State of Ohio Environmental Protection Agency

Street Address: Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329 Mailing Address: Lazarus Gov. Center

RE: DRAFT PERMIT TO INSTALL MODIFICATION **CERTIFIED MAIL**
ALLEN COUNTY
Application No: 03-16271
Fac ID: 0302020341
DATE: 6/27/2006

Greater Ohio Ethanol LLC
Gregory Kruger
212 N. Elizabeth Street, Suite 203
Lima, OH

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install modification for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit modification. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit modification should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install modification may be issued in proposed of final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install modification a fee of **$ 500** will be due. Please do not submit any payment now.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA **NWDO** **Lima-Allen Regional Planning Commission** **IN**

ALLEN COUNTY

PUBLIC NOTICE
ISSUANCE OF DRAFT PERMIT TO INSTALL **03-16271** FOR AN AIR CONTAMINANT SOURCE FOR
Greater Ohio Ethanol LLC

On 6/27/2006 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Greater Ohio Ethanol LLC**, located at **1227 East Hanthorn Road, Lima**, Ohio.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 03-16271:

Modification.

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

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

DRAFT MODIFICATION OF PERMIT TO INSTALL 03-16271

Application Number:	03-16271
Facility ID:	0302020341
Permit Fee:	**To be entered upon final issuance**
Name of Facility:	Greater Ohio Ethanol LLC
Person to Contact:	Gregory Kruger
Address:	212 N. Elizabeth Street, Suite 203 Lima, OH 45801

Location of proposed air contaminant source(s) [emissions unit(s)]:
1227 East Hanthorn Road
Lima, **Ohio**

Description of proposed emissions unit(s):
Modification.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

_____
Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping 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 (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) 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. 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 quarterly, i.e., 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.)

3. Records Retention Requirements

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.

4. 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.

5. 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).

6. 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.

7. 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.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental

Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. 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. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

Pollutant	Tons Per Year
VOC (stack)	94.2
VOC (fugitive)	4.5
PE (stack)	20.8
PE (fugitive)	8.8
NOx	54.8
CO	73.5
SO2	40.0

Emissions Unit ID: **B001**

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
		OAC rule 3745-18-06
		OAC rule 3745-21-08(B)
B001 - 63 mmBtu/hr natural gas-fired boiler with propane/butane backup	OAC rule 3745-31-05(A)(3)	OAC rule 3745-23-06(B)
		40 CFR Part 60 Subpart Dc
		OAC rule 3745-17-07(A)
		OAC rule 3745-17-10(B)(1)

Applicable Emissions Limitations/Control Measures
2.27 lbs nitrogen oxides (NO_x)/hr & 10.0 tons NO_x/yr
2.33 lbs carbon monoxide (CO)/hr & 10.2 tons CO/yr
0.47 lb particulate emissions (PE)/hr & 2.1 tons PE/yr
0.38 lb Volatile Organic Compounds (VOC)/hr & 1.7 tons VOC/yr
Visible PE shall not exceed 10% opacity as a 6-minute average
See A.2.a. and A.2.c.
record keeping requirements, See C.1.
See A.2.b.
See A.2.b.
See A.2.d.
See A.2.c.
See A.2.c.

2. Additional Terms and Conditions

2.a The "Best Available Technology" (BAT) control requirements for this emissions unit has been determined to be the use of low NOx burners, flue gas recirculation and compliance with the terms and conditions of this permit. The requirements of OAC rule 3745-31-05(A) also includes compliance with 40 CFR Part 60, Subpart Dc**.**

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

2.c The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (B) and the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05 (A)(3) in this permit to install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

B. Operational Restrictions

1. The permittee shall burn only natural gas, propane, or butane in this emissions unit.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the type and quantity of fuel burned in this emissions unit.

2. For each day during which the permittee burns a fuel other than those specified in Condition B.1., the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than those specified in Condition B.1. was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. This emissions unit is subject to the applicable provisions of Subpart Dc of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

   The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

   Pursuant to 40 CFR Part 60.7, the permittee 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 Environmental Protection Agency
   DAPC - Permit Management Unit
   P. O. Box 163669
   Columbus, Ohio 43216-3669

   and

   Ohio Environmental Protection Agency
   Northwest District Office
   Division of Air Pollution Control
   347 North Dunbridge Road
   Bowling Green, Ohio 43402

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing in accordance with

the following requirements:

a. The emission testing shall be conducted on at least one of the following emissions units: B001, B002, or B003.

b. The emission testing shall be conducted within 180 days after initial startup of either emissions unit B001, B002, or B003, whichever startup occurs first.

c. The emission testing shall be conducted to verify the NOx, and CO emission factors established for these emissions units.

d. The following test methods shall be employed: for NOx, Methods 1-4 and 7 of 40 CFR Part 60, Appendix A; and 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.

e. 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.

f. 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). The "Intent to Test" notification shall include a proposal for determining the heat input rate of the unit tested.

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 the terms and conditions of this permit shall be determined in accordance with the following methods:

a. **Emission Limitation:**
2.27 lbs NO_x/hr & 10.0 tons NO_x/yr

Applicable Compliance Method:
Compliance with the hourly emission limitation shall be determined by multiplying the vendor supplied emission factor of 0.036 lb NO_x/mmBtu (as verified by the emissions testing specified above in E.1), and by the maximum heat input of 63.0 mmBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4 and 7 of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours/year and dividing by 2000 lbs/ton.

b. **Emission Limitation:**
2.33 lbs CO/hr & 10.2 tons CO/yr

Applicable Compliance Method:
Compliance with the hourly emission limitation shall be determined by multiplying the vendor supplied emission factor of 0.037 lb CO/mmBtu (as verified by the emissions testing specified above in E.1), and by the maximum heat input of 63.0 mmBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4, and 10 of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours/year and dividing by 2000 lbs/ton.

c. **Emission Limitation:**
0.47 lb PE/hr & 2.1 ton PE/yr

Applicable Compliance Method:
Compliance with the hourly emission limitation shall be determined by multiplying the emission factor (from AP-42, Section 1.4, Table 1.4-2.) of 7.6 lb PE/10^6 scf by a conversion factor of 1 scf/1020 Btu, and by the maximum heat input of 63.0 mmBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours/year and dividing by 2000 lbs/ton.

d. **Emission Limitation:**

0.38 lbs VOC/hr & 1.7 tons VOC/yr

Applicable Compliance Method:
Compliance with the hourly emission limitation shall be determined by multiplying the vendor supplied emission factor of 0.006 lb VOC/mmBtu, and by the maximum heat input of 63.0 mmBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4, and 10 of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours/year and dividing by 2000 lbs/ton.

e. **Emission Limitation:**
Visible PE shall not exceed 10% opacity as a 6-minute average

Applicable Compliance Method:
The permittee shall demonstrate compliance by testing in accordance with Method 9 of 40 CFR Part 60, Appendix A.

F. Miscellaneous Requirements

None.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
		OAC rule 3745-17-10(B)(1)
		OAC rule 3745-18-06
B002 - 63 mmBtu/hr natural gas-fired boiler with propane/butane backup	OAC rule 3745-31-05(A)(3)	OAC rule 3745-21-08(B)
		OAC rule 3745-23-06(B)
	40 CFR Part 60 Subpart Dc	
	OAC rule 3745-17-07(A)	

Applicable Emissions Limitations/Control Measures
2.27 lbs nitrogen oxides (NO_x)/hr & 10.0 tons NO_x/yr
2.33 lbs carbon monoxide (CO)/hr & 10.2 tons CO/yr
0.47 lb particulate emissions (PE)/hr & 2.1 tons PE/yr
0.38 lb Volatile Organic Compounds (VOC)/hr & 1.7 tons VOC/yr
Visible PE shall not exceed 10% opacity as a 6-minute average
See A.2.a. and A.2.c.
record keeping requirements, See C.1.
See A.2.b.
See A.2.b.
See A.2.d.
See A.2.c.
See A.2.c.

2. Additional Terms and Conditions

2.a The "Best Available Technology" (BAT) control requirements for this emissions unit has been determined to be the use of low NOx burners, flue gas recirculation and compliance with the terms and conditions of this permit. The requirements of OAC rule 3745-31-05(A) also includes compliance with 40 CFR Part 60, Subpart Dc**.**

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

2.c The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (B) and the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05 (A)(3) in this permit to install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

B. Operational Restrictions

1. The permittee shall burn only natural gas, propane, or butane in this emissions unit.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the type and quantity of fuel burned in this emissions unit.

2. For each day during which the permittee burns a fuel other than those specified in Condition B.1., the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than those specified in Condition B.1. was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. This emissions unit is subject to the applicable provisions of Subpart Dc of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

   The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

   Pursuant to 40 CFR Part 60.7, the permittee 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 Environmental Protection Agency
   DAPC - Permit Management Unit
   P. O. Box 163669
   Columbus, Ohio 43216-3669

   and

   Ohio Environmental Protection Agency
   Northwest District Office
   Division of Air Pollution Control
   347 North Dunbridge Road
   Bowling Green, Ohio 43402

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing in accordance with

the following requirements:

a. The emission testing shall be conducted on at least one of the following emissions units: B001, B002, or B003.

b. The emission testing shall be conducted within 180 days after initial startup of either emissions unit B001, B002, or B003, whichever startup occurs first.

c. The emission testing shall be conducted to verify the NOx, and CO emission factors established for these emissions units.

d. The following test methods shall be employed: for NOx, Methods 1-4 and 7 of 40 CFR Part 60, Appendix A; and 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.

e. 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.

f. 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). The "Intent to Test" notification shall include a proposal for determining the heat input rate of the unit tested.

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 the terms and conditions of this permit shall be determined in accordance with the following methods:

a. **Emission Limitation:**
2.27 lbs NO_x/hr & 10.0 tons NO_x/yr

Applicable Compliance Method:
Compliance with the hourly emission limitation shall be determined by multiplying the vendor supplied emission factor of 0.036 lb NO_x/mmBtu (as verified by the emissions testing specified above in E.1), and by the maximum heat input of 63.0 mmBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4 and 7 of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours/year and dividing by 2000 lbs/ton.

b. **Emission Limitation:**
2.33 lbs CO/hr & 10.2 tons CO/yr

Applicable Compliance Method:
Compliance with the hourly emission limitation shall be determined by multiplying the vendor supplied emission factor of 0.037 lb CO/mmBtu (as verified by the emissions testing specified above in E.1), and by the maximum heat input of 63.0 mmBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4, and 10 of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours/year and dividing by 2000 lbs/ton.

c. **Emission Limitation:**
0.47 lb PE/hr & 2.1 ton PE/yr

Applicable Compliance Method:
Compliance with the hourly emission limitation shall be determined by multiplying the emission factor (from AP-42, Section 1.4, Table 1.4-2.) of 7.6 lb PE/10^6 scf by a conversion factor of 1 scf/1020 Btu, and by the maximum heat input of 63.0 mmBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours/year and dividing by 2000 lbs/ton.

d. **Emission Limitation:**

0.38 lbs VOC/hr & 1.7 tons VOC/yr

Applicable Compliance Method:
Compliance with the hourly emission limitation shall be determined by multiplying the vendor supplied emission factor of 0.006 lb VOC/mmBtu, and by the maximum heat input of 63.0 mmBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4, and 10 of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours/year and dividing by 2000 lbs/ton.

e. **Emission Limitation:**
Visible PE shall not exceed 10% opacity as a 6-minute average

Applicable Compliance Method:
The permittee shall demonstrate compliance by testing in accordance with Method 9 of 40 CFR Part 60, Appendix A.

