State of Ohio Environmental Protection Agency

STREET ADDRESS:
Lazarus Government Center
50 W. Town St., Suite 700
Columbus, Ohio 43215

TELE: (614) 644-3020 FAX: (614) 644-3184
www.epa.state.oh.us

MAILING ADDRESS:
P.O. Box 1049
Columbus, OH 43216-1049

Certified Mail

1/22/2009

No	TOXIC REVIEW
No	PSD
No	SYNTHETIC MINOR
No	CEMS
No	MACT
No	NSPS
No	NESHAPS
No	NETTING
No	MAJOR NON-ATTAINMENT
No	MODELING SUBMITTED

Mr. Mark Borer
Fostoria Ethanol, LLC
2111 Sandusky St
Fostoria, OH 44830

RE: FINAL AIR POLLUTION PERMIT-TO-INSTALL AND OPERATE
Facility ID: 0374010235
Permit Number: P0103811
Permit Type: OAC Chapter 3745-31 Modification
County: Seneca

Dear Permit Holder:

Enclosed please find a final Air Pollution Permit-to-Install and Operate ("PTIO") which will allow you to install, modify, and/or operate the described emissions unit(s) in the manner indicated in the permit. Because this permit contains conditions and restrictions, please read it very carefully.

Ohio EPA maintains a document entitled "Frequently Asked Questions about the PTIO". The document can be downloaded from the DAPC Web page, www.epa.state.oh.us/dapc, from the "Permits" link. This document contains additional information related to your permit, such as what activities are covered under the PTIO, who has enforcement authority over the permit and Ohio EPA's authorization to inspect your facility and records. Please contact the Office of Compliance Assistance and Pollution Prevention at (614) 644-3469 if you need assistance.

The issuance of this PTIO is a final action of the Director and may be appealed to the Environmental Review Appeals Commission ("ERAC") under Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and describe the action complained of and the grounds for the appeal. The appeal must be filed with the ERAC within thirty (30) days after notice of the Director's action. A filing fee of $70.00 must be submitted to the ERAC with the appeal, although the ERAC, has discretion to reduce the amount of the filing fee if you can demonstrate (by affidavit) that payment of the full amount of the fee would cause extreme hardship. If you file an appeal of this action, you must notify Ohio EPA of the filing of the appeal (by providing a copy to the Director) within three (3) days of filing your appeal with the ERAC. Ohio EPA requests that a copy of the appeal also be provided to the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the ERAC at the following address:

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, OH 43215

If you have any questions regarding this permit, please contact the Ohio EPA DAPC, Northwest District Office. This permit has been posted to the Division of Air Pollution Control (DAPC) Web page www.epa.state.oh.us/dapc.

Sincerely,

Michael W. Ahern

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

Cc: Ohio EPA-NWDO

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

FINAL

Air Pollution Permit-to-Install and Operate

for

Fostoria Ethanol, LLC

Facility ID:	0374010235
Permit Number:	P0103811
Permit Type:	OAC Chapter 3745-31 Modification
Issued:	1/22/2009
Effective:	1/22/2009
Expiration:	1/22/2019

OhioEPA

State of Ohio Environmental Protection Agency
Division of Air Pollution Control

Air Pollution Permit-to-Install and Operate

for

Fostoria Ethanol, LLC

Table of Contents

Authorization

Facility ID: 0374010235
Application Number(s): A0035811
Permit Number: P0103811
Permit Description: Modification to allow for the use of predictive emissions monitoring and to address increases in emissions of particulate matter 10 microns or less in size due to increased volumetric air flow for baghouse control systems.
Permit Type: OAC Chapter 3745-31 Modification
Permit Fee: $2,350.00
Issue Date: 1/22/2009
Effective Date: 1/22/2009
Expiration Date: 1/22/2019
Permit Evaluation Report (PER) Annual Date: Oct 1 - Sept 30, Due Nov 15

This document constitutes issuance to:

Fostoria Ethanol, LLC
2111 Sandusky Street
Fostoria, OH 44830

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

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

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

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski
Director

Authorization (continued)

Permit Number: P0103811
Permit Description: Modification to allow for the use of predictive emissions monitoring and to address increases in emissions of particulate matter 10 microns or less in size due to increased volumetric air flow for baghouse control systems.

Permits for the following emissions unit(s) or groups of emissions units are in this document as indicated below:

Emissions Unit ID:	**P001**
Company Equipment ID:	EU004 & EU005
Superseded Permit Number:	03-17304
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P802**
Company Equipment ID:	Wetcake Pad - F007
Superseded Permit Number:	03-17304
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P901**
Company Equipment ID:	EU001 - EU003
Superseded Permit Number:	03-17304
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**P902**
Company Equipment ID:	EU032, 033, 035
Superseded Permit Number:	03-17304
General Permit Category and Type:	Not Applicable

Group Name: BOILERS

Emissions Unit ID:	**B001**
Company Equipment ID:	EU027
Superseded Permit Number:	03-17304
General Permit Category and Type:	Not Applicable
Emissions Unit ID:	**B002**
Company Equipment ID:	EU028
Superseded Permit Number:	03-17304
General Permit Category and Type:	Not Applicable

A. Standard Terms and Conditions

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

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

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

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

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

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

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

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

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

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

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

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

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

   This permit expires on the date identified at the beginning of this permit document (see "Authorization" page above) and you must submit a renewal application to renew the permit. Ohio EPA will send a renewal notice to you approximately six months prior to the expiration date of this permit. However, it is very important that you submit a complete renewal permit application (postmarked prior to expiration of this permit) even if you do not receive the renewal notice.

