State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
50 West Town Street, Suite 700
Columbus, OH 43215

TELE: (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

RE: FINAL PERMIT TO INSTALL
LICKING COUNTY
Application No: 01-12113
Fac ID: 0145020434

DATE: 6/19/2007

CERTIFIED MAIL

Y	TOXIC REVIEW
	PSD
Y	SYNTHETIC MINOR
Y	CEMS
	MACT
Kb,Db,Dc and VV	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

E85, Inc.
Joe Schriner
8244 Country Oaks Station
West Chester, OH 45069

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

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.

You are hereby notified that this action of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of $70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

Sincerely,

Michael W. Ahern

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

CC: USEPA CDO

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install	**Issue Date: 6/19/2007**
Terms and Conditions	**Effective Date: 6/19/2007**

FINAL PERMIT TO INSTALL 01-12113

Application Number:	01-12113
Facility ID:	0145020434
Permit Fee:	**$33450**
Name of Facility:	E85, Inc.
Person to Contact:	Joe Schriner
Address:	8244 Country Oaks Station West Chester, OH 45069

Location of proposed air contaminant source(s) [emissions unit(s)]:
595 Thornwood Drive
Newark, **Ohio**

Description of proposed emissions unit(s):
Ethanol Plant.

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described emissions unit(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 and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Chris Korleski

Chris Korleski
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 (i.e., postmarked) quarterly by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

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
CO	88.64
NOx	92.0
SO2	46.9
PE	68.34
VOC	89.36
Single HAP	8.6
Total HAP	14.2

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 - (B001) - B001 - 150 mmBtu/hr natural gas fired boiler for steam generation

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Carbon monoxide emissions shall not exceed 3.30 pounds per hour and 14.5 tons per rolling, 12-month period. Carbon monoxide emissions shall not exceed 30 *ppm*vd , corrected to 3% oxygen. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-17-10(B)(1).

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Particulate emissions shall not exceed 5.0 tons per rolling, 12-month period. Sulfur dioxide emissions shall not exceed 1.8 tons per rolling, 12-month period. Nitrogen Oxides emissions shall not exceed 7.2 tons per rolling, 12-month period. Volatile Organic Compound emissions shall not exceed 3.6 tons per rolling, 12-month period. Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period. Total emissions for any individual HAP from emissions units B001-B003, J001-J002, P010-P014,P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Db.
OAC rule 3745-21-08(B)	See section A.2.b below.
OAC rule 3745-18-06	See section A.2.a below.
OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.02 pound per million BTU of actual heat input. See section A.2.c below.
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
40 CFR Part 60, Subpart A	See A.I.2.e below.
40 CFR Part 60, Subpart Db	Nitrogen Oxides emissions shall not exceed 0.10 lb NOx per million BTU of actual heat input.

2. Additional Terms and Conditions

2.a There are no SO2 emission limitations established pursuant to OAC Chapter 3745-18 for this emissions unit since natural gas is the only fuel burned in the emissions unit.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

2.b The permittee has satisfied 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 For the purposes of this permit all PE is considered to be PM_{10}.

2.d Nitrogen Oxides emissions shall not exceed 9.0 ppmvd , corrected to 3% oxygen.

2.e This emissions unit is subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency under 40 CFR Part 60. The application and enforcement of these standards are delegated to Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

B. Operational Restrictions

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

2. The permittee shall operate low NOx burners and employ flue gas re-circulation at all times this emissions unit is in operation.

3. The permittee shall install, operate and maintain equipment to continuously monitor and record the NOx emissions from this emissions unit.

C. Monitoring and/or Recordkeeping Requirements

1. Pursuant to 40 CFR Part 60, Subpart Db, the permittee shall record and maintain records of the amount of natural gas combusted during each day.

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

3. Prior to the installation of the continuous NOx monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2 for approval by the Ohio EPA, Central Office. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NOx monitoring system meets the requirements of Performance Specification 2. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Ohio EPA, Central District Office upon request.

   Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

4. The permittee shall install, operate, and maintain equipment to continuously monitor and record NOx emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

   The permittee shall maintain records of data obtained by the continuous NOx monitoring system including, but not limited to:

   a. emissions of NOx in parts per million on an instantaneous (one-minute) basis;

   b. emissions of NOx in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

   c. results of quarterly cylinder gas audits;

   d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

   e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

   f. hours of operation of the emissions unit, continuous NOx monitoring system, and control equipment;

   g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NOx monitoring system;

   h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NOx monitoring system; as well as,

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

5. The permittee shall operate and maintain equipment to continuously monitor and record the fuel flow rate in order to stoichiometrically calculate emissions of NOx, in pounds per hour. Fuel heat content values for each fuel burned, as applied in the stoichiometric calculations, shall also be recorded. The permittee shall maintain records of data obtained by the fuel flow monitor/meter, including the dates and results of each calibration check and the magnitude of calibration adjustments; periods of downtime and malfunction of the fuel flow monitor/meter; as well as, the reason (if known) and the corrective actions taken (if any) for each such event.

6. The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The date and time of the visible emissions check and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

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

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

7. The permittee shall maintain the following monthly records:

   a. the rolling, 12-month summation of particulate emissions, in tons;

   b. the rolling, 12-month summation of SO2 emissions, in tons;

   c. the rolling, 12-month summation of NOx, in tons;

   d. the rolling, 12-month summation of CO, in tons; and

8. The permittee shall maintain the following monthly records:

   a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

b. the rolling, 12-month summation of emissions of each individual HAP from this emissions unit, in tons.

c. the rolling, 12-month summation of total HAP emissions from this emissions unit, in tons.

d. the rolling, 12-month summation of emissions of each individual HAP from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005, in tons.

e. the rolling, 12-month summation of total HAP emissions from emissions units B001-B003, J001-J002, P010-P014, P022-P024 and T003-T005, in tons.

9. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Hexane
TLV (mg/m^3): 176.24
Maximum Hourly Emission Rate (lbs/hr): 0.26
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 8.05 (entire facility)
MAGLC (ug/m^3): 4,196

Pollutant: Formaldehyde
TLV (mg/m^3): 0.272
Maximum Hourly Emission Rate (lbs/hr): 0.01
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 2.39 (entire facility)
MAGLC (ug/m^3): 6.47

Pollutant: Nitric Acid
TLV (mg/m^3): 10
Maximum Hourly Emission Rate (lbs/hr): 1.02
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 25.64 (entire facility)
MAGLC (ug/m^3): 731

10. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

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

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

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in the emissions unit. These reports shall be submitted to the Ohio EPA, Central District Office within 30 days after the deviation occurs.

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

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

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

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

   Reports are to be sent to:

   Ohio Environmental Protection Agency
   DAPC - PIDM
   P. O. Box 1049
   Columbus, Ohio 43216-1049

   and

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

Ohio EPA, Central District Office
Division of Air Pollution Control
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43215-1049

3. The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NOx monitoring system:

   a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office, documenting all instances of NOx emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

   b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

      i. the facility name and address;

      ii. the manufacturer and model number of the continuous NOx and other associated monitors;

      iii. the location of the continuous NOx monitor;

      iv. the exceedance report as detailed in (a) above;

      v. the total NOx emissions for the calendar quarter (tons);

      vi. the total operating time (hours) of the emissions unit;

      vii. the total operating time of the continuous NOx monitoring system while the emissions unit was in operation;

      viii. results and date of quarterly cylinder gas audits;

      ix. results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

x. the results of any relative accuracy test audit showing the continuous NOx monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous NOx monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous NOx monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (b)(xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. The permittee shall submit annual reports that specify the total particulate, SO2, NOx and CO emissions and natural gas usages for this emissions unit for the previous calendar year. These reports shall be submitted by January 30 of each year.

6. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitations. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

7. The permittee shall submit annual reports which specify the following:

a. the total VOC emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

b. the total emissions of each individual HAP in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

c. the total HAP emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

d. the total emissions of each individual HAP in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year; and

e. the total HAP emissions , in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year;

These reports shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

8. The permittee shall submit an annual report to the director the Ohio EPA, Central District Office in writing, of whether the operations of the source are consistent with the information regarding the operations that was used to conduct the modeling. The director may consider any significant departure from the operations of the source described in the permit to install application that results in greater emissions than the emissions rate modeled to determine the ground level concentration as a modification and require the owner or operator to submit a permit to install application for the increased emissions. This report shall be submitted by January 31 of each year.

E. Testing Requirements

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

a. Emission Limitations: Particulate emissions shall not exceed 0.02 pound per million BTU of actual heat input; Sulfur dioxide emissions 1.8 tons per rolling, 12-month period. Nitrogen Oxides emissions shall not exceed 9.0 ppmvd, corrected to 3% oxygen. Carbon monoxide emissions shall not exceed 3.30 pounds per hour; Carbon monoxide emissions shall not exceed 30 ppmvd, corrected to 3% oxygen. Volatile Organic Compound emissions shall not exceed 3.6 tons per rolling, 12-month period.

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NOx, CO, VOC, SO2 and PE.

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

For PE, Methods 1-5 of 40 CFR Part 60, Appendix A

For NOx, Methods 1-4 and 7E of 40 CFR Part 60, Appendix A

For SO2, Methods 1-4 and 6C of 40 CFR Part 60, Appendix A

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

For VOC, Methods 1-4, 18 and 25 or 25A of 40 CFR Part 60, Appendix A or Method 320 of 40 CFR Part 63, Appendix A.

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

b. Emissions Limitation: Particulate emissions shall not exceed 5.0 tons per rolling, 12-month period; Sulfur dioxide emissions shall not exceed 1.8 tons per rolling, 12-month period; Nitrogen Oxides emissions shall not exceed 7.2 tons per rolling, 12-month period; Carbon monoxide emissions shall not exceed 14.5 tons per rolling, 12-month period; Volatile Organic Compound emissions shall not exceed 3.6 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined by multiplying the observed hourly emission rate from the emissions testing required above by 8,760 and dividing by 2000.

The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Visible PE shall not exceed 20% opacity, as a six-minute average

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

d. Emission Limitation: Nitrogen Oxides emissions shall not exceed 0.10 lb NOx per million BTU of actual heat input.

Applicable Compliance Method: Compliance shall be determined by data collected and recorded for the CEM and by the NOx emissions testing required above.

e. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for Total haps and individual HAP.

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

For HAPS (for but not limited to, the compounds listed in the Midwest Scaling Protocol in Version 1.6 dated August 2004), Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

For individual HAP, Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

f. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee

shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

2. Within 60 days of the effective date of this permit, the permittee shall conduct certification tests of the continuous NOx monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2; and ORC section 3704.03(I).

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

Certification of the continuous NOx monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2; and ORC section 3704.03(I).

Ongoing compliance with the NOx emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

3. Within 60 days of the effective date of this permit, the permittee shall conduct certification tests of the continuous NOx monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2; and ORC section 3704.03(I).

Personnel from the Ohio EPA Central Office and the appropriate Ohio EPA District Office or local air agency shall be notified 30 days prior to initiation of the applicable tests and shall be permitted to examine equipment and witness the certification tests. Two copies of the test results shall be submitted to Ohio EPA, one copy to the appropriate Ohio EPA District Office or local air agency and one

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

copy to Ohio EPA Central Office, and pursuant to OAC rule 3745-15-04, within 30 days after the test is completed.

Certification of the continuous NOx monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2; and ORC section 3704.03(I).

Ongoing compliance with the NOx emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

2. The following source is subject to the applicable provision of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR part 60.

Source Number	Source Description	NSPS Regulation (Subpart)
B001	150 mmBTU/hr natural gas fired boiler for steam generation	Db

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

i. Construction date (no later than 30 days after such date);
ii. Actual start-up date (within 15 days after such date); and
iii. Date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC- Air Quality Modeling and Planning
P.O. Box 1049
Columbus, OH 43216-1049

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

and

Central District Office
Division of Air Pollution Control
P.O. Box 1049
Columbus, OH 43216

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (B002) - B002 - 150 mmBtu/hr natural gas fired boiler for steam generation.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Carbon monoxide emissions shall not exceed 3.30 pounds per hour and 14.5 tons per rolling, 12-month period. Carbon monoxide emissions shall not exceed 30 **ppmvd**, corrected to 3% oxygen. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A) and OAC rule 3745-17-10(B)(1).

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Particulate emissions shall not exceed 5.0 tons per rolling, 12-month period. Sulfur dioxide emissions shall not exceed 1.8 tons per rolling, 12-month period. Nitrogen Oxides emissions shall not exceed 7.2 tons per rolling, 12-month period. Volatile Organic Compound emissions shall not exceed 3.6 tons per rolling, 12-month period. Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period. Total emissions for any individual HAP from emissions units B001-B003, J001-J002, P010-P014,P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period. The requirements of this rule also include compliance with the requirements of 40 CFR Part 60, Subpart Db.
OAC rule 3745-21-08(B)	See section A.2.b below.
OAC rule 3745-18-06	See section A.2.a below.
OAC rule 3745-17-10(B)(1)	Particulate emissions shall not exceed 0.02 pound per million BTU of actual heat input. See section A.2.c below.
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
40 CFR Part 60, Subpart A	See A.I.2.e below.
40 CFR Part 60, Subpart Db	Nitrogen Oxides emissions shall not exceed 0.10 lb NOx per million BTU of actual heat input.

2. Additional Terms and Conditions

2.a There are no SO2 emission limitations established pursuant to OAC Chapter 3745-18 for this emissions unit since natural gas is the only fuel burned in the emissions unit.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

2.b The permittee has satisfied 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 For the purposes of this permit all PE is considered to be PM_{10}.

2d Nitrogen Oxides emissions shall not exceed 9.0 ppmvd *, corrected to 3% oxygen.*

2.e This emissions unit is subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency under 40 CFR Part 60. The application and enforcement of these standards are delegated to Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

B. Operational Restrictions

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

2. The permittee shall operate low NOx burners and employ flue gas re-circulation at all times this emissions unit is in operation.

3. The permittee shall install, operate and maintain equipment to continuously monitor and record the NOx emissions from this emissions unit.

C. Monitoring and/or Recordkeeping Requirements

1. Pursuant to 40 CFR Part 60, Subpart Db, the permittee shall record and maintain records of the amount of natural gas combusted during each day.

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

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

3. Prior to the installation of the continuous NOx monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2 for approval by the Ohio EPA, Central Office. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NOx monitoring system meets the requirements of Performance Specification 2. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Ohio EPA, Central District Office upon request.

   Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

4. The permittee shall install, operate, and maintain equipment to continuously monitor and record NOx emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

   The permittee shall maintain records of data obtained by the continuous NOx monitoring system including, but not limited to:

   a. emissions of NOx in parts per million on an instantaneous (one-minute) basis;
   b. emissions of NOx in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

   c. results of quarterly cylinder gas audits;

   d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

   e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

   f. hours of operation of the emissions unit, continuous NOx monitoring system, and control equipment;

   g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NOx monitoring system;

   h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NOx monitoring system; as well as,

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

5. The permittee shall operate and maintain equipment to continuously monitor and record the fuel flow rate in order to stoichiometrically calculate emissions of NOx, in pounds per hour. Fuel heat content values for each fuel burned, as applied in the stoichiometric calculations, shall also be recorded. The permittee shall maintain records of data obtained by the fuel flow monitor/meter, including the dates and results of each calibration check and the magnitude of calibration adjustments; periods of downtime and malfunction of the fuel flow monitor/meter; as well as, the reason (if known) and the corrective actions taken (if any) for each such event.

6. The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The date and time of the visible emissions check and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and color of the emissions;

   b. whether the emissions are representative of normal operations;

   c. if the emissions are not representative of normal operations, the cause of the abnormal emissions;

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

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

7. The permittee shall maintain the following monthly records:

   a. the rolling, 12-month summation of particulate emissions, in tons;

   b. the rolling, 12-month summation of SO2 emissions, in tons;

   c. the rolling, 12-month summation of NOx, in tons;

   d. the rolling, 12-month summation of CO, in tons; and

8. The permittee shall maintain the following monthly records:

   a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

b. the rolling, 12-month summation of emissions of each individual HAP from this emissions unit, in tons.

c. the rolling, 12-month summation of total HAP emissions from this emissions unit, in tons.

d. the rolling, 12-month summation of emissions of each individual HAP from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005, in tons.

e. the rolling, 12-month summation of total HAP emissions from emissions units B001-B003, J001-J002, P010-P014, P022-P024 and T003-T005, in tons.

9. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Hexane
TLV (mg/m^3): 176.24
Maximum Hourly Emission Rate (lbs/hr): 0.26
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 8.64 (enitre facility)
MAGLC (ug/m^3): 4,196

Pollutant: Formaldehyde
TLV (mg/m^3): 0.272
Maximum Hourly Emission Rate (lbs/hr): 0.01
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 3.63 (enitre facility)
MAGLC (ug/m^3): 6.47

Nitric Acid
TLV (mg/m^3): 10
Maximum Hourly Emission Rate (lbs/hr): 1.02
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 25.44 (enitre facility)
MAGLC (ug/m^3): 731

10. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

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

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

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in the emissions unit. These reports shall be submitted to the Ohio EPA, Central District Office within 30 days after the deviation occurs.

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

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

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

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

   Reports are to be sent to:

   Ohio Environmental Protection Agency
   DAPC - PIDM
   P. O. Box 1049
   Columbus, Ohio 43216-1049

   and

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

Ohio EPA, Central District Office
Division of Air Pollution Control
50 West Town Street, Suite 700
P.O. Box 1049
Columbus, Ohio 43215-1049

3. The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NOx monitoring system:

   a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office, documenting all instances of NOx emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

   b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

      i. the facility name and address;

      ii. the manufacturer and model number of the continuous NOx and other associated monitors;

      iii. the location of the continuous NOx monitor;

      iv. the exceedance report as detailed in (a) above;

      v. the total NOx emissions for the calendar quarter (tons);

      vi. the total operating time (hours) of the emissions unit;

      vii. the total operating time of the continuous NOx monitoring system while the emissions unit was in operation;

      viii. results and date of quarterly cylinder gas audits;

      ix. results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

x. the results of any relative accuracy test audit showing the continuous NOx monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous NOx monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous NOx monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (b)(xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

4. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

5. The permittee shall submit annual reports that specify the total particulate, SO2, NOx and CO emissions and natural gas usages for this emissions unit for the previous calendar year. These reports shall be submitted by January 30 of each year.

6. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitations. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

7. The permittee shall submit annual reports which specify the following:

a. the total VOC emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

b. the total emissions of each individual HAP in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

c. the total HAP emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

d. the total emissions of each individual HAP in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year; and

e. the total HAP emissions , in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year;

These reports shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

8. The permittee shall submit an annual report to the director the Ohio EPA, Central District Office in writing, of whether the operations of the source are consistent with the information regarding the operations that was used to conduct the modeling. The director may consider any significant departure from the operations of the source described in the permit to install application that results in greater emissions than the emissions rate modeled to determine the ground level concentration as a modification and require the owner or operator to submit a permit to install application for the increased emissions. This report shall be submitted by January 31 of each year.

E. Testing Requirements

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

a. Emission Limitations: Particulate emissions shall not exceed 0.02 pound per million BTU of actual heat input; Sulfur dioxide emissions 1.8 tons per rolling, 12-month period. Nitrogen Oxides emissions shall not exceed 9.0 ppmvd, corrected to 3% oxygen. Carbon monoxide emissions shall not exceed 3.30 pounds per hour; Carbon monoxide emissions shall not exceed 30 ppmvd, corrected to 3% oxygen. Volatile Organic Compound emissions shall not exceed 3.6 tons per rolling, 12-month period.

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NOx, CO, VOC, SO2 and PE.

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

For PE, Methods 1-5 of 40 CFR Part 60, Appendix A

For NOx, Methods 1-4 and 7E of 40 CFR Part 60, Appendix A

For SO2, Methods 1-4 and 6C of 40 CFR Part 60, Appendix A

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

For VOC, Methods 1-4, 18 and 25 or 25A of 40 CFR Part 60, Appendix A or Method 320 of 40 CFR Part 63, Appendix A.

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

b. Emissions Limitation: Particulate emissions shall not exceed 5.0 tons per rolling, 12-month period; Sulfur dioxide emissions shall not exceed 1.8 tons per rolling, 12-month period; Nitrogen Oxides emissions shall not exceed 7.2 tons per rolling, 12-month period; Carbon monoxide emissions shall not exceed 14.5 tons per rolling, 12-month period; Volatile Organic Compound emissions shall not exceed 3.6 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined by multiplying the observed hourly emission rate from the emissions testing required above by 8,760 and dividing by 2000.

The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Visible PE shall not exceed 20% opacity, as a six-minute average

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

d. Emission Limitation: Nitrogen Oxides emissions shall not exceed 0.10 lb NOx per million BTU of actual heat input.

Applicable Compliance Method: Compliance shall be determined by data collected and recorded for the CEM and by the NOx emissions testing required above.

e. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for Total HAPS and individual HAP.

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

For HAPS (for but not limited to, the compounds listed in the Midwest Scaling Protocol in Version 1.6 dated August 2004), Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

For individual HAP, Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

f. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

2. Within 60 days of the effective date of this permit, the permittee shall conduct certification tests of the continuous NOx monitoring system in units of the applicable standard(s) to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2; and ORC section 3704.03(I).

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

   Certification of the continuous NOx monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2; and ORC section 3704.03(I).

   Ongoing compliance with the NOx emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

2. The following source is subject to the applicable provision of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR part 60.

Source Number	Source Description	NSPS Regulation (Subpart)

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

B002	150 mmBTU/hr natural gas fired boiler for steam generation	Db

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

i. Construction date (no later than 30 days after such date);
ii. Actual start-up date (within 15 days after such date); and
i iii. . Date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC- Air Quality Modeling and Planning
P.O. Box 1049
Columbus, OH 43216-1049

and

Central District Office
Division of Air Pollution Control
P.O. Box 1049
Columbus, OH 43216

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (B003) - B003 - emergency generator- 6,035 horsepower

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Particulate emissions (PE) shall not exceed 0.1 ton per rolling 12-month period. CO emissions shall not exceed 1.7 tons per rolling 12-month period. VOC emissions shall not exceed 0.1 ton per rolling 12-month period. SO_2 emissions shall not exceed 0.1 ton per rolling 12-month period. NO_x emissions shall not exceed 3.1 tons per rolling 12-month period. Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 15.6 tons per rolling 12-month period. Total emissions for any individual HAP from emissions units B001-B003, J001-J002, P010-P014,P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(5)(b) . See section A.2.b below.
OAC rule 3745-21-08(B)	See section A.2.a below.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-18-06(G)	The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(C).
OAC rule 3745-17-11(B)(5)(b)	The particulate emissions from the engine's exhaust shall not exceed 0.062 pound per million Btu of actual heat input.
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack shall not exceed 20% opacity as a six-minute average.

2. Additional Terms and Conditions

2.a The permittee has satisfied 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.b Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

i. use of low sulfur content fuel oil with a maximum sulfur content not to exceed 0.5% by weight; and

ii. by restricting annual operation to 100 hours only.

B. Operational Restrictions

1. The maximum annual operating hours for this emissions unit shall not exceed 100, based upon a rolling, 12-month summation of the operating hours.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table:

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

Month(s)	Maximum Allowable Cumulative Operating Hours
1	17
1-2	34
1-3	51
1-4	68
1-5	85
1-6	100
1-7	100
1-8	100
1-9	100
1-10	100
1-11	100
1-12	100

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours.

2. The quality of the no. 2 fuel oil burned in this emissions unit shall meet a sulfur content which is equal to or less than 0.5 weight percent sulfur on an "as burned" basis.

3. The maximum annual operating hours for this emissions unit shall not exceed 100 hours, based upon a rolling, 12-month summation of the operating hours.

C. Monitoring and/or Recordkeeping Requirements

1. For each shipment of any oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received and the permittee's or oil supplier's analyses for sulfur content.

2. For each day during which the permittee burns a fuel other than low sulfur No. 2 or diesel fuel in this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned.

3. The permittee shall maintain monthly records of the following information:

   a. the operating hours for each month; and

   b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the operating hours.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month.

4. The permittee shall maintain the following monthly records:

   a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

   b. the rolling, 12-month summation of emissions of each individual HAP from this emissions unit, in tons.

   c. the rolling, 12-month summation of total HAP emissions from this emissions unit, in tons.

   d. the rolling, 12-month summation of emissions of each individual HAP from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005, in tons.

   e. the rolling, 12-month summation of total HAP emissions from emissions units B001-B003, J001-J002, P010-P014, P022-P024 and T003-T005, in tons.

5. The permittee shall maintain the following monthly records:

   a. the rolling, 12-month summation of particulate emissions, in tons;

   b. the rolling, 12-month summation of SO2 emissions, in tons;

   c. the rolling, 12-month summation of NOx, in tons; and

   d. the rolling, 12-month summation of CO, in tons;

6. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

Pollutant: Formaldehyde
TLV (mg/m^3): 0.272
Maximum Hourly Emission Rate (lbs/hr): 0.033
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 2.39 (entire facility)
MAGLC (ug/m^3): 6.47

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

   a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

   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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than low sulfur No. 2 or diesel fuel was burned in this emissions unit. Each report shall be submitted within 30 days after the deviation occurs.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

2. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month imitation on the hours of operation; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative hours of operation. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

3. The permittee shall submit annual reports which specify the following:

   a. the total VOC emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   b. the total emissions of each individual HAP in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   c. the total HAP emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   d. the total emissions of each individual HAP in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year; and

   e. the total HAP emissions , in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year;

   These reports shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

   4. The permittee shall submit an annual report to the director the Ohio EPA, Central District Office in writing, of whether the operations of the source are consistent with the information regarding the operations that was used to conduct the modeling. The director may consider any significant departure from the operations of the source described in the permit to install application that results in greater emissions than the emissions rate modeled to determine the ground level concentration as a modification and require the owner or operator to submit a permit to install application for the increased emissions. This report shall be submitted by January 31 of each year.

E. Testing Requirements

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

a. Emission Limitations: NOx emissions shall not exceed 3.1 tons per rolling 12-month period.

Applicable Compliance Methods: Compliance with the hourly emission limitation may be demonstrated by the following one-time calculation using the vendor-supplied emission factor of 0.01026
lb/HP-hr and the maximum rated capacity of 6,035HP.

NOx = EF x HP
= 0.01026b/HP-hr x 6,035HP
= 61.95 lbs/hr

61.95 lbs/hr X 100 hours/12 months X 1/2000 = 3.1 tons/rolling 12 months

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4, and 7E.

b. Emission Limitations: CO emissions shall not exceed 1.73 tons per rolling, 12-month period.

Applicable Compliance Methods: Compliance with the hourly emission limitation may be demonstrated by the following one-time calculation using the vendor-supplied emission factor of 0.00573lb/HP-hr and the maximum rated capacity of 6,035 HP.

CO = EF x HP
= 0.00573 lb/HP-hr x 6,035 HP
= 34.59 lbs/hr

34.59 lbs/hr X 100 hours/12 months X 1/2000 = 1.73 tons/rolling 12 months

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4, and 10.

c. Emission Limitations: PE shall not exceed 0.10 ton per rolling 12-month period.

Applicable Compliance Methods: Compliance with the hourly emission limitation may be demonstrated by the following one-time calculation using the vendor-supplied emission factor of 0.00033lb/HP-hr and the maximum rated capacity of 6,035 HP.

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

PE = EF x HP
= 0.00033lb/HP-hr x 6,035 HP
= 2.0 lbs/hr

2.0 lbs/hr X 100 hours/12 months X 1/2000 = 0.10 ton/rolling 12 months

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

d. Emission Limitations: SO2 emissions shall not exceed 0.07 ton per rolling 12-month period.

Applicable Compliance Methods: Compliance with the hourly emission limitation may be demonstrated by the following one-time calculation using the vendor-supplied emission factor of 0.00022 lb/HP-hr and the maximum rated capacity of 6,035 HP.

SO2 = EF x HP
= 0.00022 lb/HP-hr x 6,035 HP
= 1.33 lb/hr

1.33 lbs/hr X 100 hours/12 months X 1/2000 = 0.07 ton/rolling 12 months

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4, and 6C.

e. Emission Limitations: VOC emissions shall not exceed 0.10 ton per rolling 12-month period.

Applicable Compliance Methods: Compliance with the hourly emission limitation may be demonstrated by the following one-time calculation using the vendor-supplied emission factor of 0.00032 lb/HP-hr and the maximum rated capacity of 6,035 HP.

VOC = EF x HP
= 0.00032lb/HP-hr x 6,035 HP
= 1.92 lbs/hr

1.92 lbs/hr X 100 hours/12 months X 1/2000 = 0.10 ton/rolling 12 months

If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1 - 4, and 25 or 25A.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

f. Emission Limitation: Visible particulate emissions from the stack shall not exceed 20% opacity as a six-minute average.

