment identification number;

b. the tag identification on a valve may be removed after it has been monitored for 2 successive months as specified in 40 CFR 60.482–7a(c) and no leak has been detected during those 2 months;

c. the tag identification on a connector may be removed after it has been monitored as specified in 40 CFR 60.482–11a(b)(3)(iv) and no leak has been detected during that monitoring; and

d. the tag identification on all other equipment other than a valve or connector may be removed after it has been repaired.

[Authority for term: 40 CFR 60.486a(b)]

(16) The following information shall be recorded in a log for each leak that is detected and these records shall be kept for 2 years in a readily accessible location:

a. the identification numbers of the monitoring instrument and leaking equipment;

b. the name of the operator conducting the monitoring;

c. the date each leak was detected and the date(s) of each attempt to repair them;

d. the repair methods applied in each attempt to repair each leak;

e. the maximum instrument reading measured by Method 21 of Appendix A–7 of Part 60 at the time the leak is successfully repaired or at the time it is determined to be non-repairable (except where a pump is repaired by eliminating dripping liquids);

f. identification of equipment exceeding the applicable leak detection limit 15 days after discovery of the leak and the maximum instrument reading measured by Method 21;

g. the reason for any delay of repair, where a leak is not repaired within 15 calendar days after being discovered;

h. if a decision has been made that repair of a leak cannot be completed without a process shutdown, the signature of the person authorized to make that determination;

i. the expected date of successful repair of each leak that is not repaired within 15 days;

j. dates of process unit shutdowns that occur while the equipment is unrepaired; and

k. the date of successful repair of each leak.

[Authority for term: 40 CFR 60.486a(c)]

(17) The following information pertaining to the design requirements for closed vent systems and control devices shall be recorded and kept in a readily accessible location:

a. detailed schematics, design specifications, and piping and instrumentation diagrams;

b. the dates and descriptions of any changes in the design specifications;

c. a description of the parameter(s) monitored, as required in 40 CFR 60.482–10a(e), to ensure that control devices are operated and maintained in conformance with their design;

d. an explanation of why the parameter(s) was/were selected for the monitoring;

e. periods when the closed vent systems and control devices required in 40 CFR 60.482–2a, 40 CFR 60.482–3a, 40 CFR 60.482–4a, and 40 CFR 60.482–5a are not operated as designed, including periods when a flare pilot light does not have a flame; and

f. the dates of startups and shutdowns of the closed vent systems and control devices required per 40 CFR 60.482–2a, 40 CFR 60.482–3a, 40 CFR 60.482–4a, and 40 CFR 60.482–5a.

[Authority for term: 40 CFR 60.486a(d) and 40 CFR 60.482–10a]

(18) The following information pertaining to all equipment subject to the requirements in 40 CFR 60.482–1a to 40 CFR 60.482–11a shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers for equipment subject to the requirements of Part 60 Subpart VVa;

b. a list of identification numbers for equipment that are designated for “no detectable emissions” under the provisions of 40 CFR 60.482–2a(e) for pumps in light liquid service; 40 CFR 60.482–3a(i) for compressors; and 40 CFR 60.482–7a(f) for valves in gas/vapor and light liquid service; and the designation of equipment as subject to these requirements signed by the person authorized to make this determination;

c. a list of equipment identification numbers for pressure relief devices required to comply with 40 CFR 60.482–4a;

d. for each compliance demonstration conducted as required in 40 CFR 60.482–2a(e), for pumps in light liquid service; 40 CFR 60.482–3a(i), for compressors; 40 CFR 60.482–4a, for pressure relief devices; and 40 CFR 60.482–7a(f), for valves in gas/vapor and light liquid service:

i. the dates of each compliance test;

ii. the background level measured during each compliance test; and

iii. the maximum instrument reading measured at the equipment during each compliance test;

e. a list of identification numbers for equipment in vacuum service;

f. a list of identification numbers for equipment that the permittee designates as operating in VOC service less than 300 hr/yr in accordance with 40 CFR 60.482–1a(e), a description of the conditions under which the equipment is in VOC service, and rationale supporting the designation that it is in VOC service less than 300 hr/yr;

g. the date and results of the weekly visual inspection for indications of liquids dripping from pumps in light liquid service;

h. records of the information for monitoring instrument calibrations conducted according to sections 8.1.2 and 10 of Method 21 of Appendix A–7 of Part 60 and 40 CFR 60.485a(b).

i. date of calibration and initials of operator performing the calibration;

i. calibration gas cylinder identification, certification date, and certified concentration;

ii. instrument scale(s) used;

iii. a description of any corrective action taken if the meter readout could not be adjusted to correspond to the calibration gas value in accordance with section 10.1 of Method 21 of appendix A–7 of this part;

iv. results of each calibration drift assessment required by 40 CFR 60.485a(b)(2) (i.e., the instrument reading for calibration at end of monitoring day and the calculated percent difference from the initial calibration value); and

v. if the permittee makes their own calibration gas, a description of the procedure used;

j. the connector monitoring schedule for each process unit as specified in 40 CFR 60.482–11a(b)(3)(v); and

k. the records of each release from a pressure relief device subject to the requirements of 40 CFR 60.482–4a.

[Authority for term: 40 CFR 60.486a(e)]

(19) The following information pertaining to all valves subject to the requirements of 40 CFR 60.482–7a(g) and (h), all pumps subject to the requirements of 40 CFR 60.482–2a(g), and all connectors subject to the requirements of 40 CFR 60.482–11a(e) shall be recorded in a log that is kept in a readily accessible location:

a. a list of identification numbers for valves, pumps, and connectors that are designated as unsafe-to-monitor, an explanation for each valve, pump, or connector stating why the valve, pump, or connector is unsafe-to-monitor, and the plan for monitoring each valve, pump, or connector; and

b. a list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.

[Authority for term: 40 CFR 60.486a(f)]

(20) The following information shall be recorded for valves complying with the alternative monitoring standards for valves, where after 2 consecutive quarterly leak detection periods the percent of valves leaking is less than or equal to 2.0%:

a. a schedule of the monitoring, which shall meet the requirements of 40 CFR 60.483–2a(b); and

b. the percent of valves found leaking during each monitoring period.