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

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

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

7. What reports must I submit under this permit?

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

B. Facility-Wide Terms and Conditions

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

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

      (1) None.

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

      (1) None.

C. Emissions Unit Terms and Conditions

1. P001, EU004 & EU005

Operations, Property and/or Equipment Description:

grain transfer conveyors, scalper and surge bins

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. 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)	Filterable particulate matter equal to or less than 10 microns in size (PM10) shall not exceed 0.004 grain per dry standard cubic foot (gr/dscf) and 0.45 ton per year (TPY). Visible particulate emissions (PE) from the baghouse stack(s) shall not exceed 0% opacity. See b)(2)a. and b)(2)e.
b.	OAC rule 3745-17-11(B)	See b)(2)b.
c.	OAC rule 3745-17-07(A)	See b)(2)c.
d.	40 CFR Part 60 Subpart DD	See b)(2)b.

(2) Additional Terms and Conditions

a. This permit to install and operate (PTIO) takes into account the following voluntary restrictions as proposed by the permittee for the purpose of establishing practically and legally enforceable limitations representing the potential to emit for PM10 from this emissions unit:

i. use of a baghouse system (with a 100% capture efficiency) achieving a maximum outlet grain loading of 0.004 gr/dscf of filterable PM10;

ii. Visible particulate emissions shall not exceed 0% opacity as a 6-minute average from any stack serving this emissions unit;

iii. the establishment of an annual limitation of 0.45 ton filterable PM10 to represent the potential to emit from the control system for this emissions unit.

The resulting potential to emit for this emissions unit is less than ten tons of PM10 per year and as such Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply.

b. The emission limitation established by this rule is less stringent than the emission limitation established pursuant to the voluntary restrictions contained in this permit.

c. The visible emission limitation established by this rule is less stringent than the visible emission limitation established pursuant to the voluntary restrictions contained in this permit.

d. All emissions of particulate matter are PM10.

c) Operational Restrictions

(1) The permittee shall operate the baghouse at all times when this emissions unit is in operation.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stacks serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log, as well as 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 color of the emissions;

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

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

(2) The permittee shall maintain records documenting any time periods when the emissions unit was in operation and the baghouse was not operating

e) Reporting Requirements.

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

(2) The permittee shall submit deviation (excursion) reports that identify any time periods when the emissions unit was in operation and the baghouse was not operating. Each report shall be submitted within 30 days after the deviation occurs.

f) Testing Requirements

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

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit.

The emission testing shall be conducted to demonstrate compliance with the baghouse maximum outlet concentration of 0.004 gr/dscf of filterable PM10.

b. The following test methods shall be employed to demonstrate compliance with the above emissions limitations: for PM10, 40 CFR Part 51, Appendix M, Methods 201/201A and 40 CFR Part 60, Appendix A, Methods 1-4 (for volumetric air flow rate). Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, NWDO.

c. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA, NWDO.

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

Personnel from the Ohio EPA, NWDO 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.

A comprehensive written report of the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO 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 Ohio EPA, NWDO.

(2) Compliance with the emission limitations specified in b)(1) of the terms and conditions of this permit shall be determined in accordance with the following method(s):

a. Emission Limitation:

The baghouse shall achieve a maximum outlet concentration of not greater than 0.004 gr filterable PM10/dscf of exhaust gas.

Applicable Compliance Method:

Compliance with the grain loading of 0.004 gr/dscf shall be demonstrated based on the results of emission testing conducted in accordance with Methods 201/201A of 40 CFR Part 51, Appendix M.

b. Emission Limitation:

0.45 ton filterable PM10/yr

Applicable Compliance Method:

Compliance with the annual allowable PM10 emission limitation shall be demonstrated based on the baghouse outlet grain loading and the maximum volumetric flow rate as follows:

PM10 (tons/yr) = baghouse grain loading (0.004 gr/dscf) x 1 lb/7000 gr x maximum volumetric flow rate of the baghouse (3,000 cfm) x 60 min/hour x 8760 hours/yr x ton/2000lbs

Therefore, as long as compliance with the 0.004 gr/dscf is maintained and the volumetric air flow rate is verified through testing, compliance with the annual PM10 limitation shall be ensured.

c. Emission Limitation:

Visible PE from the baghouse stack(s) shall not exceed 0% opacity.

Applicable Compliance Method:

Compliance with the visible emission limitation shall be demonstrated in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources")..

g) Miscellaneous Requirements

(1) None.