F. Miscellaneous Requirements

None.

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
B003 - 63 mmBtu/hr natural gas-fired boiler with propane/butane backup	OAC rule 3745-31-05(A)(3)	OAC rule 3745-21-08(B) OAC rule 3745-23-06(B)
	40 CFR Part 60 Subpart Dc	
	OAC rule 3745-17-07(A)	
	OAC rule 3745-17-10(B)(1)	
	OAC rule 3745-18-06	

Applicable Emissions Limitations/Control Measures
2.27 lbs nitrogen oxides (NO_x)/hr & 10.0 tons NO_x/yr
2.33 lbs carbon monoxide (CO)/hr & 10.2 tons CO/yr
0.47 lb particulate emissions (PE)/hr & 2.1 tons PE/yr
0.38 lb Volatile Organic Compounds (VOC)/hr & 1.7 tons VOC/yr
Visible PE shall not exceed 10% opacity as a 6-minute average
See A.2.a. and A.2.c.
record keeping requirements, See C.1.
See A.2.b.
See A.2.b.
See A.2.d.
See A.2.c.
See A.2.c.

2. Additional Terms and Conditions

2.a The "Best Available Technology" (BAT) control requirements for this emissions unit has been determined to be the use of low NOx burners, flue gas recirculation and compliance with the terms and conditions of this permit. The requirements of OAC rule 3745-31-05(A) also includes compliance with 40 CFR Part 60, Subpart Dc**.**

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

2.c The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (B) and the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05 (A)(3) in this permit to install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d The hourly emissions limitations outlined are based upon the emissions unit's potential to emit (PTE). Therefore, no monitoring, record keeping, or reporting is required to demonstrate compliance with these limitations.

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

B. Operational Restrictions

1. The permittee shall burn only natural gas, propane, or butane in this emissions unit.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the type and quantity of fuel burned in this emissions unit.

2. For each day during which the permittee burns a fuel other than those specified in Condition B.1., the permittee shall maintain a record of the type and quantity of fuel burned in this emissions unit.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than those specified in Condition B.1. was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. This emissions unit is subject to the applicable provisions of Subpart Dc of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60.

   The application and enforcement of these standards are delegated to the Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

   Pursuant to 40 CFR Part 60.7, the permittee 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 Environmental Protection Agency
   DAPC - Permit Management Unit
   P. O. Box 163669
   Columbus, Ohio 43216-3669

   and

   Ohio Environmental Protection Agency
   Northwest District Office
   Division of Air Pollution Control
   347 North Dunbridge Road
   Bowling Green, Ohio 43402

E. Testing Requirements

1. The permittee shall conduct, or have conducted, emission testing in accordance with the following requirements:

   a. The emission testing shall be conducted on at least one of the following emissions units: B001, B002, or B003.

b. The emission testing shall be conducted within 180 days after initial startup of either emissions unit B001, B002, or B003, whichever startup occurs first.

c. The emission testing shall be conducted to verify the NOx, and CO emission factors established for these emissions units.

d. The following test methods shall be employed: for NOx, Methods 1-4 and 7 of 40 CFR Part 60, Appendix A; and 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.

e. 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.

f. 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). The "Intent to Test" notification shall include a proposal for determining the heat input rate of the unit tested.

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 the terms and conditions of this permit shall be determined in accordance with the following methods:

a. **Emission Limitation:**
2.27 lbs NO_x/hr & 10.0 tons NO_x/yr

Applicable Compliance Method:
Compliance with the hourly emission limitation shall be determined by multiplying the vendor supplied emission factor of 0.036 lb NO_x/mmBtu (as verified by the emissions testing specified above in E.1), and by the maximum heat input of 63.0 mmBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4 and 7 of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours/year and dividing by 2000 lbs/ton.

b. **Emission Limitation:**
2.33 lbs CO/hr & 10.2 tons CO/yr

Applicable Compliance Method:
Compliance with the hourly emission limitation shall be determined by multiplying the vendor supplied emission factor of 0.037 lb CO/mmBtu (as verified by the emissions testing specified above in E.1), and by the maximum heat input of 63.0 mmBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4, and 10 of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours/year and dividing by 2000 lbs/ton.

c. **Emission Limitation:**
0.47 lb PE/hr & 2.1 ton PE/yr

Applicable Compliance Method:
Compliance with the hourly emission limitation shall be determined by multiplying the emission factor (from AP-42, Section 1.4, Table 1.4-2.) of 7.6 lb PE/10^6 scf by a conversion factor of 1 scf/1020 Btu, and by the maximum heat input of 63.0 mmBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 5 of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours/year and dividing by 2000 lbs/ton.

d. **Emission Limitation:**

0.38 lbs VOC/hr & 1.7 tons VOC/yr

Applicable Compliance Method:
Compliance with the hourly emission limitation shall be determined by multiplying the vendor supplied emission factor of 0.006 lb VOC/mmBtu, and by the maximum heat input of 63.0 mmBtu/hr. If required, the permittee shall demonstrate compliance by testing in accordance with Methods 1 - 4, and 10 of 40 CFR Part 60, Appendix A. Compliance with the annual emission limitation shall be determined by multiplying the hourly emission limitation by 8760 hours/year and dividing by 2000 lbs/ton.

e. **Emission Limitation:**
Visible PE shall not exceed 10% opacity as a 6-minute average

Applicable Compliance Method:
The permittee shall demonstrate compliance by testing in accordance with Method 9 of 40 CFR Part 60, Appendix A.

F. Miscellaneous Requirements

None.

Great
PTI A Emissions Unit ID: **F001**
Issued: To be entered upon final issuance

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
F001 - Paved Roadways and Parking Areas	OAC rule 3745-31-05 (A)(3)	7.0 tons of fugitive particulate emissions (PE)/yr
		no visible PE except for one minute during any 60-minute period
		best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust (see A.2.c. through A.2.h)
	OAC rule 3745-17-07 (B)	see A.2.b
	OAC rule 3745-17-08 (B)	see A.2.a

2. Additional Terms and Conditions

2.a Greater Ohio Ethanol, LLC, 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).

2.b 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).

2.c The paved roadways and parking areas that are covered by this permit and subject to the above-mentioned requirements are listed below:

paved roadways:

all paved road segments

paved parking areas:

all paved parking areas

2.d The permittee shall employ best available control measures on all paved roadways and parking areas for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permit application, the permittee has committed to treat the paved roadways and parking areas by sweeping and/or watering at sufficient treatment frequencies to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.e The needed frequencies of implementation of the control measures shall be determined by the permittee's inspections pursuant to the monitoring section of this permit. Implementation of the control measures shall not be necessary for a paved roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Implementation of any control measure may be suspended if unsafe or hazardous driving conditions would be created by its use.

2.f The permittee shall promptly remove, in such a manner as to minimize or prevent resuspension, earth and/or other material from paved streets onto which such material has been deposited by trucking or earth moving equipment or erosion by water or other means.

2.g Open-bodied vehicles transporting materials likely to become airborne shall have such materials covered at all times if the control measure is necessary for the materials being transported.

2.h Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the

best available technology requirements of OAC rule 3745-31-05.

B. Operational Restrictions

None

C. Monitoring and/or Recordkeeping Requirements

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

paved roadways and parking areas	minimum inspection frequency
all paved roadways/parking areas	once during each week of operation

2. The purpose of the inspections is to determine the need for implementing the above-mentioned control measures. The inspections shall be performed during representative, normal traffic conditions. No inspection shall be necessary for a roadway or parking area that is covered with snow and/or ice or if precipitation has occurred that is sufficient for that day to ensure compliance with the above-mentioned applicable requirements. Any required inspection that is not performed due to any of the above-identified events shall be performed as soon as such event(s) has (have) ended, except if the next required inspection is within one week.

3. The permittee may, upon receipt of written approval from the Northwest District Office, modify the above-mentioned inspection frequencies if operating experience indicates that less frequent inspections would be sufficient to ensure compliance with the above-mentioned applicable requirements.

4. The permittee shall maintain records of the following information:

   a. the date and reason any required inspection was not performed, including those inspections that were not performed due to snow and/or ice cover or precipitation;

   b. the date of each inspection where it was determined by the permittee that it was necessary to implement the control measures;

   c. the dates the control measures were implemented; and

d. on a calendar quarter basis, the total number of days the control measures were implemented and the total number of days where snow and/or ice cover or precipitation were sufficient to not require the control measures.

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

D. Reporting Requirements

1. In accordance with the General Terms and Conditions of this permit, the permittee shall submit deviation (excursion) reports that identify any of the following occurrences:

a. each day during which an inspection was not performed by the required frequency, excluding an inspection which was not performed due to an exemption for snow and/or ice cover or precipitation; and

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

E. Testing Requirements

1. Compliance with the emissions limitation(s) in Section A.1. of these terms and conditions shall be determined in accordance with the following method(s):

   a. Emission Limitation
   7.0 tons of fugitive PE/yr

   Applicable Compliance Method
   The permittee shall demonstrate compliance by applying a 80% control efficiency for use of best available control measure(s) to maximum potential uncontrolled emission rates of 35.0 tons per year for paved roadways and parking areas. Maximum potential uncontrolled emission rates for paved roadways and parking areas were calculated by multiplying an emission factor of 0.66 lb per vehicle mile traveled [AP-42, section 13.2.1.2 (12/03)] by a maximum annual vehicle miles traveled of 106,215 and dividing by 2000 lbs per ton. Therefore, provided compliance is shown with the requirements of this permit to apply best available control measures, compliance with the ton per year PE limitation will be assumed.

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

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

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
F002 - Dried Distillers Grains with Solubles (DDGS) Loadout (truck and rail)	OAC rule 3745-31-05(A)(3)	Control requirements (see A.2.a)
		0.1 ton fugitive PE per year
		visible fugitive PE shall not exceed 5% opacity, as a 3-minute average
	OAC rule 3745-17-07(B)	see A.2.b
	OAC rule 3745-17-08(B)	see A.2.c

2. Additional Terms and Conditions

2.a The "Best Available Technology" (BAT) control requirements for this emissions unit has been determined to be the use of partial enclosure and adjustable chutes for DDGS loadout. BAT also includes compliance with the terms and conditions of this permit.

2.b 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).

2.c Greater Ohio Ethanol, LLC, 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. Operational Restrictions

1. The maximum annual DDGS throughput for emissions unit F002 shall not exceed 219,000 tons.

C. Monitoring and/or Record keeping Requirements

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

2. 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 the egress points (i.e. building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log, 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:

   i. the location and color of the emissions;
   ii. whether the emissions are representative of normal operations;
   iii. if the emissions are not representative of normal operations, the cause of the abnormal emissions;
   iv. the total duration of any visible emission incident; and,
   v. any corrective actions taken to eliminate the abnormal visible emissions.