[Authority for term: 40 CFR 60.486a(g) for 40 CFR 60.483-2a]

(21) The following information shall be recorded in a log that is kept in a readily accessible location:

a. the design criterion for each sensor that is used to indicate failure of the seal system or barrier fluid system in a pump, as required in 40 CFR 60.482–2a(d)(5), and/or in a compressor, as required by 40 CFR 60.482–3a(e)(2); and explanation of the design criterion; and

b. any changes to this criterion and reasons for the changes.

[Authority for term: 40 CFR 60.486a(h)] for 40 CFR 60.482–2a(d)(5) and 40 CFR 60.482–3a(e)(2)]

(22) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in 40 CFR 60.480a(d):

a. an analysis demonstrating the design capacity of the affected facility;

b. a statement listing the feed or raw materials and products from the affected facilities; and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol; and

c. an analysis demonstrating that equipment is not in VOC service.

[Authority for term: 40 CFR 60.486a(i)] for exemptions in 40 CFR 60.480a(d)]

(23) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.

[Authority for term: 40 CFR 60.486a(j)]

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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

(2) The owner/operator shall submit semiannual reports that include the information identified in 40 CFR 60.487a and the report shall include the number of leaks detected during the reporting period, the identification of the equipment where each leak was detected, and the dates of attempted and final repair. The report shall include the date of any leak that was detected and not repaired within 15 days of discovery, the reason for the delay of repair, the date of final repair, and any Method 21 test results conducted for the leak during the reporting period.

[Authority for term: 40 CFR 60.487a]

(3) The initial semiannual report shall include the following information:

a. the process unit identification;

b. the number of valves subject to the requirements of 40 CFR 60.482–7a, excluding those valves designated for “no detectable emissions” under the provisions of 40 CFR 60.482–7a(f);

c. the number of pumps subject to the requirements of 40 CFR 60.482–2a, excluding those pumps designated for “no detectable emissions” under the provisions of 40 CFR 60.482–2a(e) and those pumps complying with 40 CFR 60.482–2a(f);

d. the number of compressors subject to the requirements of 40 CFR 60.482–3a, excluding those compressors designated for “no detectable emissions” under the provisions of 40 CFR 60.482–3a(i) and those compressors equipped with a closed vent system to capture and transport leakage to a process, fuel gas system, or control device complying with 40 CFR 60.482–3a(h); and

e. the number of connectors subject to the requirements of 40 CFR 60.482–11a.

[Authority for term: 40 CFR 60.487a(a) and (b)]

(4) All subsequent semiannual reports shall include the following information, summarized from the recordkeeping requirements of 40 CFR 60.486a and identified for each process unit subject to Part 60 Subpart VVa:

a. For each month during the semiannual reporting period the semiannual report must include the following information:

i. number of valves for which leaks were detected as described in 40 CFR 60.482–7a(b) or 40 CFR 60.483–2a;

ii. number of valves for which leaks were not repaired as required in 40 CFR 60.482–7a(d)(1);

iii. number of pumps for which leaks were detected as described in 40 CFR 60.482–2a(b), (d)(4)(ii)(A) or (B), or (d)(5)(iii);

iv. number of pumps for which leaks were not repaired as required in 40 CFR 60.482–2a(c)(1) and (d)(6);

v. number of compressors for which leaks were detected as described in 40 CFR 60.482–3a(f);

vi. number of compressors for which leaks were not repaired as required in 40 CFR 60.482–3a(g)(1);

vii. number of connectors for which leaks were detected as described in 40 CFR 60.482–11a(b);

viii. number of connectors for which leaks were not repaired as required in 40 CFR 60.482–11a(d); and

ix. the facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible;

b. dates of process unit shutdowns which occurred within the semiannual reporting period; and

c. revisions to items reported in the initial or subsequent semiannual compliance reports if changes have occurred since the last compliance report.

[Authority for term: 40 CFR 60.487a(a) and (c)]

(5) If the permittee elects to comply with the provisions of 40 CFR 60.483–1a or 40 CFR 60.483–2a, the alternative standards for valves demonstrated to have less than or equal to 2.0% of the facility valves leaking, the permittee shall notify the appropriate district or local office of the Ohio EPA Division of Air Pollution Control of the intention to demonstrate compliance with the alternative standard at least 90 days before implementing either of these provisions.

[Authority for term: 40 CFR 60.487a(d)]

(6) The permittee shall report the results of all performance tests in accordance with 40 CFR 60.8 of the General Provisions. The provisions of 40 CFR 60.8(d) do not apply to affected facilities subject to the provisions of Subpart VVa except that the permittee must notify the appropriate district or local office of the Ohio EPA Division of Air Pollution

Control of the schedule for the initial performance tests at least 30 days before the initial compliance demonstration.

[Authority for term: 40 CFR 60.487a(e)]

f) Testing Requirements

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

a. Emissions Limitation:

VOC emissions shall not exceed 39.31tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the rolling, 12-month VOC emissions limitation has been determined using the actual component count 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.

(2) The following testing requirements from Part 60 Subpart VVa apply to this emissions unit:

	Applicable Rule	Requirements
a.	40 CFR 60.485a	Test methods and procedures
b.	40 CFR 60.485a(b)	Method 21 shall be used to determine the presence of a leak in accordance with this paragraph
c.	40 CFR 60.485a(c)	Method 21 shall be used for determining compliance with “no detectable emissions” in accordance with this paragraph
d.	40 CFR 60.485a(d)	Demonstration that a piece of equipment is “not in VOC service”
e.	40 CFR 60.485a(e)	Demonstration that a piece of equipment is “in light liquid service”
f.	40 CFR 60.485a(f)	Sample used to demonstrate “in VOC or liquid service” shall be representative of the process fluid or gas used in the determination.
g.	40 CFR 60.485a(g)	Standards for a flare

(3) Compliance with the emission limitations shall be determined in accordance with the following methods and the compliance demonstration must be completed for all equipment within 180 days of startup in accordance with 40 CFR 60.482-1a(a):

a. Any demonstration that a piece of equipment is “not in VOC service” shall meet the requirements of 40 CFR 60.485a(d), where the VOC content of the process fluid (in contact with the equipment) must be tested using the appropriate ASTM

methods identified in 40 CFR 60.485a(d)(1), or it can be demonstrated, to the Director satisfaction, that the process fluid cannot exceed 10% VOC by weight. Samples shall be representative of the process fluid.