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

g. Emission Limitation: The particulate emissions from the engine's exhaust shall not exceed 0.062 pound per million Btu of actual heat input.

Applicable Compliance Method: If required, the permittee shall demonstrate compliance with this emission limitation in accordance with 40 CFR Part 60, Appendix A, Methods 1-5.

h. Emission Limitation: The quality of the no. 2 fuel oil burned in this emissions unit shall meet a sulfur content which is equal to or less than 0.5 weight percent sulfur on an "as burned" basis.

Applicable Compliance Method: Compliance shall be demonstrated by the record keeping requirements pursuant to section C.4 above.

i. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 15.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance shall be determined the records required by C.4 above.

j. Emission Limitation: Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance shall be determined the records required by C.4 above.

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (F001) - F001 - paved roadways and parking areas

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 17.09 tons per rolling 12-month period. There shall be no visible PE except for one minute during any 60-minute period. The permittee shall implement best available control measures that are sufficient to minimize or eliminate visible emissions of fugitive dust. See Sections A.2.a through A.2.g below.
OAC rule 3745-17-07 (B)	See Section A.2.h below.
OAC rule 3745-17-08 (B)	See Section A.2.i below.

2. Additional Terms and Conditions

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

<u>paved roadways</u>
all paved road segments

<u>paved parking areas</u>
all paved parking areas

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

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

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

2.f Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the best available technology requirements of OAC rule 3745-31-05.

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

2.h 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.i E 85 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.j The annual emissions limitation for this emissions unit was established to reflect the potential to emit. Therefore, it is not necessary to develop additional monitoring, recordkeeping and reporting requirements to ensure compliance with this emissions limitation.

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

\\cnas\dapc\prod\attachments\VFacilities/0145020434/Permits/106411\522491.wpd

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:

   <u>paved roadways and parking areas minimum inspection frequency</u>
   all paved roadways/parking areas at least once during each day 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 Ohio EPA, Central District Office (CDO), 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.

D. Reporting Requirements

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

   a. Emission Limitation
   Fugitive PE shall not exceed 17.09 tons per rolling 12-month period.

   Applicable Compliance Method
   Compliance for paved roadways and parking areas TPY shall be demonstrated by calculations in AP-42 section 13.2.1 (November 2006). Compliance has been demonstrated using inputs representing Potential To Emit (PTE) conditions as follows:

   $E = [k(sL/2)^{0.65} (W/3)^{1.5} - C](1-P/4N)$

   where
   E= size-specific emission factor (lb PE/vehicle mile traveled (VMT)
   k= particle size multiplier= 0.082
   sL= silt content of road surface material (g/m^2)= 5 g/m^2
   W= mean vehicle weight (tons)= 27.92
   C= emission factor for 1980s vehicle fleet exhaust, brake wear and tire wear= 0.00047 lb/VMT
   P= number of wet days per averaging period with at least 0.01 inches of precipitation= 100
   N= number of days per averaging period= 365

   Using the values in the above equations, the PE factors were used to calculate emissions as follows:

   E (paved)= 3.93 lb PE/VMT

   To calculate the allowable emissions, multiply the emission factor by VMT/yr (43458.83) and apply a control factor of 80 % for roadway sweeping, to obtain the annual PE rates:

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Total PE= (2.85 lb/VMT)x(46314 V MT/yr)/(2000lbs/ton)= 17.09 TPY

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

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (J001) - ethanol loadout rack to truck for denatured ethanol; equipped with flare (C0E01).

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Fugitive volatile organic compound (VOC) emissions shall not exceed 1.09 tons per rolling, 12-month period. Volatile compound (VOC) emissions from the flare shall not exceed 1.66 tons per rolling, 12-month period. NOx emissions shall not exceed 1.1 tons per rolling, 12-month period. CO emissions shall not exceed 1.9 tons per rolling, 12-month period. Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period. Total emissions for any individual HAP from emissions units B001-B003, J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period. See Section A.2.a.
OAC rule 3745-21-07(E)	See sections A.2.b through A.2.g.
OAC rule 3745-21-08(B)	See section A.2.h.

2. Additional Terms and Conditions

2.a Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

a. Use of a flare system with a required minimum control efficiency of 98%, by weight, for VOC.

2.b During any transfer of material through the loading rack, 100% of the vapors displaced from the delivery vessel shall be collected and vented to the flare.

2.c A means shall be provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.

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

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

2.f A vapor tight lid shall be placed onto trucks' fill point before loading operations.

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

2.h The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by complying with the requirements established pursuant to OAC rule3745-21-07(E) 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 U.S. EPA approves the revision to OAC rule 3745-21-08, the requirements to satisfy "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

B. Operational Restrictions

1. The maximum annual ethanol throughput rate for this emission unit shall not exceed 28.95 million gallons and the combined ethanol throughput rate for J001 and J002 shall not exceed 115.8 million gallons, based upon a rolling, 12-month summation of the loadout rates.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the ethanol loadout levels specified in the following tables:

a. For loadout to J001:

Month	Maximum Allowable Cumulative Ethanol Loadout (gallons)
1	2,412,500
1-2	4,825,000
1-3	7,237,500
1-4	9,650,000
1-5	12,062,500
1-6	14,475,000
1-7	16,887,500
1-8	19,300,000
1-9	21,712,500
1-10	24,125,000
1-11	26,537,500
1-12	28,950,000

b. For loadout to J001 and J002 combined:

Month	Maximum Allowable Cumulative Ethanol Loadout (gallons)
1	9,650,000
1-2	19,300,000
1-3	28,950,000
1-4	38,600,000
1-5	48,250,000
1-6	57,900,000
1-7	67,500,000
1-8	77,200,000
1-9	86,850,000
1-10	96,500,000
1-11	106,150,000
1-12	115,800,000

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual ethanol throughput rate limitations shall be based upon the rolling, 12-month summation of the J001 ethanol throughput rate and upon the rolling, 12-month summation of the J002 ethanol throughput rate.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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 pilot flame shall be present at all times the ethanol loading system is in operation 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 than 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 maintain monthly records of the following information for this emissions unit:

   a. the ethanol loadout rate to J001 for each month, in gallons;

   b. the ethanol loadout rate to J002 for each month, in gallons;

   c. the rolling, 12-month summation of NOx and CO emissions; and

   d. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of:

      i. the ethanol loadout rate to J001; and

      ii. the ethanol loadout rate to J002.

   During the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative ethanol loadout rate to J001 for each calendar month. During the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

permittee shall record the cumulative ethanol loadout rate to J002 for each calendar month.

2. The permittee shall properly install, operate, and maintain a device to continuously monitor the pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall comply with the following monitoring and record keeping requirements on the flare controlling this emissions unit:

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

   b. the permittee shall maintain 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; and

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

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

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

4. The permittee shall record each time loading occurs and document when submerged or bottom loading is used.

5. The permittee shall maintain daily records of the amount of natural gas utilized for flare gas enrichment in scf per day.

6. The permittee shall maintain the following monthly records:

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

b. the rolling, 12-month summation of emissions of each individual HAP from this emissions unit, in tons.

c. the rolling, 12-month summation of total HAP emissions from this emissions unit, in tons.

d. the rolling, 12-month summation of emissions of each individual HAP from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005, in tons.

e. the rolling, 12-month summation of total HAP emissions from emissions units B001-B003, J001-J002, P010-P014, P022-P024 and T003-T005, in tons.

7. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

   Pollutant: Ethanol
   TLV (mg/m^3): 1884
   Maximum Hourly Emission Rate (lbs/hr): 5.74
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 449.32 (entire facility)
   MAGLC (ug/m^3): 790

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

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the following:

   a. the rolling, 12-month ethanol throughput rate limitations to either truck or rail; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative ethanol throughput rates to either truck or rail;

   b. the rolling, 12-month summation of NOx, CO, and VOC emissions.

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

   a. all monitored parameters (i.e., thermocouple or equivalent device and vent stream flow indicator);

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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;

d. all periods of time when the net heating value of the gas being combusted in the flare was below 300 Btu/scf; and

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

3. These quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

4. The permittee shall submit annual reports which specify the total NO_X and CO emissions from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

5. The permittee shall submit annual reports which specify the following:

a. the total VOC emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

b. the total emissions of each individual HAP in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

c. the total HAP emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

d. the total emissions of each individual HAP in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year; and

e. the total HAP emissions , in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year;

These reports shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

6. The permittee shall submit an annual report to the director the Ohio EPA, Central District Office in writing, of whether the operations of the source are consistent with the information regarding the operations that was used to conduct the modeling. The director may consider any significant departure from the operations of the source

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

described in the permit to install application that results in greater emissions than the emissions rate modeled to determine the ground level concentration as a modification and require the owner or operator to submit a permit to install application for the increased emissions. This report shall be submitted by January 31 of each year.

E. Testing Requirements

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

   a. Emission Limitations: **Use** of a flare system with a required minimum control efficiency of 98%, by weight, for VOC; **Volatile compound (VOC) emissions from the flare shall not exceed 1.66 tons per rolling, 12-month period. CO emissions shall not exceed 1.9 tons per rolling 12-month period**; and NOx emissions shall not exceed 1.11 tons per rolling, 12-month period.

   Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

   ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NOx, CO, and VOC.

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

   For NOx, Methods 1-4 and 7E of 40 CFR Part 60, Appendix A

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

   For VOC, Methods 1-4, 18 and 25 or 25A of 40 CFR Part 60, Appendix A or Method 320 of 40 CFR Part 63, Appendix A.

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

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

b. Emissions Limitation: **Volatile compound (VOC) emissions from the flare shall not exceed 1.66 tons per rolling, 12-month period. CO emissions shall not exceed 1.9 tons per rolling 12-month period**; and NOx emissions shall not exceed 1.1 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for Total HAPS and individual HAP.

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

For HAPS (for but not limited to, the compounds listed in the Midwest Scaling Protocol in Version 1.6 dated August 2004), Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

For individual HAP, Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

report, where warranted, with prior approval from the Ohio EPA, Central District Office.

d. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

e. Emission Limitation: Fugitive Volatile organic compound (VOC) emissions shall not exceed 1.09 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined by multiplying the uncontrolled emission rate of 0.075 pounds of VOC per thousand gallons loaded times the annual throughput of denatured ethanol product loaded times the assumed 2% leak rate for tank truck.

F. Miscellaneous Requirements

1. If required, compliance with the net heating value of the gas being combusted in the flare (shall be 300 BTU/SCF or greater) shall be determined by the method specified in Paragraph (P)(2) of OAC rule 3745-21-10.

2. If required, compliance with the designed and operated actual exit velocity of the flare (shall be less than 60 feed per second) shall be determined by the method specified in Paragraph (P)(3) of OAC rule 3745-21-10.

3. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (J002) - ethanol loadout rack to rail for denatured ethanol; equipped with flare (COEO2).

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Fugitive volatile organic compound (VOC) emissions shall not exceed 0.19 tons per rolling, 12-month period. Volatile compound (VOC) emissions from the stack shall not exceed 0.37 tons per rolling, 12-month period. NOx emissions shall not exceed 1.0 tons per rolling, 12-month period. CO emissions shall not exceed 1.6 tons per rolling, 12-month period. Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period. Total emissions for any individual HAP from emissions units B001-B003, J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period. See Section A.2.a.
OAC rule 3745-21-07(E)	See sections A.2.b-f.
OAC rule 3745-21-08(B)	See section A.2.g.

2. Additional Terms and Conditions

2.a Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

a. Use of a flare system with a required minimum control efficiency of 98%, by weight, for VOC.

2.b During any transfer of material through the loading rack, 100% of the vapors displaced from the delivery vessel shall be collected and vented to the flare.

2.c A means shall be provided to prevent liquid drainage from the loading device when it is not in use or to accomplish complete drainage before the loading device is disconnected.

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

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

2.f The vapor head space in the rail car's tank shall be evacuated through a solid vapor line then routed to the flare.

2.g The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by complying with the requirements established pursuant to OAC rule3745-21-07(E) 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 U.S. EPA approves the revision to OAC rule 3745-21-08, the requirements to satisfy "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

B. Operational Restrictions

1. The maximum annual ethanol throughput rate for this emission unit shall not exceed 115,800,000 gallons and the combined ethanol throughput rate for J001 and J002 shall not exceed 115.8 million gallons, based upon a rolling, 12-month summation of the loadout rates.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the ethanol loadout levels specified in the following tables:

a. For loadout to J002:

Month	Maximum Allowable Cumulative Ethanol Loadout (gallons)
1	9,650,000
1-2	19,300,000
1-3	28,950,000
1-4	38,600,000
1-5	48,250,000
1-6	57,900,000
1-7	67,500,000
1-8	77,200,000
1-9	86,850,000
1-10	96,500,000
1-11	106,150,000
1-12	115,800,000

b. For loadout to J001 and J002 combined:

Month	Maximum Allowable Cumulative Ethanol Loadout (gallons)
1	9,650,000
1-2	19,300,000
1-3	28,950,000
1-4	38,600,000
1-5	48,250,000
1-6	57,900,000
1-7	67,500,000
1-8	77,200,000
1-9	86,850,000
1-10	96,500,000
1-11	106,150,000
1-12	115,800,000

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual ethanol throughput rate limitations shall be based upon the rolling, 12-month summation of the J001 ethanol throughput rate and upon the rolling, 12-month summation of the J002 ethanol throughput rate.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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 pilot flame shall be present at all times the ethanol loading system is in operation 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 than 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 maintain monthly records of the following information for this emissions unit:

   a. the ethanol loadout rate to J001 for each month, in gallons;

   b. the ethanol loadout rate to J002 for each month, in gallons;

   c. the rolling, 12-month summation of NOx and CO emissions; and

   d. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of:

      i. the ethanol loadout rate to J001; and

      ii. the ethanol loadout rate to J002.

   During the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative ethanol loadout rate to J001 for each calendar month. During the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

permittee shall record the cumulative ethanol loadout rate to J002 for each calendar month.

2. The permittee shall properly install, operate, and maintain a device to continuously monitor the pilot flame when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall comply with the following monitoring and record keeping requirements on the flare controlling this emissions unit:

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

   b. the permittee shall maintain 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; and

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

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

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

4. The permittee shall record each time loading occurs and document when submerged or bottom loading is used.

5. The permittee shall maintain daily records of the amount of natural gas utilized for flare gas enrichment in scf per day.