2. P802, Wetcake Pad - F007

Operations, Property and/or Equipment Description:

wetcake storage and loadout

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 2.17 tons/yr.

(2) Additional Terms and Conditions

a. This permit to install and operate (PTIO) takes into account the following voluntary restrictions as proposed by the permittee for the purpose of establishing practically and legally enforceable limitations representing the potential to emit for VOC from this emissions unit:

i. an annual restriction on wetcake throughput [see c)(1)];

ii. operational practices regarding wetcake storage [see c)(2)]

iii. the establishment of an annual limitation of 2.17 tons VOC to represent the potential to emit from this emissions unit.

The resulting potential to emit for this emissions unit is less than ten tons of VOC per year and as such Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply.

c) Operational Restrictions

(1) The maximum annual wetcake throughput for this emissions unit shall not exceed 522,972 tons.

(2) All wetcake must be removed from the wetcake storage area within 48 hours of production /placement to storage. If material is removed from storage area it may be either recycled back into the system or removed off of the property.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall maintain monthly records of the wetcake throughput for this emissions unit (in tons per month and total tons, to date for the calendar year).

(2) The permittee shall maintain records of the following information:

a. a daily record of the time and quantity of wetcake that is added to the wetcake storage enclosure each day as a result of production.

b. a daily record of the time and quantity of wetcake that is added to the wetcake storage enclosure each day from any source other than production.

c. a weekly record of the total amount of wetcake produced in lbs, along with the total throughput of corn used for the facility.

d. a daily record showing the time and quantity for each loadout of wetcake which is removed from the wetcake storage area, and the reason for removal (shipment, recycle, or waste).

This data is to be kept in a log book located within 50 yards of the storage facility for easy review

e) Reporting Requirements

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

f) Testing Requirements

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

a. Emission Limitation: VOC emissions shall not exceed 2.17 tons/yr

Applicable Compliance Method:

The emission limitation was developed by multiplying an emission factor of 0.0083 lbs VOC/ton of wetcake (Diversified Energy Facility in Morris, MN, stack test date: November 2, 2004) by the maximum annual wetcake throughput of

522,972 tons and dividing by 2000 lbs per ton. Therefore, provided compliance is shown with the maximum annual wetcake throughput, compliance with the annual limitation will be assumed..

g) Miscellaneous Requirements

(1) None.

3. P901, EU001 - EU003

Operations, Property and/or Equipment Description:

grain receiving by rail and truck

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. 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)	Stack Emissions: The baghouse controlling this emissions unit shall achieve an outlet emission rate of not greater than 0.004 grain of filterable particulate matter equal to or less than 10 microns in size (PM10) per dry standard cubic foot of exhaust gases (gr/dscf). Filterable PM10 emissions shall not exceed 5.96 tons per year (TPY). Visible particulate emissions (PE) from the baghouse stack shall not exceed 0% opacity Fugitive Emissions: Fugitive PE shall not exceed 12.30 TPY. Fugitive PM10 emissions shall not exceed 4.03 TPY.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Visible fugitive PE shall not exceed 5% opacity, from any truck or rail unloading. Visible fugitive PE shall not exceed 0% opacity, from any grain handling operations. See b)(2)a., b)(2)b, and b)(2)e.
b.	OAC rule 3745-17-07 (B)	See b)(2)c.
c.	OAC rule 3745-17-08(B)	See b)(2)d.
d.	40 CFR Part 60 Subpart DD	See b)(2)f.

(2) Additional Terms and Conditions

a. The "Best Available Technology (BAT)" requirements under OAC rule 3745-31-05(A)(3)(a) are not applicable to the particulate emissions (PE) emitted from this emissions unit (PE is emitted as a fugitive emission from grain receiving operations). BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate emissions (also referred to as total suspended particulate or particulate matter) is an air contaminant that does not involve an established NAAQS.

b. This permit to install and operate (PTIO) takes into account the following voluntary restrictions as proposed by the permittee for the purpose of establishing practically and legally enforceable limitations representing the potential to emit for PM10 from this emissions unit:

i. for grain receiving, partial enclosure with aspiration to baghouse;

ii. for transferring/conveying and storage, the use of a total enclosure and use of baghouse;

iii. use of a baghouse achieving a maximum outlet grain loading of 0.004 gr filterable PM10/dscf;

iv. the establishment of the following visible emission restrictions:

(a) visible particulate emissions shall not exceed 0% opacity as a 6-minute average from the baghouse stack(s) serving this emissions unit;

(b) visible fugitive particulate emissions shall not exceed 5% opacity from any truck or rail unloading;

(c) visible fugitive particulate emissions shall not exceed 0% opacity from transferring/conveying and storage operations;

v. the establishment of the following annual limitations to represent the potential to emit from this emissions unit:

(a) 5.96 tons filterable PM10 from the baghouse stack(s)

(b) 12.30 tons fugitive PE

(c) 4.03 tons fugitive PM10

The resulting potential to emit for this emissions unit is less than ten tons of PM10 per year and as such Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply.