b. Any demonstration that a piece of equipment is in "light-liquid service" shall meet the requirements of 40 CFR 60.485a(e) and by showing all of the following conditions apply:

i. the vapor pressure of one or more of the organic compounds is greater than 0.3 kPa at 20°C (1.2 in. H_2O at 68°F), where standard reference texts of ASTM D2879-83 is used to document the vapor pressures; and

ii. the total concentration of the pure organic compounds having a vapor pressure greater than 0.3 kPa at 20°C (1.2 in. H_2O at 68°F) is equal to or greater than 20% by weight; and

iii. the fluid is a liquid at operating conditions; and

iv. samples shall be representative of the process fluid.

c. Emission Limitation:

VOC from fugitive equipment leaks

<u>Applicable Compliance Method:</u>

The detection of leaks of VOC into the ambient air from equipment shall be determined as follows:

i. The detection of leaks shall be determined in accordance with the test procedure set forth in U.S. EPA Method 21.

ii. The following calibration gases shall be used:

(a) zero air, which consists of less than 10 ppm of hydrocarbon in air; and

(b) a mixture of air and methane or n-hexane at a concentration no more than, 2,000 ppm greater than the leak definition concentration of the equipment monitored.

iii. The leak detection instrument shall be calibrated before each use and shall meet the performance criteria of Method 21, from 40 CFR 60 Appendix A; and a calibration drift assessment shall be performed, at a minimum, at the end of each monitoring day in accordance with 40 CFR 60.485a(b).

d. Emission Limitation:

< 500 ppm VOC above background for demonstration of "no detectable emissions"

Applicable Compliance Method:

The detection of leaks of VOC into the ambient air from equipment and background level shall be determined as follows:

i. The detection of leaks shall be determined in accordance with the test procedure set forth in U.S. EPA Method 21 and the instrument shall be calibrated each day before use.

ii. The following calibration gases shall be used:

(a) zero air, which consists of less than 10 ppm of hydrocarbon in air; and

(b) a mixture of air and methane or n-hexane at a concentration no more than, 2,000 ppm greater than the leak definition concentration of the equipment monitored.

All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance. The leak detection instrument shall be calibrated before each use and shall meet the performance criteria of Method 21, from 40 CFR 60 Appendix A.

e. Emissions Standard:

Where complying with the alternative standards for valves in 40 CFR 60.483-1a or 40 CFR 60.483-2a, determination of 2% of valves leaking shall be calculated in accordance with 40 CFR 60.485a(h).

Applicable Compliance Method:

The percent of valves leaking shall be determined using the following equation:

$\%V_L = (V_L/V_T) \times 100$

Where:

$\%V_L$ = percent leaking valves

V_L = number of valves found leaking

V_T =sum of total number of valves monitored

f. Emissions Standard:

To determine the monitoring frequency for connectors in gas/vapor or light-liquid service the calculation from 40 CFR 60.482-11a(c) shall be used.

Applicable Compliance Method:

The monitoring frequency for connectors in gas/vapor or light-liquid service shall be determined using the following equation:

$\%C_L = (C_L/C_T) \times 100$

Where:

$\%C_L$ = percent of leaking connectors as determined through periodic monitoring

C_L = number of connectors measured at 500 ppm or greater, by the method specified in 40 CFR 60.485(b)

C_T = the total number of monitored connectors in the process unit or affected facility

[Authority for term: 40 CFR 60.485a(b) through (f) and (h), 40 CFR 60.483-1a or 40 CFR 60.483-2a, and 40 CFR 60.482-11a(c)]

g) Miscellaneous Requirements

(1) None.

8. P901, EU001

Operations, Property and/or Equipment Description:

Grain Receiving, Transferring and Conveying vented to a baghouse

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3) (PTI P0106079)	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, 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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(A)(1)]

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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

(2) 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.

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).

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-03(B)(1)(a), and OAC rule 3745-15-03(C)]

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).

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(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. If required, the permittee shall conduct, or have conducted, emission testing for each emissions unit in accordance with the following requirements:

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; and

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.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific 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), as effective 11/30/2001 (PTI P0112203)	Fugitive particulate emissions (PE) shall not exceed 0.08 pound per hour (lb/hr) and 0.36 ton per year (TPY). See b)(2)a. and b)(2)c.
b.	OAC rule 3745-31-05(A)(3), as effective 12/1/2006 (PTI P0112203)	See b)(2)b.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid Title V for PE)	The baghouse for emissions units P902 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).

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (Senate Bill 265

changes), such that BAT is no longer required by State regulations for emissions units that have the potential to emit less than ten tons per year for pollutants to which National Ambient Air Quality Standards (NAAQS) apply. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. When U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emissions limitations/control measures will no longer apply.

b. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:

i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE from this air contaminant source because the calculated annual emission rate for PE is less than 10 TPY, taking into consideration the federally enforceable rule limit of 1.71 tons PE per rolling, 12-month period established under OAC rule 3745-31-05(D) for emissions units P902 and P903 combined.

c. The hourly fugitive PE limitation was established to reflect the potential to emit for this emissions unit. It is not necessary to develop monitoring, recordkeeping, or reporting requirements to ensure compliance with this limitation.

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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(A)(1)]

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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

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

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

k. the name(s) of the personnel who performed the work.

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

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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

(2) 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.

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).

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-03(B)(1)(a), and OAC rule 3745-15-03(C)]

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 Limitations:</u>

Fugitive PE shall not exceed 0.08lb/hr and 0.36 TPY (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

<u>Applicable Compliance Method:</u>

Compliance shall be determined using the following equation:

(82.6 tons/hr)x(0.001 lb PE/ton)= 0.08pounds of fugitive PE per hour.

where:

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

Compliance with the annual limitation is determined by multiplying the hourly emissions limitation by 8,760 hours and dividing by 2,000 pounds per ton.

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

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:

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

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(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. If required, the permittee shall conduct, or have conducted, emission testing for each emissions unit in accordance with the following requirements:

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

i. 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; and

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.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

10. P903, EU037

Operations, Property and/or Equipment Description:

DDGS Loadout to truck and rail (EU037) equipped with a baghouse

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001 (PTI P0108710)	Fugitive particulate emissions (PE) shall not exceed 0.16 pound per hour (lb/hr) and 0.70 ton per year (TPY). See b)(2)a. and b)(2)c.
b.	OAC 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006 (PTI P0108710)	See b)(2)b.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD for VOC)	The baghouse for emissions units P902 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).