6. The permittee shall maintain the following monthly records:

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

b. the rolling, 12-month summation of emissions of each individual HAP from this emissions unit, in tons.

c. the rolling, 12-month summation of total HAP emissions from this emissions unit, in tons.

d. the rolling, 12-month summation of emissions of each individual HAP from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005, in tons.

e. the rolling, 12-month summation of total HAP emissions from emissions units B001-B003, J001-J002, P010-P014, P022-P024 and T003-T005, in tons.

7. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

   Pollutant: Ethanol
   TLV (mg/m^3): 1884
   Maximum Hourly Emission Rate (lbs/hr): 5.74
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 449.32 (entire facility)
   MAGLC (ug/m^3): 790

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

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the following:

   a. the rolling, 12-month ethanol throughput rate limitations to either truck or rail; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable cumulative ethanol throughput rates to either truck or rail;

   b. the rolling, 12-month summation of NOx, CO, and VOC emissions.

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

   a. all monitored parameters (i.e., thermocouple or equivalent device and vent stream flow indicator);

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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;

d. all periods of time when the net heating value of the gas being combusted in the flare was below 300 Btu/scf; and

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

3. These quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

4. The permittee shall submit annual reports which specify the total NO_X and CO emissions from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

5. The permittee shall submit annual reports which specify the following:

a. the total VOC emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

b. the total emissions of each individual HAP in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

c. the total HAP emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

d. the total emissions of each individual HAP in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year; and

e. the total HAP emissions , in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year;

These reports shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

6. The permittee shall submit an annual report to the director the Ohio EPA, Central District Office in writing, of whether the operations of the source are consistent with the information regarding the operations that was used to conduct the modeling. The director may consider any significant departure from the operations of the source

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

described in the permit to install application that results in greater emissions than the emissions rate modeled to determine the ground level concentration as a modification and require the owner or operator to submit a permit to install application for the increased emissions. This report shall be submitted by January 31 of each year.

E. Testing Requirements

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

   a. Emission Limitations: **Use** of a flare system with a required minimum control efficiency of 98%, by weight, for VOC; **VOC emissions from the stack shall not exceed 0.37 tons per rolling 12-month period; CO emissions shall not exceed 1.6 tons per rolling 12-month period**; and NOx emissions shall not exceed 1.0 tons per rolling, 12-month period.

      Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

      ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NOx, CO, and VOC.

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

         For NOx, Methods 1-4 and 7E of 40 CFR Part 60, Appendix A

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

         For VOC, Methods 1-4, 18 and 25 or 25A of 40 CFR Part 60, Appendix A or Method 320 of 40 CFR Part 63, Appendix A.

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

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

b. Emissions Limitation: **VOC emissions from the stack shall not exceed 0.37 tons per rolling 12-month period; CO emissions shall not exceed 1.6 tons per rolling 12-month period**; and NOx emissions shall not exceed 1.0 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

i. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions units will be

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

operated, but not later than 180 days after initial startup of such emissions units. ;

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for Total HAPS and individual HAP.

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

For HAPS (for but not limited to, the compounds listed in the Midwest Scaling Protocol in Version 1.6 dated August 2004), Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

For individual HAP, Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

d. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

e. Emission Limitation: Fugitive volatile organic compound (VOC) emissions shall not exceed 0.19 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance shall be based upon the records required by C.6 above

F. Miscellaneous Requirements

1. If required, compliance with the net heating value of the gas being combusted in the flare (shall be 300 BTU/SCF or greater) shall be determined by the method specified in Paragraph (P)(2) of OAC rule 3745-21-10.

2. If required, compliance with the designed and operated actual exit velocity of the flare (shall be less than 60 feed per second) shall be determined by the method specified in Paragraph (P)(3) of OAC rule 3745-21-10.

3. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (P001) - P001 - grain receiving by rail

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Particulate emissions(PE) from the stack of the baghouse controlling emissions from this emissions unit shall not exceed 3.0 tons per rolling 12-month period. Combined Fugitive PE from P001 and P002 shall not exceed **4.0 tons per rolling 12-month period**. See A.2.d below. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1).
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-17-07(B)	See Section A.2.a below.
OAC rule 3745-17-08(B)	See Section A.2.b below.
OAC rule 3745-17-11(B)(1)	The emissions limitation specified by this rule are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(C). See Section A.2.e below.
40 CFR 60 Subpart DD	See Section A.2.c below.

2. Additional Terms and Conditions

2.a 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).

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

2.c 40 CFR Part 60, Subpart DD (Standards of Performance for Grain Elevators), is applicable to grain elevators with a permanent grain storage capacity greater than 2.5 million U.S. bushels. The permanent grain storage capacity of this facility is less than 2.5 million bushels. Therefore, 40 CFR Part 60, Subpart DD, is not applicable.

2.d Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3): Use of a baghouse with a maximum outlet concentration not to exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

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

B. Operational Restrictions

1. The maximum annual processing rate for this emissions unit shall not exceed 41,000,000 bushels of corn, based upon a rolling, 12-month summation of the corn processing rate.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the processing levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Corn Processing Rate(bushels)
1	3,416,666
1-2	6,833,332
1-3	10,249,998
1-4	13,666,664
1-5	17,083,330
1-6	20,499,996
1-7	23,916,662
1-8	27,333,328
1-9	30,749,994
1-10	34,166,660
1-11	37,583,326
1-12	41,000,000

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual corn processing limitation shall be based upon a rolling, 12-month summation of the number of bushels of corn processed.

2. The permittee shall operate the baghouse at all times when this 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, in inches of water, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across the baghouse on a continuous basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be established during the most recent emissions test that demonstrated the emissions unit to be in compliance or the baghouse pressure drop range shall be 2 to 6 inches of water until such testing is completed.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

This range is effective for the duration of this permit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The date and time of the visible emissions check and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

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

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

3. The permittee shall maintain monthly records of the rolling, 12-month summation of PE from the stack of the baghouse controlling emissions from this emissions unit, in tons.

4. The permittee shall maintain monthly records of the rolling, 12-month summation of fugitive PE from this emissions unit, in tons.

5. The permittee shall maintain daily records of the following information:

   a. the quantity of corn processed, in bushels, for each day; and

   b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the quantity of corn processed, in bushels.

   Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative corn processing rate, in bushels, for each calendar month.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the acceptable range;

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

3. The permittee shall submit annual reports which specify the total fugitive PE emissions from this emissions unit, in tons per rolling 12-month period for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

4. The permittee shall submit annual reports which specify the total PE emissions from the stack of the baghouse controlling emissions from this emissions unit, in tons per rolling 12-month period for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

5. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the quantity of corn processed; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable quantity of corn processed . These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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

   a. Emission Limitations: PE from the stack of the baghouse controlling emissions from this emissions unit, shall not exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

      Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

      ii. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PE.

      iii. The following test method(s) shall be employed to demonstrate compliance with the allowable emission rate(s) for PE: Methods 1-5 and 202 or Methods 1-4, 201A, and 202 of 40 CFR Part 60, Appendix A

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

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

      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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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

b. **Emissions Limitation: Particulate emissions(PE) from the stack of the baghouse controlling emissions from this emissions unit shall not exceed 3.0 tons per rolling 12-month period.**

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Combined Fugitive PE from P001 and P002 shall not exceed **4.0 tons per rolling 12-month period**.

Applicable Compliance Method: Compliance shall be calculated using AP-42 Table 9.9.1-1 (March 2003) for the fugitive grain receiving emissions and the following calculation:

Receiving Emissions = (total grain throughput / yr) * (emission factor) * (1 - capture efficiency) * (1 ton / 2000lbs)
Receiving Emissions = (1,148,000 tons grain/hr) * (0.035 lb/ton grain) * (1 - 80%) * (1 ton / 2000 lbs)
Receiving Emissions = 4.0 tons per year

d. Emissions Limitation: Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

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

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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 - (P002) - P002 - grain receiving by truck

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Particulate emissions(PE) from the stack of the baghouse controlling emissions from this emissions unit shall not exceed 3.0 tons per rolling 12-month period. Combined Fugitive PE from P001 and P002 shall not exceed **4.0 tons per rolling 12-month period**. See A.2.d below. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1).
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-17-07(B)	See Section A.2.a below.
OAC rule 3745-17-08(B)	See Section A.2.b below.
OAC rule 3745-17-11(B)(1)	The emissions limitation specified by this rule are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(C). See Section A.2.e below.
40 CFR 60 Subpart DD	See Section A.2.c below.

2. Additional Terms and Conditions

2.a 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).

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

2.c 40 CFR Part 60, Subpart DD (Standards of Performance for Grain Elevators), is applicable to grain elevators with a permanent grain storage capacity greater than 2.5 million U.S. bushels. The permanent grain storage capacity of this facility is less than 2.5 million bushels. Therefore, 40 CFR Part 60, Subpart DD, is not applicable.

2.d Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3): Use of a baghouse with a maximum outlet concentration not to exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

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

B. Operational Restrictions

1. The maximum annual processing rate for this emissions unit shall not exceed 41,000,000 bushels of corn, based upon a rolling, 12-month summation of the corn processing rate.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the processing levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Corn Processing Rate(bushels)
1	3,416,666
1-2	6,833,332
1-3	10,249,998
1-4	13,666,664
1-5	17,083,330
1-6	20,499,996
1-7	23,916,662
1-8	27,333,328
1-9	30,749,994
1-10	34,166,660
1-11	37,583,326
1-12	41,000,000

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual corn processing limitation shall be based upon a rolling, 12-month summation of the number of bushels of corn processed.

2. The permittee shall operate the baghouse at all times when this 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, in inches of water, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across the baghouse on a continuous basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be established during the most recent emissions test that demonstrated the emissions unit to be in compliance or the baghouse pressure drop range shall be 2 to 6 inches of water until such testing is completed.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

This range is effective for the duration of this permit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The date and time of the visible emissions check and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

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

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

3. The permittee shall maintain monthly records of the rolling, 12-month summation of PE from the stack of the baghouse controlling emissions from this emissions unit, in tons.

4. The permittee shall maintain monthly records of the rolling, 12-month summation of fugitive PE from this emissions unit, in tons, utilizing the following equation from AP-42 Table 9.9.1-1 (March 2003):

   Receiving Emissions = (total grain throughput / month) * (emission factor) * (1 - capture efficiency) * (1 ton / 2000lbs)

   where emission factor = [(0.0035 lb/ton grain) * (tons of grain received by hopper truck) + (0.18 lb/ton grain) * (tons of grain received by straight truck)] / (total tons of grain received)

5. The permittee shall maintain daily records of the following information:

   a. the quantity of corn processed, in bushels, for each day; and

   b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the quantity of corn processed, in bushels.

   Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative corn processing rate, in bushels, for each calendar month.

6. The permittee shall maintain monthly records of the following information:

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

a. the total tons of grain received;
b. the tons of grain received by straight truck; and
c. the tons of grain received by hopper truck.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the acceptable range;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

   These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

3. The permittee shall submit annual reports which specify the total fugitive PE emissions from this emissions unit, in tons per rolling 12-month period for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

4. The permittee shall submit annual reports which specify the total PE emissions from the stack of the baghouse controlling emissions from this emissions unit, in tons per rolling 12-month period for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

5. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the quantity of corn processed; and

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable quantity of corn processed . These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

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

   a. Emission Limitations: PE from the stack of the baghouse controlling emissions from this emissions unit, shall not exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

   Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

   ii. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PE.

   iii. The following test method(s) shall be employed to demonstrate compliance with the allowable emission rate(s) for PE: Methods 1-5 and 202 or Methods 1-4, 201A, and 202 of 40 CFR Part 60, Appendix A Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA; and

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

   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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

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

b. Emissions Limitation: Particulate emissions(PE) from the stack of the baghouse controlling emissions from this emissions unit shall not exceed 3.0 tons per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Combined Fugitive PE from P001 and P002 shall not exceed 4.0 tons per rolling 12-month period.

Applicable Compliance Method:

Compliance shall be determined by summing the monthly record keeping specified in Section C.4.

d. Emissions Limitation: Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

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

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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 - (P003) - P003 - material handling (3 conveyors with baghouses and grain silo with baghouse).

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	PE from the stacks of all baghouses controlling emissions from this emissions unit shall not exceed 1.1 tons per rolling 12-month period. See A.2.c below. The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1) and 3745-17-11(B)(1).
OAC rule 3745-17-11(B)(1)	The emissions limitation specified by this rule are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(C). See Section A.2.a below.
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
40 CFR 60 Subpart DD	See Section A.2.b below

2. Additional Terms and Conditions

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

2.b 40 CFR Part 60, Subpart DD (Standards of Performance for Grain Elevators), is applicable to grain elevators with a permanent grain storage capacity greater than 2.5 million U.S. bushels. The permanent grain storage capacity of this facility is less than 2.5 million bushels. Therefore, 40 CFR Part 60, Subpart DD, is not applicable.

2.c Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

a. Use of three baghouses, each with a maximum outlet concentration not to exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

B. Operational Restrictions

1. The maximum annual processing rate for this emissions unit shall not exceed 41,000,000 bushels of corn, based upon a rolling, 12-month summation of the corn processing rate.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the processing levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Corn Processing Rate(bushels)
1	3,416,666
1-2	6,833,332
1-3	10,249,998
1-4	13,666,664
1-5	17,083,330
1-6	20,499,996
1-7	23,916,662
1-8	27,333,328
1-9	30,749,994
1-10	34,166,660
1-11	37,583,326
1-12	41,000,000

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual corn processing limitation shall be based upon a rolling, 12-month summation of the number of bushels of corn processed.

2. The permittee shall operate the baghouses controlling the emissions from this emissions unit at all times when this emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop, in inches of water, across each of the baghouses during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across each of the baghouses on a continuous basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across each of the baghouses shall be established during the most recent emissions test that demonstrated the emissions units to be in compliance or the baghouse's pressure drop range shall be 2 to 6 inches of water until such testing is completed.

   This range is effective for the duration of this permit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stacks serving these emission units. The date and time of the visible emission checks and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations logs:

   a. the color of the emissions;

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

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

3. The permittee shall maintain monthly records of the rolling, 12-month summation of PE from this emissions unit, in tons.