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

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

e. All stack emissions of particulate matter are PM10.

f. The emissions limitations specified by this rule is as stringent or less stringent than the emissions limitations established pursuant to the voluntary restrictions contained in this permit.

c) Operational Restrictions

(1) The permittee shall not exceed an annual material throughput rate of 683,280 tons of grain received.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log, as well as 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 color of the emissions;

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

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

(2) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible fugitive particulate emissions from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions

unit. The presence or absence of any visible fugitive emissions shall be noted in an operations log, as well as the date and time the daily check was performed. If visible fugitive emissions are observed, the permittee shall also note the following in the operations log:

a. the 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 visible emissions.

(3) The permittee shall maintain monthly records of the amount (tons of grain per month and total tons of grain, to date for the calendar year) material throughput for this emissions unit..

e) Reporting Requirements

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

f) Testing Requirements

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

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the baghouse maximum outlet concentration of 0.004 gr/dscf of filterable PM10.

c. The following test methods shall be employed to demonstrate compliance with the above emission limitations: for filterable PM10, 40 CFR Part 51, Appendix M, Methods 201/201A. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, NWDO.

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

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

Personnel from the Ohio EPA, NWDO 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.

A comprehensive written report of the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO 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 Ohio EPA, NWDO.

(2) Compliance with the emission limitations in Section A.1 of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitations:

0.004 gr filterable PM10/dscf of exhaust gas and 5.96 TPY filterable PM10.

Applicable Compliance Method:

Compliance with the maximum outlet concentration of 0.004 gr/dscf of filterable PM10 shall be demonstrated based on the results of emission testing conducted in accordance with Methods 201/201A of 40 CFR Part 51, Appendix M and 40 CFR Part 60, Appendix A, Methods 1-4 (volumetric air flow rate). Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, NWDO.

Compliance with the annual allowable filterable PM10 emission limitation shall be demonstrated based on the baghouse outlet grain loading and the maximum volumetric flow rate as follows:

Filterable PM10 (tons/yr) = baghouse grain loading (0.004 gr/dscf) x 1 lb/7000 gr x maximum volumetric flow rate of the baghouse (39,700 cfm) x 60 min/hour x 8760 hours/yr x ton/2000lbs

Therefore, as long as compliance with the 0.004 gr/dscf is maintained and the volumetric air flow rate is verified through testing, compliance with the annual PM10 limitation shall be ensured.

b. Emission Limitation:

Fugitive PE shall not exceed 12.30 tons/yr, fugitive PM10 shall not exceed 4.03 tons/yr.

Applicable Compliance Method:

Compliance with the annual emission limitations above may be demonstrated by the following calculations using the AP-42 emission factors (Section 9.9.1, March 2003) and the maximum grain throughput.

= 683,280 ton/yr x 0.18 lb PE/ton x 0.0005 ton/lb x 0.2 (80% capture efficiency) = 12.30 tons PE/year

= 683,280 ton/yr x 0.059 lb PM10/ton x 0.0005 ton/lb x 0.2 (80% capture efficiency) = 4.03 tons PM10/year

c. Emission Limitation:

Visible PE from the baghouse stack shall not exceed 0% opacity

Applicable Compliance Method:

Compliance shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources."

d. Emission Limitation:

Visible fugitive PE shall not exceed 5% opacity, from any truck or rail unloading.

Applicable Compliance Method:

Compliance with the visible emission limitation shall be determined in accordance with Test Method 9 as set forth in “Appendix on Test Methods” in 40 CFR, Part 60 (“Standards of Performance for New Stationary Sources”), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

e. Emission Limitation:

Visible fugitive PE shall not exceed 0% opacity, from any grain handling operations.

f. Applicable Compliance Method:

Compliance with the visible emission limitation shall be determined in accordance with Test Method 9 as set forth in “Appendix on Test Methods” in 40 CFR, Part 60 (“Standards of Performance for New Stationary Sources”), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

g) Miscellaneous Requirements

(1) None.

4. P902, EU032, 033, 035

Operations, Property and/or Equipment Description:

DDGS loadout

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

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

a. None.

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. Emissions from each unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
a.	OAC rule 3745-31-05(A)(3)	<u>Stack Emissions</u>: The baghouse shall achieve an outlet emission rate of not greater than 0.004 grain of filterable particulate matter equal to or less than 10 microns in size (PM10) per dry standard cubic foot of exhaust gases (gr/dscf). Filterable PM10 emissions shall not exceed 1.50 tons per year (TPY). Visible particulate emissions (PE) from the baghouse stack shall not exceed 0% opacity, as a 6-minute average. <u>Fugitive Emissions</u>: Fugitive PE shall not exceed 4.33 TPY. Fugitive PM10 emissions shall not exceed 1.46 TPY.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		Visible fugitive PE shall not exceed 5% opacity, as a 3-minute average, from the dried distiller's grains with solubles (DDGS) loadout. See b)(2)a., b)(2)b., and b)(2)e.
b.	OAC rule 3745-17-07(B)	See b)(2)c.
c.	OAC rule 3745-17-08(B)	See b)(2)d.
d.	OAC rule 3745-17-07(A)	See b)(2)f.
e.	OAC rule 3745-17-11(B)	See b)(2)f.