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (Senate Bill 265

changes), such that BAT is no longer required by State regulations for emissions units that have the potential to emit less than ten tons per year for pollutants to which National Ambient Air Quality Standards (NAAQS) apply. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. When U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emissions limitations/control measures will no longer apply.

b. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:

i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the PE from this air contaminant source because the calculated annual emission rate for PE is less than 10 TPY, taking into consideration the federally enforceable rule limit of 1.71 tons PE per rolling, 12-month period established under OAC rule 3745-31-05(D) for emissions units P902 and P903 combined.

c. The hourly fugitive PE limitation was established to reflect the potential to emit for this emissions unit. It is not necessary to develop monitoring, recordkeeping, or reporting requirements to ensure compliance with this limitation.

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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(A)(1)]

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. 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 baghouse;

c. the particulate emissions for the stack serving emissions units P902 and P903, in tons, calculated in accordance with f)(1):

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

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

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

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

k. the name(s) of the personnel who performed the work.

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

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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

(2) 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 baghousewas 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, thepermittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

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

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-03(B)(1)(a), and OAC rule 3745-15-03(C)]

f) Testing Requirements

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

a. Emissions Limitations:

Fugitive PE shall not exceed 0.16lb/hr and 0.70 TPY (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

Applicable Compliance Method:

Compliance shall be determined using the following equation:

(49 tons/hr)x(0.0033 lb PE/ton)= 0.16pounds of fugitive PE per hour.

where:

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

Compliance with the annual limitation is determined by multiplying the hourly emissions limitation by 8,760 hours and dividing by 2,000 pounds per ton.

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) and the following equation:

PE = AOC * EV * (60min/hr) * (1 lb/7000 gr) * (HO) * (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 rolling, 12-month hours of operation for the baghouse.

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.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

(2) The permittee demonstrated compliance with the limitations identified in f)(1)b. and f)(1)c. above through emissions tests conducted on July 31, 2008. If required, 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)b. and f)(1)c. above through emissions tests conducted on July 31, 2008. If required, the permittee shall conduct, or have conducted, emission testing for each emissions unit in accordance with the following requirements:

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 1.71 tons per rolling, 12-month period; 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; and

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.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

11. T003, T003

Operations, Property and/or Equipment Description:

200,000 gal, 200-proof ethanol storage tank

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001 (PTI P0108710)	Volatile organic compound (VOC) emissions shall not exceed 0.56 ton per year (TPY). See b)(2)a. and b)(2)c.
b.	OAC 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006 (PTI P0108710)	See b)(2)b.
c.	40 CFR Part 60, subpart Kb	See b)(2)d. and b)(2)e.
d.	40 CFR Part 60, subpart A	See b)(2)f.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for emissions units that have the potential to emit less than ten tons per year for pollutants to which National Ambient Air Quality Standards (NAAQS) apply. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. When U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emissions limitations/control measures will no longer apply.

b. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:

i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source because the calculated annual emission rate for VOC is less than 10 TPY, taking into consideration the federally enforceable requirements established under 40 CFR Part 60, subpart Kb.

c. The annual VOC emissions limitation was established to reflect the potential to emit for this emissions unit, taking into consideration the requirements established under 40 CFR Part 60, subpart Kb. Themonitoring, recordkeeping, and reporting requirementsfor the purpose of demonstrating compliance with 40 CFR Part 60, subpart Kb, as established in the following terms and conditions, are sufficient to demonstrate compliance with this limitation.

d. 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.

e. 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.

f. The complete 40 CFR Part 60 requirements, including the General Provisions may be accessed via theinternet 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 comply with the applicable operational restrictions necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

[Authority for term: 40 CFR Part 60, subpart Kb, subpart A, and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and/or recordkeeping requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

[Authority for term: 40 CFR Part 60, subpart Kb, subpart A, and OAC rule 3745-77-07(C)(1)]

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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

(2) The permittee shall comply with the applicable reporting requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

[Authority for term: 40 CFR Part 60, subpart Kb, subpart A, and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

a. Emissions Limitation:

VOC emissions shall not exceed 0.56 TPY (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

<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.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the applicable testing requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

[Authority for term: 40 CFR Part 60, subpart Kb, subpart A, and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

12. T004, T004

Operations, Property and/or Equipment Description:

200,000 gal denaturant storage tank

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3) (PTI P0106079)	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.

[Authority for term: OAC rule 3745-21-09 and OAC rule 3745-77-07(A)(1)]

(2) The permittee shall comply with the applicableoperational restrictions necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

[Authority for term: 40 CFR Part 60, subpart Kb, subpart A, and OAC rule 3745-77-07(A)(1)]

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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(3) The permittee shall comply with the applicablemonitoring and/or recordkeeping requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

[Authority for term: 40 CFR Part 60, subpart Kb, subpart A, and OAC rule 3745-77-07(C)(1)]

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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

(2) The permittee shall comply with the applicablereporting requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

[Authority for term: 40 CFR Part 60, subpart Kb, subpart A, and OAC rule 3745-77-07(C)(1)]

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.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the applicabletesting requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

[Authority for term: 40 CFR Part 60, subpart Kb, subpart A, and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.