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

a. the quantity of corn processed, in bushels, for each day; and

b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the quantity of corn processed, in bushels.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative corn processing rate, in bushels, for each calendar month.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time when the pressure drop across any of the baghouses was outside of the acceptable range;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from any of the baghouse stacks serving this emissions unit and (b) describe any corrective actions taken to eliminate

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

the visible particulate emissions. These reports shall be submitted to the Central District Office(CDO) by January 31 and July 31 of each year and shall cover the previous 6-month period.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

3. The permittee shall submit annual reports which specify the total PE emissions in tons per rolling 12-month period from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

4. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the quantity of corn processed; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable quantity of corn processed . These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

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

   a. Emission Limitations: PE from the stack of each of the baghouses controlling emissions from this emissions unit shall not exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf) .

      Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

      ii. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PE.

      iii. The following test method(s) shall be employed to demonstrate compliance with the allowable emission rate(s) for PE: Methods 1-5 and 202 or Methods 1-4, 201A, and 202 of 40 CFR Part 60, Appendix A

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

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

b. Emissions Limitation: PE from the stacks of the baghouses controlling emissions from this emissions unit shall not exceed 1.1 tons per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Visible particulate emissions from the stacks of the baghouses controlling emissions from this emission units shall not exceed 20% opacity, as a six-minute average.

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

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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 - (P004) - P004 - corn scalper

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	PE from the stack of the baghouse controlling emissions from this emissions unit shall not exceed 0.3 ton per rolling 12-month period. See A.2.c below. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1).
OAC rule 3745-17-11(B)(1)	The emissions limitation specified by this rule are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(C). See Section A.2.a below.
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-17-07(B)	See Section A.2.a below.
40 CFR 60 Subpart DD	See Section A.2.b below.

2. Additional Terms and Conditions

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

2.b 40 CFR Part 60, Subpart DD (Standards of Performance for Grain Elevators), is applicable to grain elevators with a permanent grain storage capacity greater than 2.5 million U.S. bushels. The permanent grain storage capacity of this facility is less than 2.5 million bushels. Therefore, 40 CFR Part 60, Subpart DD, is not applicable.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

2.c Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

a. Use of a baghouse with a maximum outlet concentration not to exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

B. Operational Restrictions

1. The maximum annual processing rate for this emissions unit shall not exceed 41,000,000 bushels of corn, based upon a rolling, 12-month summation of the corn processing rate.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the processing levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Corn Processing Rate(bushels)
1	3,416,666
1-2	6,833,332
1-3	10,249,998
1-4	13,666,664
1-5	17,083,330
1-6	20,499,996
1-7	23,916,662
1-8	27,333,328
1-9	30,749,994
1-10	34,166,660
1-11	37,583,326
1-12	41,000,000

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual corn processing limitation shall be based upon a rolling, 12-month summation of the number of bushels of corn processed.

2. The permittee shall operate the baghouse controlling the emissions from this emissions unit at all times when this emissions unit is in operation.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop, in inches of water, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across the baghouse on a continuous basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop reading immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be established during the most recent emissions test that demonstrated the emissions units to be in compliance or the baghouse pressure drop range shall be 2 to 6 inches of water until such testing is completed.

   This range is effective for the duration of this permit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emission unit. The date and time of the visible emission checks and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations logs:

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

a. the color of the emissions;

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

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

3. The permittee shall maintain monthly records of the rolling, 12-month summation of PE from this emissions unit, in tons.

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

a. the quantity of corn processed, in bushels, for each day; and

b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the quantity of corn processed, in bushels.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative corn processing rate, in bushels, for each calendar month.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time when the pressure drop across the baghouse was outside of the acceptable range;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Central District Office(CDO) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit annual reports which specify the total PE emissions in tons per rolling 12-month period from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

4. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the quantity of corn processed; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable quantity of corn processed . These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

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

   a. Emission Limitations: PE from the stack of the baghouse controlling emissions from this emissions unit, shall not exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

      Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

      ii. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PE.

      iii. The following test method(s) shall be employed to demonstrate compliance with the allowable emission rate(s) for PE: Methods 1-5 and 202 or Methods 1-4, 201A, and 202 of 40 CFR Part 60, Appendix A

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

b. Emissions Limitation: PE from the stack of the baghouse controlling emissions from this emissions unit shall not exceed 0.3 ton per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Visible particulate emissions from the stack of the baghouse controlling emissions from this emission units shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method: If required, compliance shall be determined through visible emission observations performed in accordance with 40 CFR

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Part 60, Appendix A, Method 9 and the procedures specified in OAC rule 3745-17-03(B)(1).

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (P005) - P005 - material handling/transport (elevator legs, conveyors).

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	PE from the stack of the baghouse controlling emissions from this emissions unit shall not exceed 0.3 ton per rolling 12-month period. See A.2.a below. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1).
OAC rule 3745-17-11(B)(1)	The emissions limitation specified by this rule are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(C). See Section A.2.c below.
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
40 CFR 60 Subpart DD	See Section A.2.b below.

2. Additional Terms and Conditions

2.a Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

a. Use of a baghouse with a maximum outlet concentration not to exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

2.b 40 CFR Part 60, Subpart DD (Standards of Performance for Grain Elevators), is applicable to grain elevators with a permanent grain storage capacity greater than 2.5 million U.S. bushels. The permanent grain storage capacity of this facility is less than 2.5 million bushels. Therefore, 40 CFR Part 60, Subpart DD, is not applicable.

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

B. Operational Restrictions

1. The maximum annual processing rate for this emissions unit shall not exceed 41,000,000 bushels of corn, based upon a rolling, 12-month summation of the corn processing rate.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the processing levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Corn Processing Rate(bushels)
1	3,416,666
1-2	6,833,332
1-3	10,249,998
1-4	13,666,664
1-5	17,083,330
1-6	20,499,996
1-7	23,916,662
1-8	27,333,328
1-9	30,749,994
1-10	34,166,660
1-11	37,583,326
1-12	41,000,000

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual corn processing limitation shall be based upon a rolling, 12-month summation of the number of bushels of corn processed.

2. The permittee shall operate the baghouse controlling the emissions from this emissions unit at all times when this emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop, in inches of water, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across the baghouse on a continuous basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop reading immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be established during the most recent emissions test that demonstrated the emissions units to be in compliance or the baghouse pressure drop range shall be 2 to 6 inches of water until such testing is completed.

   This range is effective for the duration of this permit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emission unit. The date and time of the visible emission checks and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations logs:

   a. the color of the emissions;

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

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

3. The permittee shall maintain monthly records of the rolling, 12-month summation of PE from this emissions unit, in tons.

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

a. the quantity of corn processed, in bushels, for each day; and

b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the quantity of corn processed, in bushels.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative corn processing rate, in bushels, for each calendar month.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time when the pressure drop across the baghouse was outside of the acceptable range;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

particulate emissions. These reports shall be submitted to the Central District Office(CDO) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit annual reports which specify the total PE emissions in tons per rolling 12-month period from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

4. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the quantity of corn processed; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable quantity of corn processed . These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

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

   a. Emission Limitations: PE from the stack of the baghouse controlling emissions from this emissions unit, shall not exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

      Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

      ii. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PE.

      iii. The following test method(s) shall be employed to demonstrate compliance with the allowable emission rate(s) for PE: Methods 1-5 and 202 or Methods 1-4, 201A, and 202 of 40 CFR Part 60, Appendix A.

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

b. Emissions Limitation: PE from the stack of the baghouse controlling emissions from this emissions unit shall not exceed 0.3 ton per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Visible particulate emissions from the stack of the baghouse controlling emissions from this emission units shall not exceed 20% opacity, as a six-minute average.

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

F. Miscellaneous Requirements

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (P006) - P006 - hammermill no.1 (EU001)

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	PE from emissions units P006-P009 shall not exceed 1.1 ton per rolling 12-month period. See A.2.a below. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1).
OAC rule 3745-17-11(B)(1)	The emission limitation specified in this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(C). See A.2.b below.
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

a. Use of a baghouse with a maximum outlet concentration not to exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

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

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

B. Operational Restrictions

1. The permittee shall operate the baghouse controlling emissions from this emissions unit
at all times when this 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, in inches of water, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across the baghouse on a continuous basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be established during the most recent emissions test that demonstrated the emissions unit to be in compliance or the baghouse pressure drop range shall be 2 to 6 inches of water until such testing is completed.

   This range is effective for the duration of this permit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The date and time of the visible emissions check and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

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

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

3. The permittee shall maintain monthly records of the rolling, 12-month summation of PE from the stack of the baghouse controlling emissions from this emissions unit, in tons.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the acceptable range;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

   These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

3. The permittee shall submit annual reports which specify the total PE emissions from the stack of the baghouse controlling emissions from this emissions unit, in tons per rolling 12-month period for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

E. Testing Requirements

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

   a. Emission Limitations: Particulate emissions (PE) from the stack of the baghouse controlling emissions from this emissions unit, shall not exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

   Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

   ii. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PE.

   iii. The following test method(s) shall be employed to demonstrate compliance with the allowable emission rate(s) for PE: Methods 1-5 and 202 or Methods 1-4, 201A, and 202 of 40 CFR Part 60, Appendix A.

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

   iv. The test(s) shall be conducted while emissions units P006-P009 are operating at or near their maximum capacity, unless otherwise specified or approved by the Ohio EPA Central District Office.

   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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

b. Emissions Limitation: PE from emissions units P006-P009 shall not exceed 1.1 ton per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Visible particulate emissions from the stack of the baghouse controlling emissions from this emission units shall not exceed 20% opacity, as a six-minute average.

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

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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 - (P007) - P007 - hammermill no.2 (EU002)

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	PE from emissions units P006-P009 shall not exceed 1.1 ton per rolling 12-month period. See A.2.a below. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1).
OAC rule 3745-17-11(B)(1)	The emission limitation specified in this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(C). See A.2.b below.
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

a. Use of a baghouse with a maximum outlet concentration not to exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

B. Operational Restrictions

1. The permittee shall operate the baghouse controlling emissions from this emissions unit
at all times when this 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, in inches of water, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across the baghouse on a continuous basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be established during the most recent emissions test that demonstrated the emissions unit to be in compliance or the baghouse pressure drop range shall be 2 to 6 inches of water until such testing is completed.

   This range is effective for the duration of this permit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The date and time of the visible emissions check and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

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

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

3. The permittee shall maintain monthly records of the rolling, 12-month summation of PE from the stack of the baghouse controlling emissions from this emissions unit, in tons.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the acceptable range;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

   These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

3. The permittee shall submit annual reports which specify the total PE emissions from the stack of the baghouse controlling emissions from this emissions unit, in tons per rolling 12-month period for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

E. Testing Requirements

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

   a. Emission Limitations: Particulate emissions (PE) from the stack of the baghouse controlling emissions from this emissions unit, shall not exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

   Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

   ii. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PE.

   iii. The following test method(s) shall be employed to demonstrate compliance with the allowable emission rate(s) for PE: Methods 1-5 and 202 or Methods 1-4, 201A, and 202 of 40 CFR Part 60, Appendix A.

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

   iv. The test(s) shall be conducted while emissions units P006-P009 are operating at or near their maximum capacity, unless otherwise specified or approved by the Ohio EPA Central District Office.

   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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

b. Emissions Limitation: PE from emissions units P006-P009 shall not exceed 1.1 ton per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Visible particulate emissions from the stack of the baghouse controlling emissions from this emission units shall not exceed 20% opacity, as a six-minute average.

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

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (P008) - P008 - hammermill no.3 (EU003)

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	PE from emissions units P006-P009 shall not exceed 1.1 ton per rolling 12-month period. See A.2.a below. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1).
OAC rule 3745-17-11(B)(1)	The emission limitation specified in this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(C). See A.2.b below.
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

a. Use of a baghouse with a maximum outlet concentration not to exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

B. Operational Restrictions

1. The permittee shall operate the baghouse controlling emissions from this emissions unit
at all times when this 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, in inches of water, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across the baghouse on a continuous basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be established during the most recent emissions test that demonstrated the emissions unit to be in compliance or the baghouse pressure drop range shall be 2 to 6 inches of water until such testing is completed.

   This range is effective for the duration of this permit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The date and time of the visible emissions check and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

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

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

3. The permittee shall maintain monthly records of the rolling, 12-month summation of PE from the stack of the baghouse controlling emissions from this emissions unit, in tons.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the acceptable range;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

   These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

3. The permittee shall submit annual reports which specify the total PE emissions from the stack of the baghouse controlling emissions from this emissions unit, in tons per rolling 12-month period for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

E. Testing Requirements

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

   a. Emission Limitations: Particulate emissions (PE) from the stack of the baghouse controlling emissions from this emissions unit, shall not exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

      Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

      ii. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PE.

      iii. The following test method(s) shall be employed to demonstrate compliance with the allowable emission rate(s) for PE: Methods 1-5 and 202 or Methods 1-4, 201A, and 202 of 40 CFR Part 60, Appendix A.

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

      iv. The test(s) shall be conducted while emissions units P006-P009 are operating at or near their maximum capacity, unless otherwise specified or approved by the Ohio EPA Central District Office.

      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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

b. Emissions Limitation: PE from emissions units P006-P009 shall not exceed 1.1 ton per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Visible particulate emissions from the stack of the baghouse controlling emissions from this emission units shall not exceed 20% opacity, as a six-minute average.

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

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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 - (P009) - P0009 - hammermill no.4 (EU004)

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	PE from emissions units P006-P009 shall not exceed 1.1 ton per rolling 12-month period. See A.2.a below. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1).
OAC rule 3745-17-11(B)(1)	The emission limitation specified in this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(C). See A.2.b below.
OAC rule 3745-17-07(A)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

2.a Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

a. Use of a baghouse with a maximum outlet concentration not to exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

B. Operational Restrictions

1. The permittee shall operate the baghouse controlling emissions from this emissions unit
at all times when this 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, in inches of water, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across the baghouse on a continuous basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be established during the most recent emissions test that demonstrated the emissions unit to be in compliance or the baghouse pressure drop range shall be 2 to 6 inches of water until such testing is completed.

   This range is effective for the duration of this permit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The date and time of the visible emissions check and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the color of the emissions;

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

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

3. The permittee shall maintain monthly records of the rolling, 12-month summation of PE from the stack of the baghouse controlling emissions from this emissions unit, in tons.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the acceptable range;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

   These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

3. The permittee shall submit annual reports which specify the total PE emissions from the stack of the baghouse controlling emissions from this emissions unit, in tons per rolling 12-month period for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

E. Testing Requirements

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

   a. Emission Limitations: Particulate emissions (PE) from the stack of the baghouse controlling emissions from this emissions unit, shall not exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

   Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

   ii. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PE.

   iii. The following test method(s) shall be employed to demonstrate compliance with the allowable emission rate(s) for PE: Methods 1-5 and 202 or Methods 1-4, 201A, and 202 of 40 CFR Part 60, Appendix A.