D. Reporting Requirements

1. The permittee shall submit annual reports which identify any exceedance of the annual DDGS throughput limitation, as well as the corrective actions that were taken to achieve compliance. If no deviations occurred during the calendar year, the permittee shall submit an annual report, which states that no deviations occurred during that calendar year. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

2. The permittee shall submit semiannual written reports that (a)identify all days during which any visible fugitive particulate emissions were observed from the the egress points (i.e. building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions. These reports shall be submitted to the Director (the Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

E. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitation(s)

established in the Applicable Emissions Limitation section of this permit shall be determined in accordance with the following method(s):

a. Emission Limitation:
0.1 ton fugitive particulate emissions (PE)/yr from DDGS loadout (truck and rail)

Applicable Compliance Method
The emission limitation was developed by multiplying the AP-42 emission factor of 0.003 lb PE/ton for loadout (Section 9.9.1 (3/2003)), by a maximum annual DDGS throughput of 219,000 tons, applying a control efficiency of 75% for partial enclosure and adjustable chutes, and by the conversion factor of ton/2000 lbs. Therefore provided compliance is shown with the annual throughput restriction, compliance with the annual limitation will be assumed.

b. Emission Limitation
visible fugitive PE shall not exceed 5% opacity, as a 3-minute average from the DDGS loadout (truck and rail)

Applicable Compliance Method
Compliance with the visible emission limitations 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.

F. Miscellaneous Requirements

None

Great
PTI A Emissions Unit ID: **J001**
Issued: To be entered upon final issuance

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
J001 - Ethanol and Gasoline Loading Operations	OAC rule 3745-31-05(A)(3)	Control Requirements (See A.2.a., A.2.d., and B.2.) Emissions from the Flare 2.37 lbs carbon monoxide (CO)/hr, 2.22 tons CO/yr 2.73 lbs Volatile Organic Compounds (VOC)/hr, 1.1 tons VOC/yr no visible PE except for periods not to exceed 5 minutes during any two consecutive hours
	OAC rule 3745-17-11 (B)	See A.2.b.
	OAC rule 3745-17-07 (A)	See A.2.c.
	OAC rule 3745-21-07 (E)	See A.2.a.

2. Additional Terms and Conditions

2.a The Best Available Technology (BAT) control requirements for this emissions unit has been determined to be use of a closed process vent system for all liquid product loadout operations, combusted in a flare.

2.b The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 lbs per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(I), Figure II of OAC rule 3745-17-11 does not apply. Table I of OAC rule 3745-17-11 does not apply because the process weight, as defined in OAC rule 3745-17-01(B)(14) does not include gaseous fuels used solely as fuel for the flare as a control device.

2.c This emissions unit is exempt from the visible particulate emission limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because the emissions unit is not subject to the requirements of OAC rule 3745-17-11.

2.d The requirements of this rule also include compliance with the requirements of OAC rule OAC rule 3745-21-07 (E).

B. Operational Restrictions

1. The maximum annual ethanol throughput rate for this emissions unit shall not exceed 57,000,000 gallons. The maximum annual gasoline throughput rate for this emissions unit shall not exceed 3,000,000 gallons.

2. The permittee shall comply with the following restrictions on the flare controlling this emissions unit:

   a. the closed vent system shall be operated at all times when emissions may be vented to it;

   b. the flare shall be operated with a pilot flame. The flame shall be present at all times and shall be monitored with a thermocouple or any other equivalent device to detect the presence of the pilot flame;

   c. the net heating value of the gas being combusted in the flare, as determined by the method specified in paragraph (P)(2) of rule 3745-21-10 of the Administrative Code, shall be 300 Btu/scf or greater;

   d. the flare shall be designed and operated with an actual exit velocity, as determined by the method specified in paragraph (P)(3) of rule 3745-21-10 of the Administrative Code, less that 60 feet per second; and,

e. the permittee shall ensure the flare is operated and maintained in conformance with its design.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall comply with the following monitoring and recordkeeping requirements on the flare controlling this emissions unit:

   a. the flare shall be monitored with a thermocouple or any other equivalent device to detect the presence of a pilot flame;

   b. the permittee shall maintain and operate a flow indicator which provides a record of the vent stream flow to the flare;

   c. the permittee shall maintain records of the following:

      i. flow rate to the flare, including records of all periods when the closed vent stream is diverted from the flare or when there is no flow rate;

      ii. records of all periods when the flare pilot flame is absent;

      iii. periods when the closed vent system and flare are not operated as designed;

      iv. dates of start-ups and shutdowns of the closed vent system and flare.

   d. the permittee shall collect and record a daily log or record of operating time for the closed vent system, flare and monitoring equipment.

2. The permittee shall maintain monthly records of the amount of (gallons per month and total gallons, to date for the calendar year) product throughput for each type of product.

3. The permit to install for Emission Units J001, P002, P004, P901, and T001-T005 were evaluated based on the actual materials and the design parameters of each emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved

model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Hexane
TLV (mg/m^3): 176.23
Maximum Hourly Emission Rate (lbs/hr): 0.51
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 21.51
MAGLC (ug/m^3): 4,196

Pollutant: Aliphatic Hydrocarbons
TLV (mg/m^3): 1803.0
Maximum Hourly Emission Rate (lbs/hr): 1.47
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 62.13
MAGLC (ug/m^3): 42,928

Pollutant: Pentane
TLV (mg/m^3): 1475.5
Maximum Hourly Emission Rate (lbs/hr): 0.73

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 2.6
MAGLC (ug/m^3): 35,130

Pollutant: Ethanol
TLV (mg/m^3): 1884.3
Maximum Hourly Emission Rate (lbs/hr): 11.66
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 1055.30
MAGLC (ug/m^3): 44,863

Physical changes to or changes in the method of operation of the emissions units after installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. Changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

4. The permittee shall perform daily checks, when the emissions unit is in operation for visible emissions from the flare. The presence or absence of any visible fugitive emissions shall be noted in an operations log, including the date and time the daily check was performed. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the total duration of any visible emission incident; and,
b. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit annual reports which identify any exceedances of the annual ethanol and gasoline throughput limitations, as well as the corrective actions that were taken to achieve compliance. If no deviations occurred during the calendar year, the permittee shall submit an annual report, which states that no deviations occurred during that calendar year. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

2. The permittee shall submit deviation (excursion) reports which identify exceedances of any of the following requirements for the flare:

a. exceedances of all monitored parameters;

b. periods of time when the closed vent system stream is diverted from system control devices;

c. all periods of time when the flare was not operational, including all periods of time during which the pilot flame on the flare is not functioning properly; and,

d. all periods of time when required monitoring data was not collected.

3. The permittee shall submit semiannual written reports that (a) identify all days during which any visible emissions were observed from the flare and (b) describe any corrective actions taken to eliminate the visible emissions. These reports shall be submitted to the Director (the Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

E. Testing Requirements

1. Compliance with the emission limitation(s) in section A.I. of the terms and conditions of this permit shall be determined in accordance with the following method(s):

   a. Emission Limitation:
   2.73 lbs VOC/hr

   Applicable Compliance Method:
   The emission limitation represents the potential to emit* therefore no monitoring, recordkeeping, reporting, or compliance method calculations are required.

   *The potential to emit was calculated by multiplying the controlled emission factor of 0.36 lbs VOC/thousand gallons of gasoline [gasoline represents worst-case hourly emissions and the emission factor was determined through the methodology in AP-42, section 5.2.2 (1/95) in conjunction with the information submitted by the permittee in PTI application #03-16271, Table 7-A] by the maximum hourly gasoline throughput of 7,583 gallons.

   b. Emission Limitation:
   1.1 tons VOC/yr

   Applicable Compliance Method:
   The permittee shall demonstrate compliance by multiplying the controlled emission factors of 0.02 lbs VOC/thousand gallons of ethanol and 0.36 lbs VOC/thousand gallons of gasoline [as determined through the methodology in AP-42, section 5.2.2 (1/95) in conjunction with the information submitted by the permittee in PTI application #03-16271, Table 7-A] by their maximum annual throughput of 57,000,000 gallons and 3,000,000 gallons respectively, and applying a conversion factor of ton/2000 lbs. Therefore provided compliance is shown with the annual unloading throughput for ethanol and gasoline compliance with the annual emission limitation will be assumed.

   c. Emission Limitation:
   2.37 lbs CO/hr

   Compliance Method:
   The emission limitation represents the potential to emit* therefore no monitoring, recordkeeping, reporting, or compliance method calculations are required.

*The potential to emit was calculated by multiplying a maximum heat input of 6.40 mmBtu/hr by an emission factor of 0.37 lb/mmBtu (AP-42, Table 13.5-1, 9/91).

d. Emission Limitation:
2.22 tons CO/yr.

Compliance Method:
The annual limitation was established by multiplying an average heat input of 4.00 mmBtu/hr, an emission factor 0.37 lb/mmBtu (AP-42, Table 13.5-1, 9/91), a maximum operating schedule of 3,000 hrs/yr, and dividing by 2000 lbs/ton. The maximum operating schedule of 3,000 hrs/yr is based on the annual unloading throughput of 57,000,000 gallons of ethanol and 3,000,000 gallons of gasoline. Therefore provided compliance is shown with the annual unloading throughput for ethanol and gasoline compliance with the annual emission limitation will be assumed.

e. Emission Limitation: No visible PE except not to exceed a total of 5 minutes during any 2 consecutive hours.

Applicable Compliance Method:
Compliance with the visible PE limitation shall be determined in accordance with the test methods and procedures in USEPA Method 22, which is located in 40 CFR Part 60, Appendix A, using a 2 hour observation period.

F. Miscellaneous Requirements

None

Great
PTI A Emissions Unit ID: **P001**
Issued: To be entered upon final issuance

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P001 - Hammermill	OAC rule 3745-31-05(A)(3)	Control Requirements (See A.2.a) 0.01 grains particulate emissions (PE)/dscf 3.6 tons PE/yr visible PE shall not exceed 0% opacity, as a 6-minute average
	OAC rule 3745-17-11 (B)	See A.2.b
	OAC rule 3745-17-07 (A)	See A.2.c

2. Additional Terms and Conditions

2.a Best available technology (BAT) control requirements for this emissions unit has been determined to be use of a baghouse with an outlet grain loading of 0.01 grains PE/dscf.

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

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

B. Operational Restrictions

1. The pressure drop across the baghouse controlling this emissions unit shall be maintained within the range of 2.0 to 4.0 inches of water while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse controlling this emissions unit while it is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop on a daily basis.

D. Reporting Requirements

1. In accordance with the General Terms and Conditions of this permit, the permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across baghouse controlling this emissions unit the did not comply with the allowable range specified above.

E. 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 outlet grain loading concentration for PE.

   c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations: for PE, Methods 1-5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office (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 Limitation
0.01 grains PE/dscf,

Applicable Compliance Method
Compliance with the allowable grain outlet concentration shall be demonstrated by the performance testing as described in condition E.1.

b. Emission Limitation
3.6 tons PE/yr

The permittee shall demonstrate compliance by multiplying an AP-42 emission factor of 1.2 lb PE/ton grain for grain hammermilling (Section 9.9.1 (5/98)) by a maximum annual grain throughput of 599,340 tons grain/yr*, by a conversion factor of ton/2000 lbs, and applying a 100% capture efficiency and a 99% control efficiency for use of a baghouse.

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

c. Emission Limitation
visible PE shall not exceed 0% opacity, as a 6-minute average

Applicable Compliance Method

Emissions Unit ID: **P001**

Compliance with the visible PE limitation shall be determined in accordance with the test methods and procedures in USEPA Method 9, which is located in 40 CFR Part 60, Appendix A.