(2) Additional Terms and Conditions

a. The "Best Available Technology (BAT)" requirements under OAC rule 3745-31-05(A)(3)(a) are not applicable to the particulate emissions (PE) emitted from this emissions unit (PE is emitted as a fugitive emission from grain receiving operations). BAT is only applicable to emissions of an air contaminant or precursor of an air contaminant for which a national ambient air quality standard (NAAQS) has been adopted under the Clean Air Act. Particulate emissions (also referred to as total suspended particulate or particulate matter) is an air contaminant that does not involve an established NAAQS.

b. This permit to install and operate (PTIO) takes into account the following voluntary restrictions as proposed by the permittee for the purpose of establishing practically and legally enforceable limitations representing the potential to emit for PM10 from this emissions unit:

i. for DDGS rail load out, the use of a partial enclosure with aspiration to baghouse;

ii. for DDGS truck load out, the use of a total enclosure;

iii. use of a baghouse achieving a maximum outlet grain loading of 0.004 gr filterable PM10/dscf;

iv. the establishment of the following visible emission restrictions:

(a) visible particulate emissions shall not exceed 0% opacity as a 6-minute average from the baghouse stack(s) serving this emissions unit;

(b) visible fugitive particulate emissions shall not exceed 5% opacity from the DDGS loadout;

v. the establishment of the following annual limitations to represent the potential to emit from this emissions unit:

(a) 1.50 tons filterable PM10 from the baghouse stack(s)

(b) 4.33 tons fugitive PE

(c) 1.46 tons fugitive PM10

The resulting potential to emit for this emissions unit is less than ten tons of PM10 per year and as such Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3)(a) do not apply.

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

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

e. All stack emissions of particulate matter are PM10.

f. The emissions limitations specified by this rule is as stringent or less stringent than the emissions limitations established pursuant to the voluntary restrictions contained in this permit.

c) Operational Restrictions

(1) None.

d) Monitoring and/or Recordkeeping Requirements

(1) The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the baghouse stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log, as well as 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 color of the emissions;

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

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

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

a. the 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 visible emissions..

e) Reporting Requirements

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

f) Testing Requirements

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

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the baghouse maximum outlet concentration of 0.004 gr/dscf of filterable PM10

c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations: for filterable PM10, 40 CFR Part 51, Appendix M, Methods 201/201A and 40 CFR Part 60, Appendix A, Methods 1-4 (volumetric air flow rate). Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, NWDO.

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

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

Personnel from the Ohio EPA, NWDO 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.

A comprehensive written report of the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO 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 Ohio EPA, NWDO.

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

a. Emission Limitation:

The baghouse shall achieve an outlet emission rate of not greater than 0.004 gr/dscf of filterable PM10.

Applicable Compliance Method:

Compliance with the grain loading of 0.004 gr/dscf shall be demonstrated based on the results of emission testing conducted in accordance with Methods 201/201A of 40 CFR Part 51, Appendix M. Alternative U.S. EPA-approved test methods may be used with prior approval from the Ohio EPA, NWDO.

b. Emission Limitations:

Filterable PM10 from the baghouse stack shall not exceed 1.50 TPY.

Applicable Compliance Method:

Compliance with the annual allowable PM10 emission limitation shall be demonstrated based on the baghouse outlet grain loading and the maximum volumetric flow rate as follows:

PM10 (tons/yr) = baghouse grain loading (0.004 gr/dscf) x 1 lb/7000 gr x maximum volumetric flow rate of the baghouse (10,000 cfm) x 60 min/hour x 8760 hours/yr x ton/2000lbs

Therefore, as long as compliance with the 0.004 gr/dscf is maintained and the volumetric air flow rate is verified through testing, compliance with the annual PM10 limitation shall be ensured.

c. Emission Limitation:

Visible particulate emissions from the baghouse stack shall not exceed 0% opacity, as a 6-minute average.

Applicable Compliance Method:

Compliance shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR Part 60 "Standards of Performance for New Stationary Sources."

d. Emission Limitation:

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

Applicable Compliance Method:

Compliance with the visible emission limitation shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 2002, and the modifications listed in paragraphs (B)(3)(a) and (B)(3)(b) of OAC rule 3745-17-03.

e. Emission Limitation:

Fugitive PE shall not exceed 4.33 TPY; fugitive PM10 shall not exceed 1.46 TPY.

Applicable Compliance Method:

Compliance with the annual emission limitations above may be demonstrated by the following calculation using the AP-42 emission factor (Section 9.9.1, 5/98) and the maximum grain throughput:

= 201,480 ton/yr x 0.086 lb PM/ton x 0.0005 ton/lb x 0.5 (50% capture efficiency) = 4.33 tons PE/year

= 201,480 ton/yr x 0.029 lbPM10/ton x 0.0005 ton/lb x 0.5 (50% capture efficiency) = 1.46 ton PM10/year

g) Miscellaneous Requirements

(1) None.