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

   iv. The test(s) shall be conducted while emissions units P006-P009 are operating at or near their maximum capacity, unless otherwise specified or approved by the Ohio EPA Central District Office.

   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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

b. Emissions Limitation: PE from emissions units P006-P009 shall not exceed 1.1 ton per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Visible particulate emissions from the stack of the baghouse controlling emissions from this emission units shall not exceed 20% opacity, as a six-minute average.

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

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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 - (P010) - P010 - cooking and mash formation- (mixer, slurry tanks, cook tubes, flash tanks, liquification tanks) with thermal oxidizer.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

OAC rule 3745-31-05(C)	Volatile Organic Compound emissions from emissions units P010, P011, P013, and P014 shall not exceed 1.0 tons per rolling, 12-month period. Particulate emissions from emissions units P010, P011, P013, and P014 shall not exceed 0.3 ton per rolling, 12-month period. Sulfur dioxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.1 ton per rolling, 12-month period. Nitrogen Oxides emissions from emissions units P010,P011,P013 and P014 shall not exceed 2.2 tons per rolling, 12-month period. Carbon monoxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 3.7 tons per rolling, 12-month period. Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period. Total emissions for any individual HAP from emissions units B001-B003, J001-J002, P010-P014,P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-08(B), OAC rule 3745-21-09(DD) and 40 CFR Part 60, Subpart VV. See Section A.2.a below
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity as a six-minute average.
OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(C).
OAC rule 3745-18-06	See Section A.2.b below
OAC rule 3745-21-08(B)	See Section A.2.c below
OAC rule 3745-21-09(DD)	See the requirements for emissions unit P801.
40 CFR Part 60, Subpart VV	See the requirements for emissions unit P801.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

2. Additional Terms and Conditions

2.a The rolling 12-month allowable emission rates are based on the annual production of 115,800,000 gallons of denatured ethanol.

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

2.c The permittee has satisfied 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 permittee shall control VOC emissions from this emissions unit through the use of a Thermal Oxidizer with a minimum control efficiency of 98%.

2.e The permittee shall maintain enclosures and vent all the emissions to the thermal oxidizers to ensure compliance.

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

2.g 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.h This emissions unit includes the mixer, two flash vessels, slurry tank, jet cooker, cooker, liquefaction tank, barometric condenser, two vacuum pumps, cooler and ancillary equipment.

B. Operational Restrictions

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

1. The permittee shall burn only natural gas in the thermal oxidizer controlling emissions from this emissions unit.

2. The maximum annual ethanol production rate for this emissions unit shall not exceed 115,800,000 gallons, based upon a rolling, 12-month summation of the ethanol production rate.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Ethanol Production Rate(gallons)
1	19,300,000
1-2	38,600,000
1-3	57,900,000
1-4	77,200,000
1-5	96,500,000
1-6	115,800,000
1-7	115,800,000
1-8	115,800,000
1-9	115,800,000
1-10	115,800,000
1-11	115,800,000
1-12	115,800,000

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual ethanol production limitation shall be based upon a rolling, 12-month summation of the number of gallons of ethanol produced.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

C. Monitoring and/or Recordkeeping Requirements

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

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the combustion temperature, in degrees Fahrenheit, within the thermal oxidizer during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the combustion temperature, in degrees Fahrenheit, within the thermal oxidizer on a daily basis.

   Whenever the monitored value for the combustion temperature deviates from the value specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment to the acceptable value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the combustion temperature reading immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable value for the average combustion temperature within the thermal oxidizer, for all 3-hour blocks of time, when the emissions unit was in operation, shall not be more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance or the minimum average combustion temperature within the thermal oxidizer recommended by the thermal oxidizer manufacturer until such testing is completed.

   This value is effective for the duration of this permit. In addition, approved revisions to the value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

3. The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The date and time of the visible emissions check and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and color of the emissions;

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

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

4. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

   Pollutant: Acetaldehyde
   TLV (mg/m^3): 33.20
   Maximum Hourly Emission Rate (lbs/hr): 0.28
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 92.74 (entire facility)
   MAGLC (ug/m^3): 790

   Pollutant: Ethyl Acetate
   TLV (mg/m^3): 1441
   Maximum Hourly Emission Rate (lbs/hr): 1.52
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 469.26(entire facility)
   MAGLC (ug/m^3): 34,317

   Pollutant: Ethanol
   TLV (mg/m^3): 1884
   Maximum Hourly Emission Rate (lbs/hr): 0.58
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 449.32 (entire facility)
   MAGLC (ug/m^3): 44,863

   Pollutant: N-Propanol
   TLV (mg/m^3): 491.53

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Maximum Hourly Emission Rate (lbs/hr): 0.06
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 18.35 (entire facility)
MAGLC (ug/m^3): 11,703

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

   a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

   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.).

6. 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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

7. The permittee shall maintain daily records of the following information:

   a. the quantity of ethanol produced, in gallons, for each day; and

   b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the quantity of ethanol produced, in gallons.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative ethanol production rate, in gallons, for each calendar month.

8. The permittee shall maintain the following monthly records:

   a. the rolling, 12-month summation of CO emissions from emissions units P010, P011, P013 and P014, in tons.

   b. the rolling, 12-month summation of SO2 emissions from emissions units P010, P011, P013 and P014, in tons.

   c. the rolling, 12-month summation of NOx emissions from emissions units P010, P011, P013 and P014, in tons.

   d. the rolling, 12-month summation of PE emissions from emissions units P010, P011, P013 and P014, in tons.

9. The permittee shall maintain the following monthly records:

   a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

   b. the rolling, 12-month summation of emissions of each individual HAP from this emissions unit, in tons.

   c. the rolling, 12-month summation of total HAP emissions from this emissions unit, in tons.

   d. the rolling, 12-month summation of emissions of each individual HAP from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005, in tons.

   e. the rolling, 12-month summation of total HAP emissions from emissions units B001-B003, J001-J002, P010-P014, P022-P024 and T003-T005, in tons.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in the emissions unit. These reports shall be submitted to the Ohio EPA, Central District Office within 30 days after the deviation occurs.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the combustion temperature within the thermal oxidizer was not equal to the acceptable value;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the combustion temperature into compliance with the acceptable value, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

   These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

4. The permittee shall submit an annual report to the Ohio EPA, Central District Office in writing, of whether the operations of the source are consistent with the information regarding the operations that was used to conduct the modeling. The director may consider any significant departure from the operations of the source described in the permit to install application that results in greater emissions than the emissions rate modeled to determine the ground level concentration as a modification and require the owner or operator to submit a permit to install application for the increased emissions.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

6. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitations. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

7. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the quantity of ethanol produced; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable quantity of ethanol produced . These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

8. The permittee shall submit annual reports which specify the following:

   a. the total VOC emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   b. the total emissions of each individual HAP in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   c. the total HAP emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   d. the total emissions of each individual HAP in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year; and

   e. the total HAP emissions , in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year;

   These reports shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

E. Testing Requirements

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

   a. Emission Limitations: The permittee shall control VOC emissions from this emissions unit through the use of a Thermal Oxidizer with a minimum control efficiency of 98%; Particulate emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.3 ton per rolling, 12-month period. Sulfur dioxide

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.1 ton per rolling, 12-month period. Nitrogen Oxides emissions from emissions units P010,P011,P013 and P014 shall not exceed 2.2 tons per rolling, 12-month period. Carbon monoxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 3.7 tons per rolling, 12-month period.

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NOx, CO, VOC, SO2 and PE and to determine the overall control efficiency of the control equipment serving this emissions unit.

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

For PE,

Methods 1-5 and 202 or Methods 1-4, 201A, and 202 of 40 CFR Part 60, Appendix A

For NOx, Methods 1-4 and 7E of 40 CFR Part 60, Appendix A

For SO2, Methods 1-4 and 6C of 40 CFR Part 60, Appendix A

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

For VOC, Methods 1-4, 18 and 25 or 25A of 40 CFR Part 60, Appendix A or Method 320 of 40 CFR Part 63, Appendix A.

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

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

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

b. Emissions Limitation: The permittee shall control VOC emissions from this emissions unit through the use of a Thermal Oxidizer with a minimum control efficiency of 98%; Particulate emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.3 ton per rolling, 12-month period. Sulfur dioxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.1 ton per rolling, 12-month period. Nitrogen Oxides emissions from emissions units P010,P011,P013 and P014 shall not exceed 2.2 tons per rolling, 12-month period. Carbon monoxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 3.7 tons per rolling, 12-month period. Volatile Organic Compound emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.8 tons shall per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Visible PE shall not exceed 20% opacity, as a six-minute average

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

d. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for Total HAPS and individual HAP.

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

For HAPS (for but not limited to, the compounds listed in the Midwest Scaling Protocol in Version 1.6 dated August 2004), Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

For individual HAP, Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

e. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (P011) - P011 - pre-fermenters (yeast conditioning vessels) with wet scrubber and thermal oxidizer

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Volatile Organic Compound emissions from emissions units P010, P011, P013, and P014 shall not exceed 1.0 tons shall per rolling, 12-month period. Particulate emissions from emissions units P010, P011, P013, and P014 shall not exceed 0.3 ton per rolling, 12-month period. Sulfur dioxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.1 ton per rolling, 12-month period. Nitrogen Oxides emissions from emissions units P010,P011,P013 and P014 shall not exceed 2.2 tons per rolling, 12-month period. Carbon monoxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 3.7 tons per rolling, 12-month period. Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period. Total emissions for any individual HAP from emissions units B001-B003, J001-J002, P010-P014,P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-08(B), OAC rule 3745-21-09(DD) and 40 CFR Part 60, Subpart VV. See Section A.2.a.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity as a six-minute average.
OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(C).
OAC rule 3745-18-06	See Section A.2.b below.
OAC rule 3745-21-08(B)	See Section A.2.c below.
OAC rule 3745-21-09(DD)	See the requirements for emissions unit P801.
40 CFR Part 60, Subpart VV	See the requirements for emissions unit P801.

2. Additional Terms and Conditions

2.a The rolling 12-month allowable emission rates are based on the annual production of 115,800,000 gallons of denatured ethanol.

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

2.c The permittee has satisfied 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 permittee shall control VOC emissions from this emissions unit through the use of a Thermal Oxidizer with a minimum control efficiency of 98%.

2.e The permittee shall maintain enclosures and vent all the emissions to the thermal oxidizers to ensure compliance.

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

2.g 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).

B. Operational Restrictions

1. The permittee shall burn only natural gas in the thermal oxidizer controlling emissions from this emissions unit.

2. The maximum annual ethanol production rate for this emissions unit shall not exceed 115,800,000 gallons, based upon a rolling, 12-month summation of the ethanol production rate.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Ethanol Production Rate(gallons)
1	19,300,000
1-2	38,600,000
1-3	57,900,000
1-4	77,200,000
1-5	96,500,000
1-6	115,800,000
1-7	115,800,000
1-8	115,800,000
1-9	115,800,000
1-10	115,800,000
1-11	115,800,000
1-12	115,800,000

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual ethanol production limitation shall be based upon a rolling, 12-month summation of the number of gallons of ethanol produced.

3. The permittee shall operate the wet scrubber at all times this emissions unit is in operation.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

C. Monitoring and/or Recordkeeping Requirements

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

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the combustion temperature, in degrees Fahrenheit, within the thermal oxidizer during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the combustion temperature, in degrees Fahrenheit, within the thermal oxidizer on a daily basis.

   Whenever the monitored value for the combustion temperature deviates from the value specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment to the acceptable value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the combustion temperature reading immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable value for the average combustion temperature within the thermal oxidizer, for all 3-hour blocks of time, when the emissions unit was in operation, shall not be more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance or the minimum average combustion temperature within the thermal oxidizer recommended by the thermal oxidizer manufacturer until such testing is completed.

   This value is effective for the duration of this permit. In addition, approved revisions to the value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

3. The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The date and time of the visible emissions check and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and color of the emissions;

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

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

4. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

   Pollutant: Acetaldehyde
   TLV (mg/m^3): 33.20
   Maximum Hourly Emission Rate (lbs/hr): 0.26
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 92.74 (entire facility)
   MAGLC (ug/m^3): 790

   Pollutant: Ethyl Acetate
   TLV (mg/m^3): 1441
   Maximum Hourly Emission Rate (lbs/hr): 0.01
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 469.26(entire facility)
   MAGLC (ug/m^3): 34,317

   Pollutant: Ethanol
   TLV (mg/m^3): 1884
   Maximum Hourly Emission Rate (lbs/hr): 0.18
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 449.32 (entire facility)
   MAGLC (ug/m^3): 44,863

5. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

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.).

6. 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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

7. The permittee shall maintain daily records of the following information:

a. the quantity of ethanol produced, in gallons, for each day; and

b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the quantity of ethanol produced, in gallons.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative ethanol production rate, in gallons, for each calendar month.

8. The permittee shall maintain the following monthly records:

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

a. the rolling, 12-month summation of CO emissions from emissions units P010, P011, P013 and P014, in tons.

b. the rolling, 12-month summation of SO2 emissions from emissions units P010, P011, P013 and P014, in tons.

c. the rolling, 12-month summation of NOx emissions from emissions units P010, P011, P013 and P014, in tons.

d. the rolling, 12-month summation of PE emissions from emissions units P010, P011, P013 and P014, in tons.

9. The permittee shall maintain the following monthly records:

a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

b. the rolling, 12-month summation of emissions of each individual HAP from this emissions unit, in tons.

c. the rolling, 12-month summation of total HAP emissions from this emissions unit, in tons.

d. the rolling, 12-month summation of emissions of each individual HAP from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005, in tons.

e. the rolling, 12-month summation of total HAP emissions from emissions units B001-B003, J001-J002, P010-P014, P022-P024 and T003-T005, in tons.

10. The permittee shall properly install, operate, and maintain equipment to monitor the water flow rate, in gallons per minute, and the pressure drop across the scrubber, in inches of water, during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the water flow rate, in gallons per minute, and the pressure drop across the scrubber, in inches of water on a continuous basis.

Whenever the monitored value for the water flow rate and/or pressure drop deviates from the values specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable values specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the water flow rate and pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable value for the pressure drop across the scrubber is the minimum scrubber pressure drop established during the most recent emission test that demonstrated the emissions unit to be in compliance or the minimum scrubber pressure drop recommended by the scrubber manufacturer until such testing is completed.