F. Miscellaneous Requirements

None

Great
PTI A

Emissions Unit ID: **P002**

Issued: To be entered upon final issuance

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P002 -ethanol production operations, including fermenters, beer well & column, distillers, stripper, rectifier, evaporators, and dryers	OAC rule 3745-21-09(DD)	See A.2.d. and F.1.
	40 CFR 60 Subpart VV	See A.2.d. and F.1.
	OAC rule 3745-17-11(B)(1)	See A.2.c.
	OAC rule 3745-17-07(A)	See A.2.f.
	OAC rule 3745-23-06 (B)	See A.2.b.
	OAC rule 3745-21-08 (B)	See A.2.b.
	OAC rule 3745-18-06(E)(2)	See A.2.c
	OAC rule 3745-31-05(A)(3)	Control Requirements, see A.2.a. See A.2.e. No visible fugitive particulate emissions (PE) from any building openings (associated with this emissions unit). CO2 Scrubber Stack 13.23 lbs Volatile Organic Compounds (VOC)/hr,

58.0 tons VOC/yr

Vent Scrubber Stack
0.93 lbs VOC/hr, 4.1 tons VOC/yr

Bio Scrubber Stack (See A.2.a.iii)
1.02 lb PE/hr, 4.5 tons PE/yr

4.69 lb VOC/hr, 20.53 tons VOC/yr

4.90 lbs Nitrogen Oxides (NOx)/hr, 21.5 tons NOx/yr

8.24 lbs Carbon Monoxide (CO)/hr, 36.1 tons CO/yr

9.13 lbs Sulfur Dioxide (SO2)/hr, 40.0 tons SO2/yr

visible PE shall not exceed 10% opacity, as a 6-minute average from the bio-scrubber stack

Thermal Oxidizer Stack (See A.2.a.iii)
1.02 lbs PE/hr, 4.5 tons PE/yr

1.56 lbs VOC/hr, 6.84 tons VOC/yr

5.88 lbs NOx/hr, 25.8 tons NOx/yr

9.88 lbs CO/hr, 43.3 tons CO/yr

9.13 lbs SO2/hr, 40.0 tons SO2/yr

visible PE shall not exceed 10% opacity, as a 6-minute average from the thermal oxidizer stack

fugitive VOC emissions
4.5 tons VOC/yr
See A.2.a.v. and A.2.d.

Emissions Unit ID: **P002**

2. Additional Terms and Conditions

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

i. a high efficiency wet scrubber (CO2 scrubber) for VOC control on the fermentation process. The scrubber shall meet a minimum control efficiency of 99% for VOC emissions;

ii. a high efficiency wet scrubber (vent scrubber) for VOC control on the distillation process. The scrubber shall meet a minimum control efficiency of 99% for VOC emissions;

iii. one of the following shall be used for VOC and PE control on the drying process:

(a) a bio scrubber meeting a minimum control efficiency of 98% for PE and 85% for VOC emissions;

OR

(b) a regenerative thermal oxidizer meeting a minimum control efficiency of 98% for PE emissions and 95% for VOC emissions.

iv. firing only natural gas and the use of low NOx burners in the dryers;

v. implementation of a fugitive leak detection and repair program (LDAR) for all the miscellaneous process equipment the associated with this emissions unit.

2.b The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06 (B) and the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05 (A)(3) in this permit to install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to

Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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

2.d The permittee shall include the appropriate process equipment and regulated components in a site fugitive Leak Detection and Repair (LDAR) program. The LDAR program shall comply with the appropriate provisions (includes operational restrictions, monitoring and recordkeeping, reporting, and testing) of OAC rule 3745-21-09(DD) Leaks from process units that produce organic chemicals, and 40 CFR 60 Subpart VV (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry).

2.e The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-09(DD), and 40 CFR 60 Subpart VV.

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

B. Operational Restrictions

1. The permittee shall burn only natural gas, propane, or butane in this emissions unit.

2. The following parameters* on the CO2 scrubber controlling this emissions unit shall be continuously maintained at all times while the emissions unit is in operation:

   a. the pressure drop across the scrubber, in inches of water, shall be maintained at or above a value to be determined by design information, and or manufacturer's data;

   b. the scrubber water flow rate in gallons per minute, shall be continuously maintained at or above a value to be determined by design information, and or manufacturer's data.

3. The following parameters* on the vent scrubber controlling this emissions unit shall be continuously maintained at all times while the emissions unit is in operation:

a. the pressure drop across the scrubber, in inches of water, shall be maintained at or above a value to be determined by design information, and or manufacturer's data;

b. the scrubber water flow rate in gallons per minute, shall be continuously maintained at or above a value to be determined by design information, and or manufacturer's data.

4. The following parameters* on the Bio Scrubber (when in use for controlling this emissions unit, see A.2.a.iii) shall be continuously maintained at all times while the emissions unit is in operation:

a. the pressure drop across the scrubber, in inches of water, shall be maintained at or above a value to be determined by design information, and or manufacturer's data;

b. the scrubber water flow rate in gallons per minute, shall be continuously maintained at or above a value to be determined by design information, and or manufacturer's data;

c. the average temperature within the bio scrubber beds, in degrees Fahrenheit, shall not be less than a value to be determined by design information, and or manufacturer's data;

d. the average moisture content, in percent moisture, within the bio scrubber bed shall not be less than a value to be determined by design information, and or manufacturer's data.

5. The average combustion temperature within the regenerative thermal oxidizer (when in use for controlling this emissions unit, see A.2.a.iii) , 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.

.6. The dryers for this emissions unit shall be continuously maintained at or below a value* to be determined by design information, and or manufacturer's data.

* see condition F.3 for the establishment for these values.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall record and maintain daily records of the type and amounts of fuel combusted in this emissions unit.

2. The permittee shall properly install, operate and maintain equipment to continuously monitor the static pressure drop across the CO2 scrubber, vent scrubber, and bio scrubber (when the bio-scrubber is used for controlling the drying process, see A.2.a.iii), and the water flow rates across the CO2 scrubber, vent scrubber, and bio scrubber (when the bio-scrubber is used for controlling the drying process, see A.2.a.iii) while the emissions unit is in operation. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. The permittee shall collect and record the following information each day:

   a. the pressure drop across each scrubber, in inches of water, on a once per shift basis;

   b. the water flow rate for each scrubber, in gallons per minute, on a once per shift basis; and,

   c. a log or record of operating time for each capture (collection) system, control device, monitoring equipment, and the associated emissions unit.

3. When the bio-scrubber is used for controlling the drying process (see A.2.a.iii), the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the average temperature within the bio scrubber beds when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modification deemed necessary by the permittee. The permittee shall collect and record the following information for each day:

   a. all time periods during which the average temperature within the bio scrubber beds, when the emissions unit is in operation, is less than the minimum temperature requirement in section B.4.c;

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

4. When the bio-scrubber is used for controlling the drying process (see A.2.a.iii), the permittee shall properly install, operate and maintain equipment to continuously monitor the average moisture content within the bio scrubber bed. The monitoring devices and any recorders shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals. The permittee shall collect and record the average moisture content, in percent moisture, on a once per shift basis.

5. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the temperature within the dryers when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modification deemed necessary by the permittee. The permittee shall collect and record all time periods during which the maximum temperature within the dryers, when the emissions unit is in operation, is more than the maximum temperature requirement in section B.5.

6. When the regenerative thermal oxidizer is used for controlling the drying process (see A.2.a.iii), the permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the combustion temperature within the regenerative 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 modification 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 regenerative 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.

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

a. the location and color of the emissions;

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

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

8. The permit to install for Emission Units J001, P002, P004, P903, and T001-T004 were evaluated based on the actual materials and the design parameters of each emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Hexane
TLV (mg/m^3): 176.23
Maximum Hourly Emission Rate (lbs/hr): 0.54
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 17.12
MAGLC (ug/m^3): 4,196

Pollutant: Aliphatic Hydrocarbons

TLV (mg/m^3): 1803.0
Maximum Hourly Emission Rate (lbs/hr): 1.57
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 49.45
MAGLC (ug/m^3): 42,928

Pollutant: Pentane
TLV (mg/m^3): 1475.5
Maximum Hourly Emission Rate (lbs/hr): 0.79
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 24.72
MAGLC (ug/m^3): 35,130

Pollutant: Ethanol
TLV (mg/m^3): 1884.3
Maximum Hourly Emission Rate (lbs/hr): 17.15
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 1101.10
MAGLC (ug/m^3): 44,863

Pollutant: Acetaldehyde
TLV (mg/m^3): 45.04
Maximum Hourly Emission Rate (lbs/hr): 0.93
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 157.68
MAGLC (ug/m^3): 1,072

Physical changes to or changes in the method of operation of the emissions units after installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. Changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was

proposed in the application and modeled; and

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas, propane, or butane was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

2. The permittee shall submit deviation (excursion) reports, which identify all time periods during which the static pressure drop and water flow rate for the CO2 scrubber, when the emissions unit is in operation, does not comply with the restrictions specified in section B.2.

3. The permittee shall submit deviation (excursion) reports, which identify all time periods

during which the static pressure drop and water flow rate for the vent scrubber, when the emissions unit is in operation, does not comply with the restrictions specified in section B.3.

4. The permittee shall submit deviation (excursion) reports, which identify all time periods during which the static pressure drop, water flow rate, average temperature, and moisture content within the bio scrubber beds, when the emissions unit is in operation, does not comply with the restrictions specified in section B.4.

5. The permittee shall submit deviation (excursion) reports, which identify all time periods during which the emissions unit is in operation, does not comply with the restriction specified in section B.5.

6. The permittee shall submit semiannual written reports that (a) identify all days during which any visible fugitive particulate emissions were observed from the egress points (i.e., building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to minimize or eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Ohio EPA, Northwest District Office (NWDO) by January 31 and July 31 of each year and shall cover the previous 6-month period.

7. The permittee shall submit information specifying the parameter values identified in sections B.2., B.3., and B.4. The information shall be submitted in association with the "Intent to Test" notification specified in section E.1.f.

8. The permittee shall submit deviation (excursion) reports, which identify all 3-hour blocks of time during which the average combustion temperature within the regenerative thermal oxidizer does not comply with the temperature limitation specified above.

9. Except as otherwise specified, deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.

E. 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 VOC mass emissions limitations from the CO2 scrubber and vent scrubber controlling this emissions unit, and the for the NOx, CO, VOC, SO_2, and PE mass emissions limitations from the bio scrubber or the thermal oxidizer (see E.1.f & F.4) controlling this emissions unit. Emission testing shall also be conducted to demonstrate compliance with the control efficiency limitation for VOCs from the CO2 and vent scrubber controlling this emissions unit, and for the control efficiency limitation for PE and VOCs from the bio scrubber or thermal oxidizer controlling this emissions unit.

c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations: for PE, Methods 1-5 of 40 CFR Part 60, Appendix A (including the back half of the sampling train); for NOx, Methods 1-4 and 7 of 40 CFR Part 60, Appendix A; for CO, Methods 1-4 and 10 of 40 CFR Part 60, Appendix A for SO2, Methods 1-4 and 6 of 40 CFR Part 60, Appendix A and for VOC Methods 1-4 and 18, 25 or 25a of 40 CFR Part 60, Appendix A. The "Midwest Scaling Protocol for the Measurement of VOC Mass Emissions", Dated 8/04 shall be used in conjunction with the test methods and procedures specified in Methods 18, 25, or 25A of 40 CFR Part 60, Appendix A for determining VOC mass emissions. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, NWDO. The test method(s) which must be employed to demonstrate compliance with the control efficiencies are specified below.

d. The control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in Methods 18, 25, or 25A of 40 CFR Part 60, Appendix A for VOC emissions. 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."

e. 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.

f. 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). The "Intent to Test" notification shall also indicate the control device (bio-scrubber or thermal oxidizer) on the drying operation that will be employed and tested (see F.4). 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 Limitation:

CO2 Scrubber Stack; 13.23 lbs VOC/hr, 58.0 tons VOC/yr

Vent Scrubber Stack: 0.93 lbs VOC/hr, 4.1 tons VOC/yr

Applicable Compliance Method: Compliance with the hourly mass emission limitations for VOC shall be demonstrated by the performance testing as described in condition E.1.