5. Emissions Unit Group - BOILERS: B001, B002,

EU ID	Operations, Property and/or Equipment Description
B001	143 mmBtu/hr natural gas fired boiler
B002	143 mmBtu/hr natural gas fired boiler

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

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

a. b)(1)i., d)(5), d)(6), d(7), and e)(2)

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

a. None.

b) Applicable Emissions Limitations and/or Control Requirements

(1) The specific operations(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. 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)(a)	The requirements of this rule also include compliance with the requirements of 40 CFR Part 60 Subpart Db and OAC rule 3745-17-07(A)(1). Nitrogen oxides (NOx) emissions shall not exceed 0.035 pound per million British thermal units (lbs/mmBtu) of actual heat input and 21.92 tons per year (TPY). Carbon monoxide (CO) emissions shall not exceed 5.72 pounds per hour (lbs/hr) and 25.10 TPY. See b)(2)a.
b.	OAC rule 3745-31-05(A)(3)	Particulate matter emissions equal to or less than 10 microns in size (PM10) shall not exceed 1.09 lbs/hr and 4.77 TPY.

	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
		See b)(2)g.
c.	OAC rule 3745-31-05(A)(3)(a)(ii)	See b)(2)d.
d.	OAC rule 3745-17-07(A)(1)	Visible particulate emissions (PE) shall not exceed 20% opacity, as a six-minute average, except as provided by rule.
e.	OAC rule 3745-17-10(B)(1)	See b)(2)h.
f.	40 CFR Part 60, Subpart Db	See b)(2)c. and b)(2)f.
g.	OAC rule 3745-18-06	See b)(2)b.
h.	OAC rule 3745-114-01 ORC 3704.03(F)	See d)(5), d)(6), d(7), and e)(2)

(2) Additional Terms and Conditions

a. Best available technology (BAT) control requirements for this emissions unit has been determined to be:

i. the use of low NO_X burners; and

ii. the firing of only natural gas.

BAT also includes compliance with the terms and conditions of this permit.

b. This emissions unit is exempt from the requirements of OAC rule 3745-18-06 in accordance with OAC rule 3745-18-06(A).

c. Within 180 days of the effective date of this permit, the permittee shall develop and maintain a written quality assurance/quality control plan for the continuous NOx monitoring system, designed to ensure continuous valid and representative readings of NOx emissions in units of the applicable standard(s). The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

The plan shall include the requirement to conduct quarterly cylinder gas audits or relative accuracy audits as required in 40 CFR Part 60; and to conduct relative accuracy test audits in units of the standard(s), in accordance with and at the frequencies required per 40 CFR Part 60.

d. The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) do not apply the VOC, SO2, and PM10 emissions from this air contaminant source since the potentials to emit (PTE) for VOC and SO2 is each less than ten tons per year.

The PTE for VOC from this emissions unit of 3.44 tons/yr was calculated by multiplying the emission factor of 5.5 lbs of VOC per million standard cubic feet (mm scf) [USEPA AP-42 Table 1.4-2, revised 7/98] by the maximum hourly heat input rate of 143 mmBtu/hr, by the heating value of Cf/1000 Btu, by the maximum operating schedule of 8760 hours per year and then dividing by 2000 pounds/ton.

The PTE for SO2 from this emissions unit of 0.40 ton/yr was calculated by multiplying the emission factor of 0.6 lb of SO2/mm scf (USEPA AP-42 emission factor, Table 1.4-2, Revised 7/98) by the maximum hourly heat input rate of 143 mmBtu/hr, by the heating value of Cf/1000 Btu, by the maximum operating schedule of 8760 hours per year and then dividing by 2000 pounds/ton.

See b)(2)g. regarding PTE for PM10.

e. All emissions of particulate matter are PM10.

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

g. The permittee has requested voluntary allowable emission limitations for filterable PM10 of 1.09 lbs/hr and 4.77 TPY. The short-term (lb/hour) and long-term (tons/year) emission limitations for filterable PM10 are being established as practically and legally enforceable requirements representing the potential to emit based on the physical capacity of the emissions unit and the use of natural gas.

h. The emissions limitations specified by this rule is as stringent or less stringent than the emissions limitations established pursuant to the voluntary restrictions contained in this permit.

c) Operational Restrictions

(1) The permittee shall burn only natural gas in this emissions unit.

d) Monitoring and/or Recordkeeping Requirements

(1) Pursuant to 40 CFR Part 60, Subpart Db, the permittee shall record and maintain records of the amount of natural gas combusted during each day. These records shall be maintained by the permittee for a period of two years following the date of such record.