The acceptable value for the water flow rate is the minimum water flow rate established during the most recent emission test that demonstrated the emissions unit to be in compliance or as recommended by the scrubber manufacturer until such testing is completed.

These values are effective for the duration of this permit. In addition, approved revisions to the values will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in the emissions unit. These reports shall be submitted to the Ohio EPA, Central District Office within 30 days after the deviation occurs.

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the combustion temperature within the thermal oxidizer was not equal to the acceptable value;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the combustion temperature into compliance with the acceptable value, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

4. The permittee shall submit an annual report to the Ohio EPA, Central District Office in writing, of whether the operations of the source are consistent with the information regarding the operations that was used to conduct the modeling. The director may consider any significant departure from the operations of the source described in the permit to install application that results in greater emissions than the emissions rate modeled to determine the ground level concentration as a modification and require the owner or operator to submit a permit to install application for the increased emissions.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

6. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitations. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

7. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the quantity of ethanol produced; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable quantity of ethanol produced . These reports shall be submitted in accordance with the

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

8. The permittee shall submit annual reports which specify the following:

   a. the total VOC emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   b. the total emissions of each individual HAP in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   c. the total HAP emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   d. the total emissions of each individual HAP in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year; and

   e. the total HAP emissions , in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year;

   These reports shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

9. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the scrubber water flow rate and pressure drop was not equal to the acceptable values;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the scrubber water flow rate and pressure drop into compliance with the acceptable values, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

E. Testing Requirements

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

   a. Emission Limitations: The permittee shall control VOC emissions from this emissions unit through the use of a Thermal Oxidizer with a minimum control efficiency of 98%; Particulate emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.3 ton per rolling, 12-month period. Sulfur dioxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.1 ton per rolling, 12-month period. Nitrogen Oxides emissions from emissions units P010,P011,P013 and P014 shall not exceed 2.2 tons per rolling, 12-month period. Carbon monoxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 3.7 tons per rolling, 12-month period.

   Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

   ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NOx, CO, VOC, SO2 and PE and to determine the overall control efficiency of the control equipment serving this emissions unit.

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

   For PE,

   Methods 1-5 and 202 or Methods 1-4, 201A, and 202 of 40 CFR Part 60, Appendix A

   For NOx, Methods 1-4 and 7E of 40 CFR Part 60, Appendix A

   For SO2, Methods 1-4 and 6C of 40 CFR Part 60, Appendix A

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

   For VOC, Methods 1-4, 18 and 25 or 25A of 40 CFR Part 60, Appendix A or Method 320 of 40 CFR Part 63, Appendix A.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

b. Emissions Limitation: The permittee shall control VOC emissions from this emissions unit through the use of a Thermal Oxidizer with a minimum control efficiency of 98%; Particulate emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.3 ton per rolling, 12-month period. Sulfur dioxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.1 ton per rolling, 12-month period. Nitrogen Oxides emissions from emissions units P010,P011,P013 and P014 shall not exceed 2.2 tons per rolling, 12-month period. Carbon monoxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 3.7 tons per rolling, 12-month period. Volatile Organic Compound emissions from emissions units P010,P011,P013 and P014 shall not exceed 1.0 tons shall per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Visible PE shall not exceed 20% opacity, as a six-minute average

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

d. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for Total HAPS and individual HAP.

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

For HAPS (for but not limited to, the compounds listed in the Midwest Scaling Protocol in Version 1.6 dated August 2004), Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

For individual HAP, Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

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

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

e. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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 - (P012) - P012 - fermentation (fermenters, beerwell).

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measure
OAC rule 3745-31-05(A)(3)	Volatile organic compound (VOC) emissions shall not exceed 8.4 lbs/hr. Acetaldehyde emissions shall not exceed 0.74 lbs/hr. The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(C), OAC rule 3745-21-09(DD) and 40 CFR Part 60, Subpart VV.
OAC rule 3745-31-05(C)	VOC emissions shall not exceed 37.0 tons per rolling 12-month period. Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period. Total emissions for any individual HAP from emissions units B001-B003, J001-J002, P010-P014,P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period.
OAC rule 3745-21-09(DD)	See the requirements for emissions unit P801.
40 CFR Part 60, Subpart VV	See the requirements for emissions unit P801.

2. Additional Terms and Conditions

2.a The rolling 12-month allowable emission rates are based on the annual production of 115,800,000 gallons of denatured ethanol.

2.b The permittee shall control VOC emissions from this emissions unit through the use of a high efficiency wet scrubber (CO_2 scrubber) with a minimum VOC control efficiency of 99.5%.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

2.c **The permittee shall implement a fugitive leak detection and repair program (LDAR) for all the miscellaneous process equipment associated with this emissions unit.** 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).

B. Operational Restrictions

1. The permittee shall operate the high efficiency wet scrubber (CO_2 scrubber) at all times this emissions unit is in operation.

2. The permittee shall employ sodium bisulfite addition at all times that the wet scrubber is in operation.

3. The permittee shall maintain the minimum scrubber bottom liquid temperature described below at all times that the wet scrubber is in operation.

4. The permittee shall maintain the minimum scrubber exit vapor temperature at all times that the wet scrubber is in operation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall properly install, operate, and maintain equipment to monitor the water flow rate, in gallons per minute, and the pressure drop across the scrubber, in inches of water, during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the water flow rate, in gallons per minute, and the pressure drop across the scrubber, in inches of water on a continuous basis.

   Whenever the monitored value for the water flow rate and/or pressure drop deviates from the values specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

equipment within the acceptable values specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the water flow rate and pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable value for the pressure drop across the scrubber is the minimum scrubber pressure drop established during the most recent emission test that demonstrated the emissions unit to be in compliance or the minimum scrubber pressure drop recommended by the scrubber manufacturer until such testing is completed.

The acceptable value for the water flow rate is the minimum water flow rate established during the most recent emission test that demonstrated the emissions unit to be in compliance or as recommended by the scrubber manufacturer until such testing is completed.

These values are effective for the duration of this permit. In addition, approved revisions to the values will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

2. The permittee shall maintain the following monthly records:

   a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

   b. the rolling, 12-month summation of emissions of each individual HAP from this emissions unit, in tons.

   c. the rolling, 12-month summation of total HAP emissions from this emissions unit, in tons.

   d. the rolling, 12-month summation of emissions of each individual HAP from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005, in tons.

   e. the rolling, 12-month summation of total HAP emissions from emissions units B001-B003, J001-J002, P010-P014, P022-P024 and T003-T005, in tons.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

3. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

   Pollutant: Acetaldehyde
   TLV (mg/m^3): 33.20
   Maximum Hourly Emission Rate (lbs/hr): 0.74
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 92.74 (entire facility)
   MAGLC (ug/m^3): 790

   Pollutant: Ethyl Acetate
   TLV (mg/m^3): 1441
   Maximum Hourly Emission Rate (lbs/hr): 4.95
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 469.26 (entire facility)
   MAGLC (ug/m^3): 34,317

   Pollutant: N-Propanol
   TLV (mg/m^3): 491.53
   Maximum Hourly Emission Rate (lbs/hr): 0.19
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 18.35 (entire facility)
   MAGLC (ug/m^3): 11,703

   Pollutant: Ethanol
   TLV (mg/m^3): 1884
   Maximum Hourly Emission Rate (lbs/hr): 2.31
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 449.32 (entire facility)
   MAGLC (ug/m^3): 790

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

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.).

5. 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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

6. The permittee shall properly install, operate, and maintain equipment to monitor the sodium bisulfite concentration of the scrubber liquor, in PPM, during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the sodium bisulfite concentration of the scrubber liquor on a continuous basis.

   Whenever the monitored value for sodium bisulfite concentration of the scrubber liquor deviates from the values specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable values specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the water flow rate and pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable value for the sodium bisulfite concentration of the scrubber liquor is the minimum sodium bisulfite concentration of the scrubber liquor established during the most recent emission test that demonstrated the emissions unit to be in compliance or the minimum sodium bisulfite concentration of the scrubber liquor recommended by the scrubber manufacturer until such testing is completed.

These values are effective for the duration of this permit. In addition, approved revisions to the values will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

7. The permittee shall properly install, operate, and maintain equipment to monitor the scrubber bottom liquid temperature, in degrees Fahrenheit, during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the scrubber bottom liquid temperature on a continuous basis.

   Whenever the monitored value for the scrubber bottom liquid temperature deviates from the values specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable values specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the water flow rate and pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable value for the scrubber bottom liquid temperature is the minimum scrubber bottom liquid temperature established during the most recent emission test that demonstrated the emissions unit to be in compliance or the scrubber bottom liquid temperature recommended by the scrubber manufacturer until such testing is completed.

These values are effective for the duration of this permit. In addition, approved revisions to the values will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

8. The permittee shall properly install, operate, and maintain equipment to monitor the scrubber exit vapor temperature, in degrees Fahrenheit, during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the scrubber exit vapor temperature on a continuous basis.

   Whenever the monitored value for the scrubber exit vapor temperature deviates from the values specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable values specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the water flow rate and pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable value for the scrubber exit vapor temperature is the minimum scrubber exit vapor temperature established during the most recent emission test that demonstrated the emissions unit to be in compliance or the minimum scrubber exit

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

vapor temperature recommended by the scrubber manufacturer until such testing is completed.

These values are effective for the duration of this permit. In addition, approved revisions to the values will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the scrubber bottom liquid temperature, scrubber exit vapor temperature, sodium bisulfite concentration, scrubber water flow rate and pressure drop was not equal to the acceptable values;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the scrubber bottom liquid temperature, scrubber exit vapor temperature, sodium bisulfite concentration, scrubber water flow rate and pressure drop into compliance with the acceptable values, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

   These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

2. The permittee shall submit annual reports which specify the following:

   a. the total VOC emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   b. the total emissions of each individual HAP in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   c. the total HAP emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

d. the total emissions of each individual HAP in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year; and

e. the total HAP emissions , in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year;

These reports shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

3. The permittee shall submit an annual report to the director the Ohio EPA, Central District Office in writing, of whether the operations of the source are consistent with the information regarding the operations that was used to conduct the modeling. The director may consider any significant departure from the operations of the source described in the permit to install application that results in greater emissions than the emissions rate modeled to determine the ground level concentration as a modification and require the owner or operator to submit a permit to install application for the increased emissions. This report shall be submitted by January 31 of each year.

4. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time when the sodium bisulfite concentration of the scrubber liquor was not equal to the acceptable values;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the sodium bisulfite concentration of the scrubber liquor into compliance with the acceptable values, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

5. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the scrubber bottom liquid temperature was not equal to the acceptable values;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the scrubber bottom liquid temperature into compliance with the acceptable values, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

   These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

6. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the scrubber exit vapor temperature was not equal to the acceptable values;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the scrubber exit vapor temperature into compliance with the acceptable values, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

   These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

E. Testing Requirements

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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

   a. Emission Limitations: Volatile Organic Compound emissions shall not exceed 7.5 pounds per hour; The permittee shall control VOC emissions from this emissions unit through the use of a high efficiency wet scrubber (CO_2 scrubber) with a minimum VOC control efficiency of 99.5%.

      Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

      ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for VOC and to determine the overall VOC control efficiency of the control equipment serving this emissions unit.

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

         For VOC, Methods 1-4, 18 and 25 or 25A of 40 CFR Part 60, Appendix A or Method 320 of 40 CFR Part 63, Appendix A.

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

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

      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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

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

b. Emissions Limitation: Volatile Organic Compound emissions shall not exceed 37.0 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period; Acetaldehyde emissions shall not exceed 0.74 lbs/hr.

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for Total HAPS and individual HAP.

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

For HAPS (for but not limited to, the compounds listed in the Midwest Scaling Protocol in Version 1.6 dated August 2004), Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

For individual HAP, Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

d. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

derived from the most recent stack test with the design capacity of the emission unit.

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (P013) - P013 - distillation process (beer column, side stripper, rectifier column) with wet scrubber and thermal oxidizer.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Volatile Organic Compound emissions from emissions units P010, P011, P013, and P014 shall not exceed 1.0 tons shall per rolling, 12-month period. Particulate emissions from emissions units P010, P011, P013, and P014 shall not exceed 0.3 ton per rolling, 12-month period. Sulfur dioxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.1 ton per rolling, 12-month period. Nitrogen Oxides emissions from emissions units P010,P011,P013 and P014 shall not exceed 2.2 tons per rolling, 12-month period. Carbon monoxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 3.7 tons per rolling, 12-month period. Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period. Total emissions for any individual HAP from emissions units B001-B003, J001-J002, P010-P014,P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-08(B), OAC rule 3745-21-09(DD) and 40 CFR Part 60, Subpart VV. See Section A.2.a.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity as a six-minute average.
OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(C).
OAC rule 3745-18-06	See Section A.2.b below.
OAC rule 3745-21-08(B)	See Section A.2.c below.
OAC rule 3745-21-09(DD)	See the requirements for emissions unit P801.
40 CFR Part 60, Subpart VV	See the requirements for emissions unit P801.

2. Additional Terms and Conditions

2.a The rolling 12-month allowable emission rates are based on the annual production of 115,800,000 gallons of denatured ethanol.

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

2.c The permittee has satisfied 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 permittee shall control VOC emissions from this emissions unit through the use of a Thermal Oxidizer with a minimum control efficiency of 98%.

2.e The permittee shall maintain enclosures and vent all the emissions to the thermal oxidizers to ensure compliance.

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

2.g 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).

B. Operational Restrictions

1. The permittee shall burn only natural gas in the thermal oxidizer controlling emissions from this emissions unit.

2. The maximum annual ethanol production rate for this emissions unit shall not exceed 115,800,000 gallons, based upon a rolling, 12-month summation of the ethanol production rate.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Ethanol Production Rate(gallons)
1	19,300,000
1-2	38,600,000
1-3	57,900,000
1-4	77,200,000
1-5	96,500,000
1-6	115,800,000
1-7	115,800,000
1-8	115,800,000
1-9	115,800,000
1-10	115,800,000
1-11	115,800,000
1-12	115,800,000

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual ethanol production limitation shall be based upon a rolling, 12-month summation of the number of gallons of ethanol produced.

3. The permittee shall operate the wet scrubber at all times this emissions unit is in operation.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

C. Monitoring and/or Recordkeeping Requirements

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

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the combustion temperature, in degrees Fahrenheit, within the thermal oxidizer during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the combustion temperature, in degrees Fahrenheit, within the thermal oxidizer on a daily basis.