The annual emission limitation for VOC was developed by multiplying the respective hourly emission limitation by maximum operating schedule of 8760

hours/year, and dividing by 2000 lbs/ton. Therefore, if compliance is shown with the hourly limitation, compliance with the annual limitation will be assumed.

b. Emission Limitation:

Bio Scrubber Stack:
1.02 lb PE/hr, 4.5 tons PE/yr
4.69 lb VOC/hr, 20.53 tons VOC/yr
4.90 lbs NOx/hr, 21.5 tons NOx/yr
8.24 lbs CO/hr, 36.1 tons CO/yr
9.13 lbs SO2/hr, 40.0 tons SO2/yr

Thermal Oxidizer Stack:
1.02 lb PE/hr, 4.5 tons PE/yr
1.56 lb VOC/hr, 6.84 tons VOC/yr
5.88 lbs NOx/hr, 25.8 tons NOx/yr
9.88 lbs CO/hr, 43.3 tons CO/yr
9.13 lbs SO2/hr, 40.0 tons SO2/yr

Applicable Compliance Method:
Compliance with the hourly mass emission limitations shall be demonstrated by the performance testing required in condition E.1. The annual emission limitations were developed by multiplying the respective hourly emission limitation by the maximum operating schedule of 8760 hours/year, and then dividing by 2000 lbs/ton. Therefore, if compliance is shown with the hourly limitation, compliance with the annual limitation will be assumed.

c. Emission Limitation:
4.5 tons fugitive VOC/yr

Applicable Compliance Method:
The annual emission limitation was developed by multiplying the respective emission factors and control efficiencies of all the proposed equipment subject to the LDAR program, as submitted by the permittee in PTI application #03-16271, Table 4-E. Therefore, if compliance is shown with the LDAR program as described in condition A.2.d. and F.1., compliance with the annual limitation will be assumed.

d. Emission Limitation:
visible PE shall not exceed 10% opacity, as a 6-minute average (bio scrubber or thermal oxidizer stack)

Applicable Compliance Method:
Compliance with the visible PE limitations shall be determined in accordance with the test methods and procedures in USEPA Method 9, which is located in 40 CFR Part 60, Appendix A.

e. Emission Limitation: No visible fugitive PE from any building openings (associated with this emissions unit).

Applicable Compliance Method:
Compliance with the visible PE limitation shall be determined in accordance with the test methods and procedures in USEPA Method 22, which is located in 40 CFR Part 60, Appendix A.

F. Miscellaneous Requirements

1. Within 180 days of the start up of this emissions unit, the permittee shall develop an onsite fugitive LDAR program. At a minimum, the program shall include all the appropriate process equipment and regulated components that are subject to this program and clearly identify how the permittee will comply with the appropriate provisions (includes operational restrictions, monitoring and recordkeeping, reporting, and testing) of OAC rule 3745-21-09 (DD), and 40 CFR 60 Subpart VV.

2. Within 180 days of the start up of this emissions unit, the permittee shall develop and implement a written startup, shutdown, and malfunction (SSM) plan. This plan must be maintained on site and is subject to review and approval of the OEPA, Northwest District Office.

3. Within 180 days of the start up of this emissions unit, the permittee shall develop, implement, and propose parameters for operational restrictions specified in conditions B.2,3,4,and 5. This proposal must be submitted prior to the performance testing on this emissions unit and is subject to review and approval of the OEPA, Northwest District Office.

4. If at any time, the permittee elects to change the control option on the drying process from the device which was tested as required in E.1.b, emissions testing on the alternate control device shall be conducted within 60 days after the change. Emissions testing on the alternate control device shall be performed in accordance with the requirements in E.1.b through E.1.f above.

Great
PTI A Emissions Unit ID: **P003**
Issued: To be entered upon final issuance

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P003 - Cooling Tower	OAC rule 3745-31-05 (A)(3)	See A.2.a. and A.2.b. 1.44 lbs Particulate Emissions (PE)/hr & 6.3 tons PE/yr
	OAC rule 3745-17-11 (B)(4)	See A.2.c.
	OAC rule 3745-17-07 (A)(1)	visible particulate emissions shall not exceed 20 percent opacity as a six-minute average, except as provided by rule

2. Additional Terms and Conditions

2.a The Best Available Technology (BAT) control requirements for this emissions unit has been determined to be use of high efficiency drift eliminators.

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

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

B. Operational Restrictions

1. The permittee shall not exceed an average annual total dissolved solids content of

2,500 parts per million (ppm) in this emissions unit.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall perform the following monitoring requirements for emissions unit P003 on a monthly basis:

   a. test and record the total dissolved solids content, in ppm;

   b. determine the average dissolved solids content, in ppm on an annual basis.

D. Reporting Requirements

1. In accordance with the General Terms and Conditions of this permit, the permittee shall submit deviation (excursion) reports in that identify any exceedances of the average total dissolved solids content.

E. Testing Requirements

1. Compliance with the allowable emission limitations in this permit shall be determined according to the following methods:

   a. Emission Limitation
   1.44 lbs PE/hr & 6.3 tons PE/yr

   Applicable Compliance Method
   The lbs/hr emission limitation shall was established by applying the maximum drift loss factor 0.005 percent to the maximum average total dissolved solids content of 2,500 ppm and a maximum flow rate of 1,080,000 gallons per hour for the cooling water. Therefore, provided the permittee demonstrates compliance with the average dissolved solids content, compliance with the hourly emission limitation will be assumed. If required, the permittee shall submit a testing proposal which will demonstrate that the maximum drift loss does not exceed 0.005 percent. Compliance with the annual emission limitation shall be demonstrated by the multiplying the hourly emission rate by the maximum operating schedule of 8760 hrs/yr, and by the conversion factor of 2000 lbs/ton.

   b. Emission Limitation
   Visible PE shall not exceed 20 percent opacity as a six-minute average, except as provided by rule

   Applicable Compliance Method

Compliance with the visible emissions limitation shall be determined by OAC rule 3745-17-03(B)(1).

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	OAC rule 3745-17-07 (B)
P901 - Grain Receiving (truck and rail)	OAC rule 3745-31-05(A)(3)	
	40 CFR Part 60 Subpart DD	
	OAC rule 3745-17-08(A)	
	OAC rule 3745-17-11 (B)	
	OAC rule 3745-17-07 (A)	

Applicable Emissions Limitations/Control Measures
Control Requirements, see A.2.a.
See A.2.f.
0.9 ton particulate emissions (PE)/yr (stack)
1.1 ton PE/yr (fugitive)
0.023g PE/dscm (0.01 grains PE/dscf) from stack
visible stack PE shall not exceed 0% opacity, as a 6-minute average
visible fugitive PE shall not exceed 5% opacity, as a 6-minute average
See A.2.d.
See A.2.b.
See A.2.c.
See A.2.c.
See A.2.e.

2. Additional Terms and Conditions

2.a The "Best Available Technology" (BAT) control requirements for this emissions unit has been determined to be the use of a two-sided enclosure with receiving pits, aspirated to a baghouse.

2.b Greater Ohio Ethanol LLC 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.

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

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

2.e 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).

2.f The requirements of this rule also include compliance with the requirements of 40 CFR Part 60 Subpart DD.

B. Operational Restrictions

1. The maximum annual grain throughput rate for this emissions unit shall not exceed 599,340 tons.

2. The pressure drop across the baghouse controlling this emissions unit shall be maintained within the range of 2.0 to 4.0 inches of water while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

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

2. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse controlling this emissions unit while it is in

operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop on a daily basis.

3. 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 the egress points (i.e. building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log, 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.

D. Reporting Requirements

1. The permittee shall submit annual reports which identify any exceedances of the annual grain throughput limitation, as well as the corrective actions that were taken to achieve compliance. If no deviations occurred during the calendar year, the permittee shall submit an annual report, which states that no deviations occurred during that calendar year. These reports shall be submitted by January 31 of each year and shall cover the previous calendar year.

2. In accordance with the General Terms and Conditions of this permit, the permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse controlling this emissions unit the did not comply with the allowable range specified above.

3. The permittee shall submit semiannual written reports that (a)identify all days during which any visible fugitive particulate emissions were observed from the the egress points (i.e. building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions. These reports shall be submitted to the Director (the Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

4. Pursuant to the New Source Performance Standards (NSPS), the source owner/operator is hereby advised of the requirements 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 Environmental Protection Agency
   DAPC - Permit Management Unit
   Lazarus Government Center
   P.O. Box 1049
   Columbus, OH 43216-1049

   and

   Ohio EPA, Northwest District Office
   347 North Dunbridge Road
   Bowling Green, OH 43402

E. 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 allowable maximum outlet concentration and opacity requirements for PE.

   c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations: for PE, Methods 1-5 of 40 CFR Part 60, Appendix A, and for Opacity, Method 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office (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 Limitation
0.023g PE/dscm (0.01 grains PE/dscf) from stack

Applicable Compliance Method
Compliance shall be demonstrated by the performance testing as described in condition E.1.

b. Emission Limitation
0.9 ton PE/yr (stack)

Applicable Compliance Method
The permittee shall demonstrate compliance by multiplying an AP-42 emission factor of 0.035 lb PE/ton grain for grain receiving (Section 9.9.1 (5/98)) by a

maximum annual grain throughput of 599,340 tons grain/yr, by a conversion factor of ton/2000 lbs, and applying a 90% capture efficiency and a 90% control efficiency for use of a two sided enclosure with aspiration to a baghouse.

c. Emission Limitation
1.1 ton PE/yr (fugitive)

Applicable Compliance Method
The permittee shall demonstrate compliance by multiplying an AP-42 emission factor of 0.035 lb PE/ton grain for grain receiving (Section 9.9.1 (5/98)) by a maximum annual grain throughput of 599,340 tons grain/yr, by a conversion factor of ton/2000 lbs, and applying a 90% capture efficiency for use of a two sided enclosure with aspiration to a baghouse.

d. Emission Limitation
visible stack PE shall not exceed 0% opacity, as a 6-minute average

visible fugitive PE shall not exceed 5% opacity, as a 6-minute average

Applicable Compliance Method
Compliance with the allowable opacity limitations shall be demonstrated by the performance testing as described in condition E.1

F. Miscellaneous Requirements

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

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
P902 - Grain handling and storage	OAC rule 3745-31-05(A)(3)	OAC rule 3745-17-07 (A) OAC rule 3745-17-07 (B)
	40 CFR Part 60 Subpart DD	
	OAC rule 3745-17-08(A)	
	OAC rule 3745-17-11 (B)	

Applicable Emissions Limitations/Control Measures	
Control Requirements (See A.2.a)	
See A.2.f.	
0.4 ton particulate emissions (PE)/yr (stack)	
0.2 ton PE/yr (fugitive)	
0.023g PE/dscm (0.01 grains PE/dscf) from stack	
visible stack PE shall not exceed 0% opacity, as a 6-minute average	
visible fugitive PE shall not exceed 0% opacity, as a 6-minute average from any grain handling operation	
See A.2.d.	
See A.2.b	
See A.2.c	
See A.2.c	
See A.2.e	

2. Additional Terms and Conditions

2.a The "Best Available Technology" (BAT) control requirements for this emissions unit has been determined to be the use of a total enclosure, aspirated to a baghouse.