13. T005, T005

Operations, Property and/or Equipment Description:

200,000 gal, 190-proof ethanol storage tank

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001 (PTI P0108710)	Volatile organic compound (VOC) emissions shall not exceed 0.69 ton per year (TPY). See b)(2)a. and b)(2)c.
b.	OAC 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006 (PTI P0108710)	See b)(2)b.
c.	40 CFR Part 60, subpart Kb	See b)(2)d. and b)(2)e.
d.	40 CFR Part 60, subpart A	See b)(2)f.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for emissions units that have the potential to emit less than ten tons per year for pollutants to which National Ambient Air Quality Standards (NAAQS) apply. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. When U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emissions limitations/control measures will no longer apply.

b. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:

i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source because the calculated annual emission rate for VOC is less than 10 TPY, taking into consideration the federally enforceable requirements established under 40 CFR Part 60, subpart Kb.

c. The annual VOC emissions limitation was established to reflect the potential to emit for this emissions unit, taking into consideration the requirements established under 40 CFR Part 60, subpart Kb. Themonitoring, recordkeeping, and reporting requirementsfor the purpose of demonstrating compliance with 40 CFR Part 60, subpart Kb, as established in the following terms and conditions, are sufficient to demonstrate compliance with this limitation.

d. 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.

e. 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.

f. The complete 40 CFR Part 60 requirements, including the General Provisions may be accessed via theinternet 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 comply with the applicable operational restrictions necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

[Authority for term: 40 CFR Part 60, subpart Kb, subpart A, and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and/or recordkeeping requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

[Authority for term: 40 CFR Part 60, subpart Kb, subpart A, and OAC rule 3745-77-07(C)(1)]

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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

(2) The permittee shall comply with the applicable reporting requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

[Authority for term: 40 CFR Part 60, subpart Kb, subpart A, and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

a. Emissions Limitation:

VOC emissions shall not exceed 0.69 TPY (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

<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.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the applicable testing requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

[Authority for term: 40 CFR Part 60, subpart Kb, subpart A, and OAC rule 3745-77-07(C)(1)]

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001 (PTI P0108710)	Volatile organic compound (VOC) emissions shall be vented to a thermal oxidizer at all times that the emissions unit is operating. Particulate emissions (PE) shall not exceed 1.01 lbs/hr and 4.43 tons per year (TPY). See b)(2)a., b)(2)c., and b)(2)e. For emissions unit **P010**: Sulfur dioxide (SO_2) emissions shall not exceed 1.76 lbs/hr and 7.57 TPY. For emissions units **P011**, **P012**, and **P013**, each: SO_2 emissions shall not exceed 0.02 lb/hr and 0.09 TPY.
b.	OAC 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006	See b)(2)b.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	(PTI P0108710)	
c.	ORC 3704.03(T) (PTI P0108710)	Nitrogen oxide (NO_X) emissions shall not exceed 0.098 pound per million British thermal unit (lb/MMBtu). Carbon monoxide emissions shall not exceed 0.082 lb/MMBtu.
d.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD for VOC)	See b)(2)d. and c)(1).
e.	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 emissions unit **P010** is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3). See b)(2)b.ii.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for emissions units that have the potential to emit less than ten tons per year for pollutants to which National Ambient Air Quality Standards (NAAQS) apply. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. When U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emissions limitations/control measures will no longer apply.

b. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:

i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the SO_2, PE, or VOC emissions from this air contaminant source because the calculated annual emission rate for each pollutant is less than 10 TPY; and

ii. SO_2 emissions from emissions unit **P010** shall not exceed 160.32 lbs/hr.

c. The hourly and annual SO_2 and PE limitations for emissions units **P011, P012, and P013**, the hourly SO_2 emissions limitation for emissions unit **P010**, and the hourly and annual PE limitations for emissions unit **P010** were established to reflect the potential to emit for this emissions unit. It is not necessary to develop monitoring, recordkeeping, or reporting requirements to ensure compliance with these limitations.

d. The following limitations apply to the 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):

i. VOC emissions shall not exceed 0.12 pounds per thousand gallons of 200-proof ethanol produced (lbs/Kgal ethanol) and 8.16 tons per rolling, 12-month period.

e. 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 whenever the emissions unit is in operation.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(A)(1)]

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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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 month:

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;

c. the VOC emissions for 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), in tons, calculated in accordance with the testing requirements established for each emissions unit; and

d. the rolling, 12-month summation of VOC emissions for 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), in tons, calculated in accordance with the testing requirements established for each emissions unit.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(3) 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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(4) 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; and

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

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

(2) 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 thermal oxidizer;

ii. 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

iii. each rolling, 12-month period during which the VOC 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) exceeded 8.16 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.

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).

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-03(B)(1)(a), and OAC rule 3745-15-03(C)]

f) Testing Requirements

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

a. Emissions Limitations:

SO_2 emissions from emissions units **P011**, **P012**, and **P013**shall not exceed 0.02lb/hr and 0.09 TPY, each (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

Applicable Compliance Method:

Compliance with the hourlySO_2emissions limitation may be determined by multiplying the maximum heating capacity (38MMBtu/hr) by the following AP-42 emission factor:

Pollutant	Emissions Factor*
SO_2	0.000588lb/MMBtu

Compliance with the annual SO_2 emissions limitation was determined by multiplying the hourly emissions limitation by 8,760 hours per year and dividing by 2,000 pounds per ton.

* AP-42, Volume I, Fifth Edition, Section 1.4, "Natural Gas Combustion", Table 1.4-2, July 1998.

b. Emissions Limitations:

SO_2 emissions from emissions unit **P010**shall not exceed 1.76lbs/hr and 7.57 TPY (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

Applicable Compliance Method:

Compliance with the hourly SO_2 emissions limitation shall be determined in accordance with the following equation:

Total hourly SO_2 emissions = hourly natural gas SO_2 + hourly biogas SO_2

where,

hourly natural gas SO_2 = Max MMBtu * Ef

where,

Max MMBtu = the maximum hourly Btu rating of the dryer (38 MMBtu); and

Ef = the SO_2 emission factor from AP-42, Volume I, Fifth Edition, Section 1.4, "Natural Gas Combustion", Table 1.4-2, July 1998 (0.000588 lb/MMBtu); and

hourly biogas SO_2 = $MaxE_h$ * Ef

where,

$MaxE_h$ = the maximum, hourly 200-proof ethanol production rate (17,443 gal); and

Ef = the SO_2 emissions factor from stack tests performed on April 13, 2011 (0.10 lb/Kgal ethanol).