(2) For each day during which the permittee burns a fuel other than natural gas, the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

(3) The permittee shall perform the following monitoring and record keeping requirements for the continuous NOx monitor:

a. The permittee shall operate and maintain equipment to continuously monitor and record NOx from this emissions unit in units established in this permit. Such continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Part 60.13.

b. The permittee shall maintain records of all data obtained by the continuous NOx monitoring system including, but not limited to, parts per million NOx on an instantaneous (one-minute) basis, emissions of NOx in units established in this permit in the appropriate averaging period (i.e., lbs/hr for each hour and lbs/mmBtu for each hour), results of daily zero/span calibration checks, and the magnitude of manual calibration adjustments.

c. The permittee shall maintain a written quality assurance/quality control plan for the continuous NOx monitoring system designed to ensure continuous valid and representative readings of NOx. The plan shall follow the requirements of 40 CFR Part 60, Appendix F. The quality assurance/quality control plan and a logbook dedicated to the continuous NOx monitoring system must be kept on site and available for inspection during regular office hours.

d. A statement of certification of the existing continuous NOx monitoring system shall be maintained on site and shall consist of a letter from the Ohio EPA detailing the results of an Agency review of the certification tests and a statement by the Agency that the system is considered certified in accordance with the requirements of 40 CFR Part 60, Appendix B, Performance Specification 2 and/or 40 CFR Part 75. Proof of certification shall be made available to the Director (the Ohio EPA, Northwest District Office) upon request.

(4) In lieu of installing a continuous emissions monitoring system (CEM) for NOx, the permittee may elect to install a predictive emission monitoring system (PEMS) for the NOx emissions. The PEMS must meet 'Example Specifications and Test Procedures for Predictive Emission Monitoring Systems' as written by the United States Environmental Protection Agency, and the proposed system shall be approved in writing by Ohio EPA prior to installation. At such time that a performance specification for PEMS is promulgated, the PEMS shall be required to meet the promulgated requirements.

After initial testing to assure the PEMS meets the 'Example Specifications and Test Procedures for Predictive Emission Monitoring Systems', or when available, the promulgated performance specification, ongoing quality assurance/quality control shall include a relative accuracy test audit (RATA) once every four (or less) calendar quarters. RATA requirements are in addition to any and all PEMS manufacturer-suggested quality assurance/quality control procedures. RATA requirements shall include multi-load, multi-fuel (when applicable) testing. RATA testing shall be completed using the appropriate 40 CFR 60, Appendix A test methods (Methods 7E, 3A and 1-4 as necessary). RATA testing protocol shall be submitted to the Director (the Ohio EPA, Central Office) for approval prior to installation of the PEMS.

(5) The PTIO application for this/these emissions unit(s), B001, B002, J001, P007, P008, P009, P010, and P012, were evaluated based on the actual materials and the design parameters of the emissions unit's(s') exhaust system, as specified by the permittee. The AToxic 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 AReview 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) AThreshold 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) AThreshold 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/X x 5/Y = 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):

   Toxic Contaminant: Hexane

   TLV (mg/m3): 176.23

   Maximum Hourly Emission Rate (lbs/hr): 0.70

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 2.77

   MAGLC (ug/m3): 4,196

   Toxic Contaminant: Formaldehyde

   TLV (mg/m3): 368

   Maximum Hourly Emission Rate (lbs/hr): 0.40

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 1.14

MAGLC (ug/m3): 6.47

Toxic Contaminant: Acetaldehyde

TLV (mg/m3): 33.2

Maximum Hourly Emission Rate (lbs/hr): 4.5

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 85.16

MAGLC (ug/m3): 790

The permittee, has demonstrated that emissions of hexane, formaldehyde, and acetaldehyde, from emissions unit(s) B001, B002, J001, P007, P008, P009, P010, and P012,, are each 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 AToxic Air Contaminant Statute@, ORC 3704.03(F).

(6) Prior to making any physical changes to or changes in the method of operation of the emissions unit(s), that could impact the parameters or values that were used in the predicted 1-hour maximum ground-level concentration@, the permittee shall re-model the change(s) to demonstrate that the MAGLC has not been exceeded. Changes that can affect the parameters/values used in determining the 1-hour maximum ground-level concentration include, but are not limited to, the following:

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a new toxic air contaminant with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any toxic air contaminant listed in OAC rule 3745-114-01, that was modeled from the initial (or last) application; and

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

If the permittee determines that the AToxic 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 AToxic 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 PTIO prior to the change. The Director may consider any significant departure from the operations of the emissions unit, described in the permit application, as a modification that results in greater emissions than the emissions rate modeled to determine the ground level

concentration; and he/she may require the permittee to submit a permit application for the increased emissions

(7) The permittee shall collect, record, and retain the following information for each toxic evaluation conducted to determine compliance with the AToxic 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 AToxic 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 AToxic 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 AToxic 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.