2.b Greater Ohio Ethanol LLC 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.

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

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

2.e 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).

2.f The requirements of this rule also include compliance with the requirements of 40 CFR Part 60 Subpart DD.

B. Operational Restrictions

1. The pressure drop across the baghouse controlling this emissions unit shall be maintained within the range of 2.0 to 4.0 inches of water while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the baghouse controlling this emissions unit while it is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop on a daily basis.

2. 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 the egress points (i.e. building windows, doors, roof monitors, etc.) serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log,

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:

i. the location and color of the emissions;
ii. the total duration of any visible emission incident; and,
iii. any corrective actions taken to eliminate the abnormal visible emissions.

D. Reporting Requirements

1. In accordance with the General Terms and Conditions of this permit, the permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the baghouse controlling this emissions unit the did not comply with the allowable range specified above.

2. The permittee shall submit semiannual written reports that (a)identify all days during which any visible fugitive particulate emissions were observed from the the egress points (i.e. building windows, doors, roof monitors, etc.) serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible fugitive particulate emissions. These reports shall be submitted to the Director (the Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. Pursuant to the New Source Performance Standards (NSPS), the source owner/operator is hereby advised of the requirements 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 Environmental Protection Agency
   DAPC - Permit Management Unit
   Lazarus Government Center
   P.O. Box 1049
   Columbus, OH 43216-1049

   and

   Ohio EPA, Northwest District Office

E. 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 allowable maximum outlet concentration and opacity requirements for PE.

c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations: for PE, Methods 1-5 of 40 CFR Part 60, Appendix A, and for Opacity, Method 9 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office (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. <u>Emission Limitation</u>
0.023g PE/dscm (0.01 grains PE/dscf) from stack

<u>Applicable Compliance Method</u>

Compliance shall be demonstrated by the performance testing as described in condition E.1.

b. Emission Limitation
0.4 ton PE/yr (stack)

Applicable Compliance Method
The permittee shall demonstrate compliance by multiplying an AP-42 emission factor of 0.061 lbs PE/ton grain for grain handling and 0.025 lbs PE/ton for grain storage and surge bins (Section 9.9.1 (5/98)) by a maximum annual grain throughput of 599,340 tons* grain/yr, by a conversion factor of ton/2000 lbs, and applying a 99% capture efficiency and a 98.5% control efficiency for use of total enclosure with aspiration to a baghouse.

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

c. Emission Limitation
0.2 ton PE/yr (fugitive)

Applicable Compliance Method
The permittee shall demonstrate compliance by multiplying an AP-42 emission factor of 0.061 lbs PE/ton grain for grain handling and 0.025 lbs PE/ton for grain storage and surge bins (Section 9.9.1 (5/98)) by a maximum annual grain throughput of 599,340 tons grain/yr, by a conversion factor of ton/2000 lbs, and applying a 99% capture efficiency for use of total enclosure with aspiration to a baghouse.

d. Emission Limitation
visible stack PE shall not exceed 0% opacity, as a 6-minute average, ,

visible fugitive PE shall not exceed 0% opacity, as a 6-minute average, from any grain handling operation

Applicable Compliance Method
Compliance with the allowable opacity limitations shall be demonstrated by the performance testing as described in condition E.1

F. Miscellaneous Requirements

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

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
P903 - Dried Distillers Grains with Solubles (DDGS) handling and cooling	OAC rule 3745-31-05(A)(3)	Control Requirements (See A.2.a) 0.17 lbs particulate emissions (PE)/hr, 0.2 tons (PE)/yr (stack) 0.4 ton PE/yr (fugitive) visible PE shall not exceed 0% opacity, as a 6-minute average from cyclone visible fugitive PE from the total enclosure shall not exceed 5% opacity, as a 3-minute average 2.6 lbs Volatile Organic Compounds (VOC)/hr, 3.8 tons VOC/yr
	OAC rule 3745-17-08(A)	See A.2.b
	OAC rule 3745-17-11 (B)	See A.2.c
	OAC rule 3745-17-07 (A)	See A.2.d
	OAC rule 3745-17-07 (B)	See A.2.e

2. Additional Terms and Conditions

2.a The Best Available Technology (BAT) control requirements for this emissions unit has been determined to be the use of a cyclone in combination with the use of a total enclosure.

2.b Greater Ohio Ethanol 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.

2.c The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11 (A)(2)(a)(ii), this emissions unit is exempt from the requirements of OAC rule 3745-17-11 (B)(2).

2.d This emissions unit is exempt from the visible PE limitations specified in OAC rule 3745-17-07 (A) pursuant to OAC rule 3745-17-07 (A)(3)(h) because OAC rule 3745-17-11 is not applicable.

2.e 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).

B. Operational Restrictions

1. The pressure drop across the cyclone controlling this emissions unit shall be maintained within the range of 2.0 to 4.0 inches of water while the emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop across the cyclone controlling this emissions unit while it is in operation. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop on a daily basis.

2. 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 the egress points (i.e. building windows, doors, roof monitors, etc.) serving this emissions unit. The

presence or absence of any visible emissions shall be noted in an operations log, 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.

3. The permit to install for Emission Units J001, P002, P004, P903, and T001-T005 were evaluated based on the actual materials and the design parameters of each emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Hexane
TLV (mg/m^3): 176.23
Maximum Hourly Emission Rate (lbs/hr): 0.51
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 21.51
MAGLC (ug/m^3): 4,196

Pollutant: Aliphatic Hydrocarbons
TLV (mg/m^3): 1803.0
Maximum Hourly Emission Rate (lbs/hr): 1.47
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 62.13
MAGLC (ug/m^3): 42,928

Pollutant: Pentane
TLV (mg/m^3): 1475.5
Maximum Hourly Emission Rate (lbs/hr): 0.73
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 2.6
MAGLC (ug/m^3): 35,130

Pollutant: Ethanol

TLV (mg/m^3): 1884.3
Maximum Hourly Emission Rate (lbs/hr): 11.66
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 1055.30
MAGLC (ug/m^3): 44,863

Physical changes to or changes in the method of operation of the emissions units after installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. Changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. In accordance with the General Terms and Conditions of this permit, the permittee shall submit pressure drop deviation (excursion) reports that identify that all periods of time during which the pressure drop across the cyclone controlling this emissions unit the did not comply with the allowable range specified above.

2. The permittee shall submit semiannual written reports that (a)identify all days during which any visible fugitive particulate emissions were observed from the the egress points (i.e. building windows, doors, roof monitors, etc.) serving this emissions unit and

(b) describe any corrective actions taken to eliminate the abnormal visible fugitive particulate emissions. These reports shall be submitted to the Director (the Northwest District Office) by January 31 and July 31 of each year and shall cover the previous 6-month period.

E. 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 allowable mass emission limitation for VOC.

   c. The following test methods shall be employed to demonstrate compliance with the above emissions limitations: for VOC, Methods 1-4 and 18, 25, or 25a, of 40 CFR Part 60, Appendix A . The "Midwest Scaling Protocol for the Measurement of VOC Mass Emissions", Dated 8/04 shall be used in conjunction with the test methods and procedures specified in Methods 18, 25, or 25A of 40 CFR Part 60, Appendix A for determining VOC mass emissions. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA, Northwest District Office (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 Limitation
   0.17 lbs PE/hr

Applicable Compliance Method
The permittee shall demonstrate compliance by multiplying an AP-42 emission factor of 0.220 lbs PE/ton DDGS (Section 9.9.1 (5/98)) by a maximum hourly DDGS throughput of 75 tons DDGS/hr, and applying a 99% control efficiency of a cyclone. If required, compliance with the hourly PE limitation shall be determined in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

b. Emission Limitation
0.2 ton PE/yr (stack)

Applicable Compliance Method
The permittee shall demonstrate compliance by multiplying an AP-42 emission factor of 0.220 lbs PE/ton DDGS (Section 9.9.1 (5/98)) by a maximum annual DDGS throughput of 219,000 tons* DDGS/yr, by a conversion factor of ton/2000 lbs, and applying a 99% control efficiency of a cyclone. Therefore provided compliance is shown with the annual throughput restriction, compliance with the annual limitation will be assumed.

c. Emission Limitation
0.4 tons PE/yr(fugitive)

Applicable Compliance Method
The emission limitation was developed by multiplying the AP-42 emission factors of 0.0083 lb PE/ton for stockpile loading and 0.0610 lb PE/ton for handling (Section 9.9.1 (3/2003)), by a maximum annual DDGS throughput of 219,000 tons DDGS/yr*, applying a control efficiency of 95% for total enclosure, and by the conversion factor of ton/2000 lbs. Therefore provided compliance is shown with the annual throughput restriction, compliance with the annual limitation will be assumed.

d. Emission Limitation
visible fugitive PE from the total enclosure shall not exceed 5% opacity, as a 3-minute average

Applicable Compliance Method
If required, compliance with the visible fugitive 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)(4)(a) through (B)(4)(d) of OAC rule 3745-17-03.

e. Emission limitation:
visible PE shall not exceed 0% opacity, as a 6-minute average from cyclone
Applicable Compliance Method
Compliance with the visible fugitive PE limitation shall be determined in accordance with the test methods and procedures in USEPA Method 9, which is located in 40 CFR Part 60, Appendix A.

Emission Limitation:
2.6 lbs VOC/hr

Applicable Compliance Method
Compliance shall be demonstrated by the performance testing as described in condition E.1.

g. Emission Limitation:
3.8 tons VOC/yr

Applicable Compliance Method
The emission limitation was developed by multiplying the permittee supplied emission factor of 0.034 lb VOC/ton of material throughput, by a maximum annual DDGS throughput of 219,000 tons DDGS/yr*, and by the conversion factor of ton/2000 lbs. Therefore provided compliance is shown with the annual throughput restriction, compliance with the annual limitation will be assumed.

* This limit is established as the maximum annual throughput in emissions unit F002, DDGS loadout, and therefore effectively restricts throughput in this emissions unit as well.

F. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T001 - 95,755 gallon above ground internal floating roof storage tank (Ethanol Day Tank No.1)	OAC rule 3745-31-05(A)(3)	0.2 tons Volatile Organic Compounds (VOC)/yr See A.2.a through A.2.m.
	OAC rule 3745-21-09(L)	See A.2.o
	40 CFR, Part 60, Subpart Kb	See A.2.n.

2. Additional Terms and Conditions

2.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.

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

2.c The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.d All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not

necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and are to be closed at

all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

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

2.o OAC rule 3745-21-09(L) is not applicable because this tank does not store petroleum liquids as defined in OAC rule 3745-21-01 (E)(13).