Compliance with the annual SO_2 emissions limitation shall be determined in accordance with the following equation:

Total annual SO_2 = annual natural gas SO_2 + annual biogas SO_2

where,

annual natural gas SO_2 = (Max MMBtu * Ef) * 8,760/ 2,000

where,

Max MMBtu = the maximum hourly Btu rating of the dryer (38 MMBtu); and

Ef = the SO_2 emission factor from AP-42, Volume I, Fifth Edition, Section 1.4, "Natural Gas Combustion", Table 1.4-2, July 1998 (0.000588 lb/MMBtu); and

Annual biogas SO_2 = (ActualE * Ef)/2,000

where,

ActualE = the actual, rolling, 12-month 200-proof ethanol production rate; and

Ef = the SO_2 emissions factor from stack tests performed on April 13, 2011 (0.10 lb/Kgal ethanol).

c. Emissions Limitation:

SO_2 emissions from emissions unit **P010**shall not exceed 160.32 lbs/hr(as applicable after U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

Applicable Compliance Method:

The permittee demonstrated compliance with the SO_2 emissions limitation through performance tests conducted on April 13, 2011. The results of the test indicated an average SO_2 emissions rate of 1.41 lbs/hr and a maximum SO_2 emissions rate of 1.48 lbs/hr for emissions units B001, B002, P005, P007, P009, P008, P010, P011, P012, P013, and P014 combined.

d. Emissions Limitation:

PEshall not exceed 1.01lb/hr and 4.43 TPY (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

Applicable Compliance Method:

Compliance with the hourlyPE limitation may be determined using the following equation:

Total PE = Combustion PE + Process PE

where,

Combustion PE = 38 MMBtu * Ef

where,

Ef = the PE emissions factor from AP-42, Volume I, Fifth Edition, Section 1.4, "Natural Gas Combustion", Table 1.4-2, July 1998 (0.00745lb/MMBtu); and

Process PE = 12.2 T/hr * Ef * (1-CE)

where,

Ef = the PE emissions factor from AP-42, Volume I, Fifth Edition, Section 9.9.1, "Grain Elevators and Processes", Table 9.9.1-1, March 2003 (3.0 lb PE/Ton); and

CE = the multiclone control efficiency (98%).

Compliance with the annual PE limitation was determined by multiplying the hourly emissions limitation by 8,760 hours per year and dividing by 2,000 pounds per ton.

e. Emissions Limitation:

NO_X emissions shall not exceed 0.098 lb/MMBtu.

Applicable Compliance Method:

Compliance shall be demonstrated using the emissions factor for NO_X from USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4 Table 1.4-1 (7/98).

f. Emissions Limitation:

CO emissions shall not exceed 0.082 lb/MMBtu.

Applicable Compliance Method:

Compliance shall be demonstrated using the emissions factor for CO from USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4 Table 1.4-1 (7/98).

g. Emissions Limitations:

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. 0.12 lbs VOC/Kgal ethanol and 8.16 tons VOC per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the lbs VOC/Kgal ethanol limitation shall be demonstrated in accordance with the testing requirements identified in f)(2).

Compliance with the rolling, 12-month VOC emissions limitation shall be determined by multiplying the actual gallons of 200-proof ethanol production per

rolling, 12-month period by the lbs VOC/Kgal emissions rate determined in accordance with the testing requirements identified in f)(2).

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

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

a. The 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 limitations identified in f)(1)g. and the facility wide HAP limitations identified in B.6.b)(1);

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

i. 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; and

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.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001 (PTI P0108710)	Volatile organic compound (VOC) emissions shall not exceed 0.82 ton per year (TPY). See b)(2)a. and b)(2)c.
b.	OAC 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006 (PTI P0108710)	See b)(2)b.
b.	40 CFR Part 60, subpart Kb	See b)(2)d. and b)(2)e.
c.	40 CFR Part 60, subpart A	See b)(2)f.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for emissions units that have the potential to emit less than ten tons per year for pollutants to which National Ambient Air Quality Standards (NAAQS) apply. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. When U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emissions limitations/control measures will no longer apply.

b. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:

i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source because the calculated annual emission rate for VOC is less than 10 TPY, taking into consideration the federally enforceable requirements established under 40 CFR Part 60, subpart Kb.

c. The annual VOC emissions limitation was established to reflect the potential to emit for this emissions unit, taking into consideration the requirements established under 40 CFR Part 60, subpart Kb. Themonitoring, recordkeeping, and reporting requirementsfor the purpose of demonstrating compliance with 40 CFR Part 60, subpart Kb, as established in the following terms and conditions, are sufficient to demonstrate compliance with this limitation.

d. 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.

e. 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.

f. The complete 40 CFR Part 60 requirements, including the General Provisions may be accessed via theinternet 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 comply with the applicable operational restrictions necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

[Authority for term: 40 CFR Part 60, subpart Kb, subpart A, and OAC rule 3745-77-07(A)(1)]

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall comply with the applicable monitoring and/or recordkeeping requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

[Authority for term: 40 CFR Part 60, subpart Kb, subpart A, and OAC rule 3745-77-07(C)(1)]

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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

(2) The permittee shall comply with the applicable reporting requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

[Authority for term: 40 CFR Part 60, subpart Kb, subpart A, and OAC rule 3745-77-07(C)(1)]

f) Testing Requirements

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

a. Emissions Limitation:

VOC emissions shall not exceed 0.82 TPY (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

<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.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

(2) The permittee shall comply with the applicable testing requirements necessary to demonstrate compliance with 40 CFR Part 60, subpart Kb and 40 CFR Part 60, subpart A.

[Authority for term: 40 CFR Part 60, subpart Kb, subpart A, and OAC rule 3745-77-07(C)(1)]

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	Ohio Administrative Code (OAC) rule 3745-31-05(A)(3) (PTI P0106079)	Combined particulate emissions (PE) from the stack serving emissions units P001, P002, P003 and P004 shall not exceed 1.29pounds 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 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.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		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/hrPE 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 thebaghouse 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 unitsare in operation.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(A)(1)]

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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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:

f. a description of the corrective action;

g. the date corrective action was completed;

h. the date and time the deviation ended;

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

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

k. the name(s) of the personnel who performed the work.

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

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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-77-07(C)(1)]

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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

(2) 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, thepermittee shall submit a report that states that no deviations (excursions) occurred during the quarter.

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

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

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-03(B)(1)(a), and OAC rule 3745-15-03(C)]

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 1.29lbs/hr.

Applicable Compliance Method:

Compliance with the allowable lb PE/hrlimitation 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 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 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).

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(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. If required, the permittee shall conduct, or have conducted, emission testing for each emissions unit in accordance with the following requirements:

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; and

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.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

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

(1) b)(1)d. and d)(5) through d)(8)

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001 (PTI P0108710)	Volatile organic compound (VOC) emissions shall be vented to a thermal oxidizer at all times that the emissions unit is operating. See b)(2)a.
b.	OAC 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006 (PTI P0108710)	See b)(2)b.
c.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD for VOC)	See b)(2)c. and c)(1).
d.	ORC rule 3704.03(F)	See d)(5) through d)(8).