e) Reporting Requirements

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

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

(3) The owner or operator of each affected facility subject to the NOX standard of 40 CFR 60.44b who seeks to demonstrate compliance with those standards through the monitoring of steam generating unit operating conditions under the provisions of 40 CFR 60.48b(g)(2) shall submit to the Administrator for approval a plan that identifies the operating conditions to be monitored under 40 CFR 60.48b(g)(2) and the records to be maintained under 40 CFR 60.49b(j). This plan shall be submitted to the Administrator for approval within 360 days of the initial startup of the affected facility. If the plan is approved, the owner or operator shall maintain records of predicted nitrogen oxide

emission rates and the monitored operating conditions, including steam generating unit load, identified in the plan. The plan shall:

a. Identify the specific operating conditions to be monitored and the relationship between these operating conditions and NOX emission rates (i.e., ng/J or lbs/MMBtu heat input). Steam generating unit operating conditions include, but are not limited to, the degree of staged combustion (i.e., the ratio of primary air to secondary and/ or tertiary air) and the level of excess air (i.e., flue gas O2 level);

b. Include the data and information that the owner or operator used to identify the relationship between NOX emission rates and these operating conditions; and

c. Identify how these operating conditions, including steam generating unit load, will be monitored under 40 CFR 60.48b(g) on an hourly basis by the owner or operator during the period of operation of the affected facility; the quality assurance procedures or practices that will be employed to ensure that the data generated by monitoring these operating conditions will be representative and accurate; and the type and format of the records of these operating conditions, including steam generating unit load, that will be maintained by the owner or operator under 40 CFR 60.49b(j).

(4) Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:

a. construction date (no later than 30 days after such date);

b. actual start-up date (within 15 days after such date); and

c. date of performance testing (if required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio EPA, Northwest District Office
Division of Air Pollution Control
347 N. Dunbridge Rd.
Bowling Green, Ohio 43402

f) Testing Requirements

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

a. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions unit will be operated, but not later than 180 days after initial startup of such emissions unit.

b. The emission testing shall be conducted to demonstrate compliance with the 0.035 lb/mmBtu emission limitation for NOx and the 5.72 lbs/hr emission limitation for CO.

c. The following test methods shall be employed to demonstrate compliance with the above emission limitations:

i. for NOx, Methods 1-4 and 7 of 40 CFR Part 60, Appendix A; and

ii. for CO, Methods 1-4 and 10 of 40 CFR Part 60, Appendix A.

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

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

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

Personnel from the Ohio EPA, NWDO 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.

A comprehensive written report of the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA, NWDO 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 Ohio EPA, NWDO.

(2) Within 60 days after achieving maximum production rate but no later than 180 days after startup of the specified emissions unit, the permittee shall conduct certification tests of the continuous NOx monitoring system, in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the Ohio EPA Central District Office shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the Ohio EPA Central District Office and one copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous NOx monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I). The letter/document of certification of the continuous NOx monitoring system, issued by the Ohio EPA, shall be maintained on file upon receipt and made available to the Ohio EPA, Central District Office upon request.

Ongoing compliance with the NOx 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 requirements of 40 CFR Part 60.

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

a. Emissions Limitations:

0.035 lb NOx/mmBtu; 21.92 TPY NO_X

Applicable Compliance Method:

Compliance with the allowable lb NOx/mmBtu emission limitation shall be demonstrated based on the results of emission testing conducted in accordance with Methods 1 - 4 and 7 of 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the lb NOx/mmBtu limitation by the maximum heat input rate of 143 mmBtu/hr and then by the maximum operating schedule of 8760 hours/year, and then by 0.0005 ton/lb. Therefore, if compliance is shown with the lb NOx/mmBtu limitation, compliance with the annual limitation shall be assumed.

b. Emissions Limitations:

5.72 lbs CO/hr; 25.10 TPY CO

Applicable Compliance Method:

Compliance with the hourly allowable CO emission limitation* shall be demonstrated based on the results of emission testing conducted in accordance with Methods 1 - 4 and 10 of 40 CFR Part 60, Appendix A.

The annual emission limitation was developed by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hours/year, and then by 0.0005 ton/lb. Therefore, if compliance is shown with the hourly limitation, compliance with the annual limitation shall be assumed.

*Developed by multiplying the emission factor of 0.04 lb of CO/mmBtu (Horizon Ethanol Facility, Jewell Iowa, July 18-19 & 24-26, 2006) by the maximum hourly heat input rate of 143 mmBtu/hr.

c. Emissions Limitations:

1.09 lbs filterable PM10/hr; 4.77 TPY filterable PM10

Applicable Compliance Method:

The hourly allowable PM10 emission limitation was developed by multiplying the emission factor of 7.6 lbs of PM10/mm scf (USEPA, AP-42 emission factor, Table

1.4-2, revised 7/98) by the maximum hourly heat input rate of 143 mmBtu/hr, and then dividing by the heating value of 1000 mmBtu/mm scf.

If required, compliance with the PM10 limitation shall be determined in accordance with the test methods and procedures specified in 40 CFR Part 51, Appendix M, Methods 201/201 A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office (NWDO).

The annual emission limitation was developed by multiplying the hourly emission limitation by the maximum operating schedule of 8760 hours/year, and then by 0.0005 ton/lb. Therefore, if compliance is shown with the hourly limitation, compliance with the annual limitation shall be assumed.

d. Emissions Limitation:

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

Applicable Compliance Method:

Compliance shall be demonstrated in accordance with OAC rule 3745-17-03(B)(1).

g) Miscellaneous Requirements

(1) None.