B. Operational Restrictions

1. The permittee shall not exceed an annual material throughput rate of 34,000,000 gallons.

2. The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 0.754 pound per square inch absolute.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of the following information:

   a. The types of petroleum liquids stored in the tank.

   b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 0.754 pound per square inch absolute. Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

      i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For refined petroleum products the vapor pressure may be obtained by the following:

(a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Ohio EPA, Northwest District Office (NWDO) specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(a) May be obtained from standard reference texts, or

(b) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(c) Measured by an appropriate method approved by the OEPA, NWDO; or

(d) Calculated by an appropriate method approved by the OEPA, NWDO.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the

VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the OEPA, NWDO in the inspection report required in D.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.2.f.ii.:

   a. visually inspect the vessel as specified in C.5. at least every 5 years; or

   b. visually inspect the vessel as specified in C.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in C.3 and C.4.b and at intervals no greater than 5 years in the case of vessels specified in C.4.a.

6. The owner or operator shall keep copies of all reports and records required in D.2, D.3, and D.4, for at least 2 years.

7. Keep a record of each inspection performed as required by C.2, C.3, C.4, and C.5. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The owner or operator shall keep copies of all records required by C.2 through C.8., for at least 2 years.

9. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

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

11. The permit to install for Emission Units J001, P002, P004, P903, and T001-T005 were evaluated based on the actual materials and the design parameters of each emissions

unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved

model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Hexane
TLV (mg/m^3): 176.23
Maximum Hourly Emission Rate (lbs/hr): 0.51
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 21.51
MAGLC (ug/m^3): 4,196

Pollutant: Aliphatic Hydrocarbons
TLV (mg/m^3): 1803.0
Maximum Hourly Emission Rate (lbs/hr): 1.47
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 62.13
MAGLC (ug/m^3): 42,928

Pollutant: Pentane
TLV (mg/m^3): 1475.5
Maximum Hourly Emission Rate (lbs/hr): 0.73
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 2.6
MAGLC (ug/m^3): 35,130

Pollutant: Ethanol
TLV (mg/m^3): 1884.3
Maximum Hourly Emission Rate (lbs/hr): 11.66
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 1055.30
MAGLC (ug/m^3): 44,863

Physical changes to or changes in the method of operation of the emissions units after installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. Changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit

Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. Notify the OEPA, NWDO in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by C.2 and C.5 to afford the OEPA, NWDO the opportunity to have an observer present. If the inspection required by C.5 is not planned and the owner or operator could not have known about the inspection 30

days in advance or refilling the tank, the owner or operator shall notify the OEPA, NWDO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the OEPA, NWDO at least 7 days prior to the refilling.

2. Furnish the OEPA, NWDO with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.2.e through A.2.m and C.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in C.3 are detected during the annual visual inspection required by C.3, a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by C.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in C.4.b, a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.2.e through A.2.m or C.4 and list each repair made.

5. If the permittee placed, stored, or held in this emissions unit any petroleum liquid with a true vapor pressure which was greater than 0.754 pounds per square inch absolute, the permittee shall notify the Ohio EPA Northwest District Office within 30 days of becoming aware of the occurrence.

6. The permittee shall submit annual deviation (excursion) reports that identify any and all exceedances of the annual material throughput limitation, as well as the corrective actions taken to achieve compliance. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred during that year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

1. Compliance with the emission limitations in section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

Emission Limitation: 0.2 tons VOC/yr

Applicable Compliance Method: The permittee shall demonstrate compliance by rim seal loss, withdraw loss and deck fitting loss calculations as determined by U.S. EPA Tanks 4.0 program with a maximum annual material throughput of 34,000,000 gallons.

F. Miscellaneous Requirements

None

Great
PTI A Emissions Unit ID: **T002**
Issued: To be entered upon final issuance

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T002 -95,755 gallon above ground internal floating roof storage tank (Ethanol Day Tank No. 2)	OAC rule 3745-31-05(A)(3)	0.2 tons Volatile Organic Compounds (VOC)/yr See A.2.a through A.2.m.
	OAC rule 3745-21-09(L)	See A.2.o
	40 CFR, Part 60, Subpart Kb	See A.2.n.

2. Additional Terms and Conditions

2.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.

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

2.c The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.d All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is

completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

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

2.o OAC rule 3745-21-09(L) is not applicable because this tank does not store petroleum liquids as defined in OAC rule 3745-21-01 (E)(13).

B. Operational Restrictions

1. The permittee shall not exceed an annual material throughput rate of 34,000,000 gallons.

2. The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 0.754 pound per square inch absolute.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of the following information:

   a. The types of petroleum liquids stored in the tank.

   b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 0.754 pound per square inch absolute. Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

      i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For

vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For refined petroleum products the vapor pressure may be obtained by the following:

(a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Ohio EPA, Northwest District Office (NWDO) specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(a) May be obtained from standard reference texts, or

(b) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(c) Measured by an appropriate method approved by the OEPA, NWDO; or

(d) Calculated by an appropriate method approved by the OEPA, NWDO.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day

extension may be requested from the OEPA, NWDO in the inspection report required in D.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.2.f.ii.:

   a. visually inspect the vessel as specified in C.5. at least every 5 years; or

   b. visually inspect the vessel as specified in C.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in C.3 and C.4.b and at intervals no greater than 5 years in the case of vessels specified in C.4.a.

6. The owner or operator shall keep copies of all reports and records required in D.2, D.3, and D.4, for at least 2 years.

7. Keep a record of each inspection performed as required by C.2, C.3, C.4, and C.5. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The owner or operator shall keep copies of all records required by C.2 through C.8., for at least 2 years.

9. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

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

11. The permit to install for Emission Units J001, P002, P004, P903, and T001-T005 were evaluated based on the actual materials and the design parameters of each emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Hexane
TLV (mg/m^3): 176.23
Maximum Hourly Emission Rate (lbs/hr): 0.51
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 21.51
MAGLC (ug/m^3): 4,196

Pollutant: Aliphatic Hydrocarbons
TLV (mg/m^3): 1803.0
Maximum Hourly Emission Rate (lbs/hr): 1.47
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 62.13
MAGLC (ug/m^3): 42,928

Pollutant: Pentane
TLV (mg/m^3): 1475.5
Maximum Hourly Emission Rate (lbs/hr): 0.73
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 2.6
MAGLC (ug/m^3): 35,130

Pollutant: Ethanol
TLV (mg/m^3): 1884.3
Maximum Hourly Emission Rate (lbs/hr): 11.66
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 1055.30
MAGLC (ug/m^3): 44,863

Emissions Unit ID: **T002**

Physical changes to or changes in the method of operation of the emissions units after installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. Changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. Notify the OEPA, NWDO in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by C.2 and C.5 to afford the OEPA, NWDO the opportunity to have an observer present. If the inspection required by C.5 is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the OEPA, NWDO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why

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

2. Furnish the OEPA, NWDO with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.2.e through A.2.m and

C.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in C.3 are detected during the annual visual inspection required by C.3, a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by C.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in C.4.b, a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.2.e through A.2.m or C.4 and list each repair made.

5. If the permittee placed, stored, or held in this emissions unit any petroleum liquid with a true vapor pressure which was greater than 0.754 pounds per square inch absolute, the permittee shall notify the Ohio EPA Northwest District Office within 30 days of becoming aware of the occurrence.

6. The permittee shall submit annual deviation (excursion) reports that identify any and all exceedances of the annual material throughput limitation, as well as the corrective actions taken to achieve compliance. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred during that year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

1. Compliance with the emission limitations in section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

   Emission Limitation: 0.2 tons VOC/yr

   Applicable Compliance Method: The permittee shall demonstrate compliance by rim seal loss, withdraw loss and deck fitting loss calculations as determined by U.S. EPA Tanks 4.0 program with a maximum annual material throughput of 34,000,000 gallons.

F. Miscellaneous Requirements

None

Great
PTI A Emissions Unit ID: **T003**
Issued: To be entered upon final issuance

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T003 - -95,755 gallon above ground internal floating roof storage tank (Ethanol Off-Spec Tank)	OAC rule 3745-31-05(A)(3)	0.1 tons Volatile Organic Compounds (VOC)/yr See A.2.a through A.2.m.
	OAC rule 3745-21-09(L)	See A.2.o
	40 CFR, Part 60, Subpart Kb	See A.2.n.

2. Additional Terms and Conditions

2.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.

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

2.c The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.d All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is

completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

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

2.o OAC rule 3745-21-09(L) is not applicable because this tank does not store petroleum liquids as defined in OAC rule 3745-21-01 (E)(13).

B. Operational Restrictions

1. The permittee shall not exceed an annual material throughput rate of 480,000 gallons.

2. The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 0.754 pound per square inch absolute.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of the following information:

   a. The types of petroleum liquids stored in the tank.

   b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 0.754 pound per square inch absolute. Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

      i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor

pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For refined petroleum products the vapor pressure may be obtained by the following:

(a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Ohio EPA, Northwest District Office (NWDO) specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(a) May be obtained from standard reference texts, or

(b) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(c) Measured by an appropriate method approved by the OEPA, NWDO; or

(d) Calculated by an appropriate method approved by the OEPA, NWDO.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in

service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day

extension may be requested from the OEPA, NWDO in the inspection report required in D.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.2.f.ii.:

   a. visually inspect the vessel as specified in C.5. at least every 5 years; or

   b. visually inspect the vessel as specified in C.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in C.3 and C.4.b and at intervals no greater than 5 years in the case of vessels specified in C.4.a.

6. The owner or operator shall keep copies of all reports and records required in D.2, D.3, and D.4, for at least 2 years.

7. Keep a record of each inspection performed as required by C.2, C.3, C.4, and C.5. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The owner or operator shall keep copies of all records required by C.2 through C.8., for at least 2 years.

9. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

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

11. The permit to install for Emission Units J001, P002, P004, P903, and T001-T005 were evaluated based on the actual materials and the design parameters of each emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Hexane
TLV (mg/m^3): 176.23
Maximum Hourly Emission Rate (lbs/hr): 0.51
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 21.51
MAGLC (ug/m^3): 4,196

Pollutant: Aliphatic Hydrocarbons
TLV (mg/m^3): 1803.0
Maximum Hourly Emission Rate (lbs/hr): 1.47
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 62.13
MAGLC (ug/m^3): 42,928

Pollutant: Pentane
TLV (mg/m^3): 1475.5
Maximum Hourly Emission Rate (lbs/hr): 0.73
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 2.6
MAGLC (ug/m^3): 35,130

Pollutant: Ethanol
TLV (mg/m^3): 1884.3
Maximum Hourly Emission Rate (lbs/hr): 11.66
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 1055.30
MAGLC (ug/m^3): 44,863

Physical changes to or changes in the method of operation of the emissions units after

installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. Changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. Notify the OEPA, NWDO in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by C.2 and C.5 to afford the OEPA, NWDO the opportunity to have an observer present. If the inspection required by C.5 is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the OEPA, NWDO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why

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

2. Furnish the OEPA, NWDO with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.2.e through A.2.m and

C.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in C.3 are detected during the annual visual inspection required by C.3, a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by C.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in C.4.b, a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.2.e through A.2.m or C.4 and list each repair made.

5. If the permittee placed, stored, or held in this emissions unit any petroleum liquid with a true vapor pressure which was greater than 0.754 pounds per square inch absolute, the permittee shall notify the Ohio EPA Northwest District Office within 30 days of becoming aware of the occurrence.