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for emissions units that have the potential to emit less than ten tons per year for pollutants to which National Ambient Air Quality Standards (NAAQS) apply. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. When U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emissions limitations/control measures will no longer apply.

b. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:

i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the VOC emissions from this air contaminant source because the calculated annual emission rate for VOC is less than 10 TPY, taking into consideration the federally enforceable rule limitations and operational restrictions established under OAC rule 3745-31-05(D).

c. The following limitations apply to the 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):

i. VOC emissions shall not exceed 0.12 pounds per thousand gallons of 200-proof ethanol produced (lbs/Kgal ethanol) and 8.16 tons per rolling, 12-month period.

c) Operational Restrictions

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

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(A)(1)]

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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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 month:

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;

c. the VOC emissions for 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), in tons, calculated in accordance with the testing requirements established for each emissions unit; and

d. the rolling, 12-month summation of VOC emissions for 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), in tons, calculated in accordance with the testing requirements established for each emissions unit.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(3) 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.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(4) 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; and

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

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(5) The PTI application for emissions units P005, P007, P008 and P009was 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 methanolfrom emissions units P005, P007, P008 and P009are 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).

[Authority for term: ORC 3704.03(F)(4)(b) and OAC rule 3745-77-07(C)(1)]

(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 PTI 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.

[Authority for term: ORC 3704.03(F)(4)(b) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: ORC 3704.03(F)(4)(b) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: ORC 3704.03(F)(4)(b) and OAC rule 3745-77-07(C)(1)]

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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

(2) 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 thermal oxidizer;

ii. 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

iii. each rolling, 12-month period during which the VOC 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) exceeded 8.16 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.

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).

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-03(B)(1)(a), and OAC rule 3745-15-03(C)]

f) Testing Requirements

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

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

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. 0.12 lbs VOC/Kgal ethanol and 8.16 tons VOC per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the lbs VOC/Kgal ethanol limitation shall be demonstrated in accordance with the testing requirements identified in f)(2).

Compliance with the rolling, 12-month VOC emissions limitation shall be determined by multiplying the actual gallons of 200-proof ethanol production per rolling, 12-month period by the lbs VOC/Kgal emissions rate determined in accordance with the testing requirements identified in f)(2).

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

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

a. The 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 limitations identified in f)(1)a. and the facility wide HAP limitations identified in B.6.b)(1);

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

i. 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; and

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.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

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

(1) None.

b) Applicable Emissions Limitations and/or Control Requirements

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

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3), as effective 11/30/2001 (PTI P0108710)	Sulfur dioxide (SO_2) emissions shall not exceed 0.08 pounds per hour (lb/hr) and 0.35 tons per year (TPY). Volatile organic compound (VOC) emissions shall not exceed 2.09 lbs/hr. See b)(2)a. and b)(2)c.
b.	OAC 3745-31-05(A)(3)(a)(ii), as effective 12/1/2006 (PTI P0108710)	See b)(2)b.
c.	ORC 3704.03(T) (PTI P0108710)	Carbon monoxide emissions shall not exceed 0.082 lb/MMBtu. The nitrogen oxide (NO_X) emissions limitation established by this rule is equivalent to the limitation established pursuant to 40 CFR Part 60, subpart Db. The particulate emissions (PE) limitation established by this rule is equivalent to the limitation established pursuant to OAC rule 3745-17-10(B)(1).
d.	OAC rule 3745-31-05(D) (Synthetic minor to avoid PSD for	See b)(2)d.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	VOC)	
e.	OAC rule 3745-17-10(B)(1)	PE shall not exceed 0.020 lb/MMBtu of actual heat input. See b)(2)e.
d.	40 CFR Part 60, subpart Db (40 CFR 60.40b-60.49b)	NO_X emissions shall not exceed 0.10 lb/MMBtu of actual heat input, on a rolling, 30-day average basis. See b)(2)f.
e.	40 CFR Part 60, subpart A (40 CFR 60.1-60.18)	See b)(2)g. and b)(2)h.

(2) Additional Terms and Conditions

a. The permittee has satisfied the Best Available Technology (BAT) requirements pursuant to OAC rule 3745-31-05(A)(3), as effective November 30, 2001, in this permit. On December 1, 2006, paragraph (A)(3) of OAC rule 3745-31-05 was revised to conform to ORC changes effective August 3, 2006 (Senate Bill 265 changes), such that BAT is no longer required by State regulations for emissions units that have the potential to emit less than ten tons per year for pollutants to which National Ambient Air Quality Standards (NAAQS) apply. However, that rule revision has not yet been approved by U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Until the SIP revision occurs and U.S. EPA approves the revisions to OAC rule 3745-31-05, the requirement to satisfy BAT still exists as part of the federally-approved SIP for Ohio. When U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05, these emissions limitations/control measures will no longer apply.

b. The following rule paragraphs will apply when U.S. EPA approves the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP:

i. The BAT requirements under OAC rule 3745-31-05(A)(3) do not apply to the SO_2 and VOC emissions from this air contaminant source because the calculated annual emission rate for each pollutant is less than 10 TPY.

c. The hourly VOC emissions limitation and hourly and annual SO_2 emissions limitations were established to reflect the potential to emit for this emissions unit. It is not necessary to develop monitoring, recordkeeping, or reporting requirements to ensure compliance with these limitations.

d. The following limitations apply to the 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):

i. VOC emissions shall not exceed 0.12 pounds per thousand gallons of 200-proof ethanol produced (lbs/Kgal ethanol) and 8.16 tons per rolling, 12-month period.

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

f. 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)

g. 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.

h. 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 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 continuous emission monitoring system consists of all the equipment used to acquire data to provide a record of emissions and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data recording/processing hardware and software.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) 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 number of gallons of 200-proof ethanol produced, in gallons;

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

c. the VOC emissions for 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), in tons, calculated in accordance with the testing requirements established for each emissions unit; and

d. the rolling, 12-month summation of VOC emissions for 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), in tons, calculated in accordance with the testing requirements established for each emissions unit.

[Authority for term: OAC rule 3745-31-05(D) and OAC rule 3745-77-07(C)(1)]

(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.

[Authority for term: OAC rule 3745-77-07(C)(1), and 40 CFR Part 60 subpart Db and subpart A]

(3) The permittee shall maintain on-site, the document of certification received from the U.S. EPA or the Ohio EPA's Central Office documenting that the continuous NO_X monitoring system has been certified to meet the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2. The letter/document of certification shall be made available to the Director (the appropriate Ohio EPA District Office or local air agency) upon request.

[Authority for term: OAC rule 3745-77-07(C)(1), and 40 CFR Part 60 subpart Db and subpart A]

(4) The permittee shall 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 Part 60.

The permittee shall maintain records of all data obtained by the continuous NO_X monitoring system including, but not limited to:

a. emissions of NO_X in parts per million for each cycle time of the analyzer, with no resolution less than one data point per minute required;

b. emissions of NO_X in units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NO_X monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NO_X monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NO_X monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

All valid data points generated and recorded by the continuous emission monitoring and data acquisition and handling system shall be used in the calculation of the pollutant concentration and/or emission rate over the appropriate averaging period.

[Authority for term: OAC rule 3745-77-07(C)(1), and 40 CFR Part 60 subpart Db and 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.

[Authority for term: OAC rule 3745-15-03(A) and OAC rule 3745-77-07(A)(3)(c)]

(2) 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 VOC 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) exceeded 8.16 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.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-03(B)(1)(a), and OAC rule 3745-15-03(C)]

(3) The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NOx monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the appropriate Ohio EPA District Office or local air agency, documenting all instances of NOx emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, 40 CFR Parts 75 and 76, OAC Chapters 3745-14 and 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the

reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s).

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NOx and other associated monitors;

iii. a description of any change in the equipment that comprises the continuous emission monitoring system (CEMS), including any change to the hardware, changes to the software that may affect CEMS readings, and/or changes in the location of the CEMS sample probe;

iv. the excess emissions report (EER)*, i.e., a summary of any exceedances during the calendar quarter, as specified above;

v. the total NOx emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NOx monitoring system while the emissions unit was in operation;

viii. results and dates of quarterly cylinder gas audits or linearity checks;

ix. unless previously submitted, results and dates of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. unless previously submitted, the results of any relative accuracy test audit showing the continuous NOx monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction** of the continuous NOx monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime** of the continuous NOx monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter. Data substitution procedures from 40 CFR 75 are not to be used for showing compliance with the short term OAC 3745-31-05(A)(3) rule-based or NSPS-based limitation(s) in this permit.

* where no excess emissions have occurred or the continuous monitoring system(s) has/have not been inoperative, repaired, or adjusted during the calendar quarter, such information shall be documented in the EER quarterly report

** each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C), and 40 CFR Part 60 subpart Db and subpart A]

(4) If burner tuning has been performed during the calendar quarter, the permittee shall submit a copy of the burner tuning report. The burning tuning report shall include exhaust gas values for O_2, NO_X, and CO.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C), and 40 CFR Part 60 subpart Db and subpart A]

(5) 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.

[Authority for term: OAC rule 3745-77-07(C)(1), OAC rule 3745-15-03(B)(1)(a), OAC rule 3745-15-03(C), and 40 CFR Part 60 subpart Db and subpart A]

f) Testing Requirements

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

a. Emissions Limitation:

SO_2 emissionsshall not exceed 0.08lb/hr and 0.35 TPY (as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

Applicable Compliance Method:

Compliance with the hourlySO_2emissions limitation may be determined by multiplying the maximum heating capacity (38MMBtu/hr) by the following AP-42 emission factor:

Pollutant	Emissions Factor*
SO_2	0.000588lb/MMBtu

Compliance with the annual SO_2 emissions limitation was determined by multiplying the hourly emissions limitation by 8,760 hours per year and dividing by 2,000 pounds per ton.

* AP-42, Volume I, Fifth Edition, Section 1.4, "Natural Gas Combustion", Table 1.4-2, July 1998.

b. Emissions Limitation:

VOC emissionsshall not exceed 2.09lbs/hr(as applicable prior to U.S. EPA approving the December 1, 2006, version of OAC rule 3745-31-05 as part of the SIP).

Applicable Compliance Method:

Compliance with the hourlyVOCemissions limitation may be determined by multiplying the maximum hourly 200-proof ethanol production rate (17.443 Kgal) by the 0.12 lb VOC/Kgal ethanol emissions limitation established under OAC rule 3745-31-05(D).

c. Emissions Limitation:

PE shall not exceed 0.020 lb/MMBtu of actual heat input.

Applicable Compliance Method:

Compliance shall be demonstrated using the emissions factor for PE from USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section1.4 Table 1.4-2 (7/98).

d. Emissions Limitation:

CO emissions shall not exceed 0.082 lb/MMBtu.

Applicable Compliance Method:

Compliance shall be demonstrated using the emissions factor for CO from USEPA reference document AP-42, Fifth Edition, Compilation of Air Pollution Emission Factors, Section 1.4 Table 1.4-1 (7/98).

e. Emissions Limitation:

NO_X emissions shall not exceed 0.10 lb NO_X per MMBtu of actual heat input, on a rolling, 30-day average basis.

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)(4) and in accordance with 40 CFR 60.48b and 40 CFR 60.13.

Ongoing compliance with the NO_X emission limitations contained in this permit, 40 CFR Part 60 and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

f. Emissions Limitations:

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. 0.12 lbs VOC/Kgal ethanol and 8.16 tons VOC per rolling, 12-month period.

Applicable Compliance Method:

Compliance with the lbs VOC/Kgal ethanol limitation shall be demonstrated in accordance with the testing requirements identified in f)(2).

Compliance with the rolling, 12-month VOC emissions limitation shall be determined by multiplying the actual gallons of 200-proof ethanol production per rolling, 12-month period by the lbs VOC/Kgal emissions rate determined in accordance with the testing requirements identified in f)(2).

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

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

a. The 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 limitations identified in f)(1)f. and the facility wide HAP limitations identified in B.6.b)(1);

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

i. 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; and

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.

[Authority for term: OAC rule 3745-77-07(A)(1) and OAC rule 3745-77-07(C)(1)]

g) Miscellaneous Requirements

(1) None.