6. The permittee shall submit annual deviation (excursion) reports that identify any and all exceedances of the annual material throughput limitation, as well as the corrective actions taken to achieve compliance. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred during that year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

1. Compliance with the emission limitations in section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

   Emission Limitation: 0.1 tons VOC/yr

   Applicable Compliance Method: The permittee shall demonstrate compliance by rim seal loss, withdraw loss and deck fitting loss calculations as determined by U.S. EPA Tanks 4.0 program with a maximum annual material throughput of 480,000 gallons.

F. Miscellaneous Requirements

None

Great
PTI A Emissions Unit ID: **T004**
Issued: To be entered upon final issuance

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T004 - -56,400 gallon above ground internal floating roof storage tank (gasoline denaturant)	OAC rule 3745-31-05(A)(3)	0.8 ton Volatile Organic Compounds (VOC)/yr
		Control requirements (see A.2.a)
		See A.2.n
	OAC rule 3745-21-09(L)	See A.2.b through A.2.d and C.1
	40 CFR, part 60, Subpart Kb	
	40 CFR, Part 60.112b	See A.2.e through A.2.m
	40 CFR, Part 60.113b	See C.2 through C.5 and D.1
	40 CFR Part 60.115b	See C.6 through C.7 and D.2. through D.4
	40 CFR, Part 60.116b	See C.8 through C.10 and D.5

2. Additional Terms and Conditions

2.a The Best Available Technology (BAT) requirements for this emissions unit has been determined to be the use of submerged fill and an internal floating roof and compliance with OAC rule 3745-21-09(L) and 40 CFR Part 60, Subpart Kb.

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

2.c The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.d All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder

vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in

actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

2.n The requirements of this rule include compliance with the requirements of OAC rule 3745-21-09(L), and 40 CFR Part 60, Subpart Kb.

B. Operational Restrictions

1. The permittee shall not exceed an annual material throughput rate of 19,740,000 gallons.

2. The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 11.11 psia.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of the following information:

   a. The types of petroleum liquids stored in the tank.

b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 1.0 pound per square inch absolute. Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For refined petroleum products the vapor pressure may be obtained by the following:

(a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Ohio EPA, Northwest District Office (NWDO) specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(a) May be obtained from standard reference texts, or

(b) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(c) Measured by an appropriate method approved by the OEPA, NWDO; or

(d) Calculated by an appropriate method approved by the OEPA, NWDO.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects

in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the OEPA, NWDO in the inspection report required in D.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.2.f.ii.:

   a. visually inspect the vessel as specified in C.5. at least every 5 years; or

   b. visually inspect the vessel as specified in C.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in C.3 and C.4.b and at intervals no greater than 5 years in the case of vessels specified in C.4.a.

6. The owner or operator shall keep copies of all reports and records required in D.2, D.3, and D.4, for at least 2 years.

7. Keep a record of each inspection performed as required by C.2, C.3, C.4, and C.5. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The owner or operator shall keep copies of all records required by C.2 through C.8., for at least 2 years.

9. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

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

11. The permit to install for Emission Units J001, P002, P004, P903, and T001-T005 were evaluated based on the actual materials and the design parameters of each emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Hexane
TLV (mg/m^3): 176.23
Maximum Hourly Emission Rate (lbs/hr): 0.51
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 21.51
MAGLC (ug/m^3): 4,196

Pollutant: Aliphatic Hydrocarbons
TLV (mg/m^3): 1803.0
Maximum Hourly Emission Rate (lbs/hr): 1.47
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 62.13
MAGLC (ug/m^3): 42,928

Pollutant: Pentane
TLV (mg/m^3): 1475.5
Maximum Hourly Emission Rate (lbs/hr): 0.73
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 2.6
MAGLC (ug/m^3): 35,130

Pollutant: Ethanol
TLV (mg/m^3): 1884.3
Maximum Hourly Emission Rate (lbs/hr): 11.66
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 1055.30
MAGLC (ug/m^3): 44,863

Physical changes to or changes in the method of operation of the emissions units after

installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. Changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. Notify the OEPA, NWDO in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by C.2 and C.5 to afford the OEPA, NWDO the opportunity to have an observer present. If the inspection required by C.5 is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the OEPA, NWDO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why the inspection was unplanned. Alternatively, this notification including the written documentation may be made in writing and sent by express mail so that it is received by the OEPA, NWDO at least 7 days prior to the refilling.

2. Furnish the OEPA, NWDO with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.2.e through A.2.m and C.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in C.3 are detected during the annual visual inspection required by C.3, a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by C.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in C.4.b, a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.2.e through A.2.m or C.4 and list each repair made.

5. If the permittee placed, stored, or held in this emissions unit any petroleum liquid with a true vapor pressure which was greater than 11.1 pounds per square inch absolute, the permittee shall notify the Ohio EPA Northwest District Office within 30 days of becoming aware of the occurrence.

6. The permittee shall submit annual deviation (excursion) reports that identify any and all

exceedances of the annual material throughput limitation, as well as the corrective actions taken to achieve compliance. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred during that year. These reports shall be submitted by January 31 of each year.

V. Testing Requirements

1. Compliance with the emission limitations in section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emission Limitation: 0.8 tons VOC/yr

      Applicable Compliance Method: The permittee shall demonstrate compliance by rim seal loss, withdraw loss and deck fitting loss calculations as determined by U.S. EPA Tanks 4.0 program with a maximum annual material throughput of 19,740,000 gallons.

VI. Miscellaneous Requirements

None

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
T005 - -2,0150,200 gallon above ground internal floating roof storage tank (Denatured Ethanol Tank #1)	OAC rule 3745-31-05(A)(3)	0.3 tons Volatile Organic Compounds (VOC)/yr See A.2.a through A.2.m.
	OAC rule 3745-21-09(L)	See A.2.o.
	40 CFR, Part 60, Subpart Kb	See A.2.n

2. Additional Terms and Conditions

2.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.

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

2.c The automatic bleeder vents shall be closed at all times except when the roof is floated off or landed on the roof leg supports, and the rim vents, if provided, shall be set to open when the roof is being floated off the roof leg supports or is at the manufacturer's recommended setting.

2.d All openings, except stub drains, shall be equipped with a cover, seal or lid which is to be in a closed position at all times except when in actual use for tank gauging or sampling.

2.e The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is

completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.

2.f Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:

i. A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.

ii. Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.

iii. A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.

2.g Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.

2.h Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.

2.i Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.

2.j Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.

2.k Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.

2.l Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.

2.m Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

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

2.o OAC rule 3745-21-09(L) is not applicable because this tank does not store petroleum liquids as defined in OAC rule 3745-21-01 (E)(13).

B. Operational Restrictions

1. The permittee shall not exceed an annual material throughput rate of 120,912,000 gallons.

2. The maximum true vapor pressure of organic liquid stored in this storage tank shall not exceed 0.754 pound per square inch absolute.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of the following information:

   a. The types of petroleum liquids stored in the tank.

   b. The maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater than 0.754 pound per square inch absolute. Available data on the storage temperature may be used to determine the maximum true vapor pressure as in the following:

      i. For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For

vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.

ii. For refined petroleum products the vapor pressure may be obtained by the following:

(a) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference--see Sec. 60.17), unless the Ohio EPA, Northwest District Office (NWDO) specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).

(b) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.

iii. For other liquids, the vapor pressure:

(a) May be obtained from standard reference texts, or

(b) Determined by ASTM Method D2879-83 (incorporated by reference--see Sec. 60.17); or

(c) Measured by an appropriate method approved by the OEPA, NWDO; or

(d) Calculated by an appropriate method approved by the OEPA, NWDO.

2. Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.

3. For vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day

extension may be requested from the OEPA, NWDO in the inspection report required in D.3. Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

4. For vessels equipped with a double-seal system as specified in A.2.f.ii.:

   a. visually inspect the vessel as specified in C.5. at least every 5 years; or

   b. visually inspect the vessel as specified in C.3.

5. Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in C.3 and C.4.b and at intervals no greater than 5 years in the case of vessels specified in C.4.a.

6. The owner or operator shall keep copies of all reports and records required in D.2, D.3, and D.4, for at least 2 years.

7. Keep a record of each inspection performed as required by C.2, C.3, C.4, and C.5. Each record shall identify the storage vessel on which the inspection was performed and shall contain the date the vessel was inspected and the observed condition of each component of the control equipment (seals, internal floating roof, and fittings).

8. The owner or operator shall keep copies of all records required by C.2 through C.8., for at least 2 years.

9. The owner or operator shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel (shall be kept for the life of the source).

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

11. The permit to install for Emission Units J001, P002, P004, P903, and T001-T005 were evaluated based on the actual materials and the design parameters of each emissions unit's exhaust system, as specified by the permittee in the permit to install application. Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Hexane
TLV (mg/m^3): 176.23
Maximum Hourly Emission Rate (lbs/hr): 0.51
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 21.51
MAGLC (ug/m^3): 4,196

Pollutant: Aliphatic Hydrocarbons
TLV (mg/m^3): 1803.0
Maximum Hourly Emission Rate (lbs/hr): 1.47
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 62.13
MAGLC (ug/m^3): 42,928

Pollutant: Pentane
TLV (mg/m^3): 1475.5
Maximum Hourly Emission Rate (lbs/hr): 0.73
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 2.6
MAGLC (ug/m^3): 35,130

Pollutant: Ethanol
TLV (mg/m^3): 1884.3
Maximum Hourly Emission Rate (lbs/hr): 11.66
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 1055.30
MAGLC (ug/m^3): 44,863

Emissions Unit ID: **T005**

Physical changes to or changes in the method of operation of the emissions units after installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be still satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in applying the "Air Toxic Policy" include the following:

a. Changes in the composition of the materials used, or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. Changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

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

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"

a. A description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. Documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. Where computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. Notify the OEPA, NWDO in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by C.2 and C.5 to afford the OEPA, NWDO the opportunity to have an observer present. If the inspection required by C.5 is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the OEPA, NWDO at least 7 days prior to the refilling of the storage vessel. Notification shall be made by telephone immediately followed by written documentation demonstrating why

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

2. Furnish the OEPA, NWDO with a report that describes the control equipment and certifies that the control equipment meets the specifications of A.2.e through A.2.m and

C.2. This report shall be an attachment to the notification of the actual date of initial startup of an affected facility postmarked within 15 days after such date.

3. If any of the conditions described in C.3 are detected during the annual visual inspection required by C.3, a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.

4. After each inspection required by C.4 that finds holes or tears in the seal or seal fabric, or defects in the internal floating roof, or other control equipment defects listed in C.4.b, a report shall be furnished to the OEPA, NWDO within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of A.2.e through A.2.m or C.4 and list each repair made.

5. If the permittee placed, stored, or held in this emissions unit any petroleum liquid with a true vapor pressure which was greater than 0.754 pounds per square inch absolute, the permittee shall notify the Ohio EPA NWDO within 30 days of becoming aware of the occurrence.

6. The permittee shall submit annual deviation (excursion) reports that identify any and all exceedances of the annual material throughput limitation, as well as the corrective actions taken to achieve compliance. If no deviations occurred during a calendar year, the permittee shall submit an annual report which states that no deviations occurred during that year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

1. Compliance with the emission limitations in section A.1. of the terms and conditions of this permit shall be determined in accordance with the following methods:

   Emission Limitation: 0.3 tons VOC/yr

   Applicable Compliance Method: The permittee shall demonstrate compliance by rim seal loss, withdraw loss and deck fitting loss calculations as determined by U.S. EPA Tanks 4.0 program with a maximum annual material throughput of 120,912,000 gallons.

F. Miscellaneous Requirements

None