   Whenever the monitored value for the combustion temperature deviates from the value specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment to the acceptable value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the combustion temperature reading immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable value for the average combustion temperature within the thermal oxidizer, for all 3-hour blocks of time, when the emissions unit was in operation, shall not be more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance or the minimum average combustion temperature within the thermal oxidizer recommended by the thermal oxidizer manufacturer until such testing is completed.

   This value is effective for the duration of this permit. In addition, approved revisions to the value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

3. The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The date and time of the visible emissions check and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and color of the emissions;

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

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

4. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

   Pollutant: Acetaldehyde
   TLV (mg/m^3): 33.20
   Maximum Hourly Emission Rate (lbs/hr): 0.26
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 92.74 (entire facility)
   MAGLC (ug/m^3): 790

   Pollutant: Ethyl Acetate
   TLV (mg/m^3): 1441
   Maximum Hourly Emission Rate (lbs/hr): 0.01
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 469.26(entire facility)
   MAGLC (ug/m^3): 34,317

   Pollutant: Ethanol
   TLV (mg/m^3): 1884
   Maximum Hourly Emission Rate (lbs/hr): 0.18
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 449.32 (entire facility)
   MAGLC (ug/m^3): 44,863

5. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

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.).

6. 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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

7. The permittee shall maintain daily records of the following information:

a. the quantity of ethanol produced, in gallons, for each day; and

b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the quantity of ethanol produced, in gallons.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative ethanol production rate, in gallons, for each calendar month.

8. The permittee shall maintain the following monthly records:

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

a. the rolling, 12-month summation of CO emissions from emissions units P010, P011, P013 and P014, in tons.

b. the rolling, 12-month summation of SO2 emissions from emissions units P010, P011, P013 and P014, in tons.

c. the rolling, 12-month summation of NOx emissions from emissions units P010, P011, P013 and P014, in tons.

d. the rolling, 12-month summation of PE emissions from emissions units P010, P011, P013 and P014, in tons.

9. The permittee shall maintain the following monthly records:

a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

b. the rolling, 12-month summation of emissions of each individual HAP from this emissions unit, in tons.

c. the rolling, 12-month summation of total HAP emissions from this emissions unit, in tons.

d. the rolling, 12-month summation of emissions of each individual HAP from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005, in tons.

e. the rolling, 12-month summation of total HAP emissions from emissions units B001-B003, J001-J002, P010-P014, P022-P024 and T003-T005, in tons.

10. The permittee shall properly install, operate, and maintain equipment to monitor the water flow rate, in gallons per minute, and the pressure drop across the scrubber, in inches of water, during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the water flow rate, in gallons per minute, and the pressure drop across the scrubber, in inches of water on a continuous basis.

Whenever the monitored value for the water flow rate and/or pressure drop deviates from the values specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable values specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the water flow rate and pressure drop readings immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable value for the pressure drop across the scrubber is the minimum scrubber pressure drop established during the most recent emission test that demonstrated the emissions unit to be in compliance or the minimum scrubber pressure drop recommended by the scrubber manufacturer until such testing is completed.

The acceptable value for the water flow rate is the minimum water flow rate established during the most recent emission test that demonstrated the emissions unit to be in compliance or as recommended by the scrubber manufacturer until such testing is completed.

These values are effective for the duration of this permit. In addition, approved revisions to the values will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in the emissions unit. These reports shall be submitted to the Ohio EPA, Central District Office within 30 days after the deviation occurs.

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the combustion temperature within the thermal oxidizer was not equal to the acceptable value;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the combustion temperature into compliance with the acceptable value, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

4. The permittee shall submit an annual report to the Ohio EPA, Central District Office in writing, of whether the operations of the source are consistent with the information regarding the operations that was used to conduct the modeling. The director may consider any significant departure from the operations of the source described in the permit to install application that results in greater emissions than the emissions rate modeled to determine the ground level concentration as a modification and require the owner or operator to submit a permit to install application for the increased emissions.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

6. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitations. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

7. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the quantity of ethanol produced; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable quantity of ethanol produced . These reports shall be submitted in accordance with the

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

8. The permittee shall submit annual reports which specify the following:

   a. the total VOC emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   b. the total emissions of each individual HAP in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   c. the total HAP emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   d. the total emissions of each individual HAP in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year; and

   e. the total HAP emissions , in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year;

   These reports shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

9. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the scrubber water flow rate and pressure drop was not equal to the acceptable values;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the scrubber water flow rate and pressure drop into compliance with the acceptable values, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

E. Testing Requirements

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

   a. Emission Limitations: The permittee shall control VOC emissions from this emissions unit through the use of a Thermal Oxidizer with a minimum control efficiency of 98%; Particulate emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.3 ton per rolling, 12-month period. Sulfur dioxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.1 ton per rolling, 12-month period. Nitrogen Oxides emissions from emissions units P010,P011,P013 and P014 shall not exceed 2.2 tons per rolling, 12-month period. Carbon monoxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 3.7 tons per rolling, 12-month period.

   Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

   ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NOx, CO, VOC, SO2 and PE and to determine the overall control efficiency of the control equipment serving this emissions unit.

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

   For PE,

   Methods 1-5 and 202 or Methods 1-4, 201A, and 202 of 40 CFR Part 60, Appendix A

   For NOx, Methods 1-4 and 7E of 40 CFR Part 60, Appendix A

   For SO2, Methods 1-4 and 6C of 40 CFR Part 60, Appendix A

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

   For VOC, Methods 1-4, 18 and 25 or 25A of 40 CFR Part 60, Appendix A or Method 320 of 40 CFR Part 63, Appendix A.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

b. Emissions Limitation: The permittee shall control VOC emissions from this emissions unit through the use of a Thermal Oxidizer with a minimum control efficiency of 98%; Particulate emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.3 ton per rolling, 12-month period. Sulfur dioxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.1 ton per rolling, 12-month period. Nitrogen Oxides emissions from emissions units P010,P011,P013 and P014 shall not exceed 2.2 tons per rolling, 12-month period. Carbon monoxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 3.7 tons per rolling, 12-month period. Volatile Organic Compound emissions from emissions units P010,P011,P013 and P014 shall not exceed 1.0 tons shall per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Visible PE shall not exceed 20% opacity, as a six-minute average

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

d. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for Total HAPS and individual HAP.

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

For HAPS (for but not limited to, the compounds listed in the Midwest Scaling Protocol in Version 1.6 dated August 2004), Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

For individual HAP, Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

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

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

e. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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 - (P014) - P014 - stillage handling, surge tank, centrifuge, evaporators/vaporizers, syrup tank, conveyors, thin stillage tank, whole stillage tank with thermal oxidizer.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Volatile Organic Compound emissions from emissions units P010, P011, P013, and P014 shall not exceed 1.0 tons shall per rolling, 12-month period. Particulate emissions from emissions units P010, P011, P013, and P014 shall not exceed 0.3 ton per rolling, 12-month period. Sulfur dioxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.1 ton per rolling, 12-month period. Nitrogen Oxides emissions from emissions units P010,P011,P013 and P014 shall not exceed 2.2 tons per rolling, 12-month period. Carbon monoxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 3.7 tons per rolling, 12-month period. Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period. Total emissions for any individual HAP from emissions units B001-B003, J001-J002, P010-P014,P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period. The requirements of this rule also include compliance with the requirements of OAC rule 3745-21-08(B), OAC rule 3745-21-09(DD) and 40 CFR Part 60, Subpart VV. See Section A.2.a below

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from the stack serving this emissions unit shall not exceed 20% opacity as a six-minute average.
OAC rule 3745-17-11(B)(1)	The emission limitations specified by these rules are less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(C).
OAC rule 3745-18-06	See Section A.2.b below
OAC rule 3745-21-08(B)	See Section A.2.c below.
OAC rule 3745-21-09(DD)	See the requirements for emissions unit P801.
40 CFR Part 60, Subpart VV	See the requirements for emissions unit P801.

2. Additional Terms and Conditions

2.a The rolling 12-month allowable emission rates are based on the annual production of 115,800,000 gallons of denatured ethanol.

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

2.c The permittee has satisfied 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 permittee shall control VOC emissions from this emissions unit through the use of a Thermal Oxidizer with a minimum control efficiency of 98%.

2.e The permittee shall maintain enclosures and vent all the emissions to the thermal oxidizers to ensure compliance.

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

2.g 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.h This emissions unit includes stillage handling, surge tank, centrifuge, evaporators/vaporizers, syrup tank, conveyors, thin stillage tank, whole stillage tank.

B. Operational Restrictions

1. The permittee shall burn only natural gas in the thermal oxidizer controlling emissions from this emissions unit.

2. The maximum annual ethanol production rate for this emissions unit shall not exceed 115,800,000 gallons, based upon a rolling, 12-month summation of the ethanol production rate.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the production levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Ethanol Production Rate(gallons)
1	19,300,000
1-2	38,600,000
1-3	57,900,000
1-4	77,200,000
1-5	96,500,000
1-6	115,800,000
1-7	115,800,000
1-8	115,800,000
1-9	115,800,000
1-10	115,800,000
1-11	115,800,000
1-12	115,800,000

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual ethanol production limitation

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

shall be based upon a rolling, 12-month summation of the number of gallons of ethanol produced.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

C. Monitoring and/or Recordkeeping Requirements

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

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the combustion temperature, in degrees Fahrenheit, within the thermal oxidizer during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the combustion temperature, in degrees Fahrenheit, within the thermal oxidizer on a daily basis.

   Whenever the monitored value for the combustion temperature deviates from the value specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment to the acceptable value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the combustion temperature reading immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable value for the average combustion temperature within the thermal oxidizer, for all 3-hour blocks of time, when the emissions unit was in operation, shall not be more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance or the minimum average combustion temperature within the thermal oxidizer recommended by the thermal oxidizer manufacturer until such testing is completed.

   This value is effective for the duration of this permit. In addition, approved revisions to the value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

3. The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The date and time of the visible emissions check and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and color of the emissions;

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

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

4. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

   Pollutant: Acetaldehyde
   TLV (mg/m^3): 33.20
   Maximum Hourly Emission Rate (lbs/hr): 0.26
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 92.74 (entire facility)
   MAGLC (ug/m^3): 790

   Pollutant: Ethyl Acetate
   TLV (mg/m^3): 1441
   Maximum Hourly Emission Rate (lbs/hr): 0.01
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 469.26(entire facility)
   MAGLC (ug/m^3): 34,317

   Pollutant: Ethanol
   TLV (mg/m^3): 1884
   Maximum Hourly Emission Rate (lbs/hr): 0.18
   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 449.32 (entire facility)
   MAGLC (ug/m^3): 44,863

5. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

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.).

6. 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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

7. The permittee shall maintain daily records of the following information:

a. the quantity of ethanol produced, in gallons, for each day; and

b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the quantity of ethanol produced, in gallons.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative ethanol production rate, in gallons, for each calendar month.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

8. The permittee shall maintain the following monthly records:

   a. the rolling, 12-month summation of CO emissions from emissions units P010, P011, P013 and P014, in tons.

   b. the rolling, 12-month summation of SO2 emissions from emissions units P010, P011, P013 and P014, in tons.

   c. the rolling, 12-month summation of NOx emissions from emissions units P010, P011, P013 and P014, in tons.

   d. the rolling, 12-month summation of PE emissions from emissions units P010, P011, P013 and P014, in tons.

9. The permittee shall maintain the following monthly records:

   a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

   b. the rolling, 12-month summation of emissions of each individual HAP from this emissions unit, in tons.

   c. the rolling, 12-month summation of total HAP emissions from this emissions unit, in tons.

   d. the rolling, 12-month summation of emissions of each individual HAP from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005, in tons.

   e. the rolling, 12-month summation of total HAP emissions from emissions units B001-B003, J001-J002, P010-P014, P022-P024 and T003-T005, in tons.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in the emissions unit. These reports shall be submitted to the Ohio EPA, Central District Office within 30 days after the deviation occurs.

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the combustion temperature within the thermal oxidizer was not equal to the acceptable value;

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the combustion temperature into compliance with the acceptable value, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

4. The permittee shall submit an annual report to the Ohio EPA, Central District Office in writing, of whether the operations of the source are consistent with the information regarding the operations that was used to conduct the modeling. The director may consider any significant departure from the operations of the source described in the permit to install application that results in greater emissions than the emissions rate modeled to determine the ground level concentration as a modification and require the owner or operator to submit a permit to install application for the increased emissions.

5. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

6. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitations. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

7. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the quantity of ethanol produced; and for the first 12 calendar months of operation or the first 12 calendar months

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

following the issuance of this permit, all exceedances of the maximum allowable quantity of ethanol produced . These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

8. The permittee shall submit annual reports which specify the following:

   a. the total VOC emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   b. the total emissions of each individual HAP in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   c. the total HAP emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   d. the total emissions of each individual HAP in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year; and

   e. the total HAP emissions , in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year;

   These reports shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

E. Testing Requirements

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

   a. Emission Limitations: The permittee shall control VOC emissions from this emissions unit through the use of a Thermal Oxidizer with a minimum control efficiency of 98%; Particulate emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.3 ton per rolling, 12-month period. Sulfur dioxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.1 ton per rolling, 12-month period. Nitrogen Oxides emissions from emissions units P010,P011,P013 and P014 shall not exceed 2.2 tons per rolling, 12-month period. Carbon monoxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 3.7 tons per rolling, 12-month period.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NOx, CO, VOC, SO2 and PE and to determine the overall control efficiency of the control equipment serving this emissions unit.

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

For PE,

Methods 1-5 and 202 or Methods 1-4, 201A, and 202 of 40 CFR Part 60, Appendix A

For NOx, Methods 1-4 and 7E of 40 CFR Part 60, Appendix A

For SO2, Methods 1-4 and 6C of 40 CFR Part 60, Appendix A

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

For VOC, Methods 1-4, 18 and 25 or 25A of 40 CFR Part 60, Appendix A or Method 320 of 40 CFR Part 63, Appendix A.

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s)

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

b. Emissions Limitation: The permittee shall control VOC emissions from this emissions unit through the use of a Thermal Oxidizer with a minimum control efficiency of 98%; Particulate emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.3 ton per rolling, 12-month period. Sulfur dioxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 0.1 ton per rolling, 12-month period. Nitrogen Oxides emissions from emissions units P010,P011,P013 and P014 shall not exceed 2.2 tons per rolling, 12-month period. Carbon monoxide emissions from emissions units P010,P011,P013 and P014 shall not exceed 3.7 tons per rolling, 12-month period. Volatile Organic Compound emissions from emissions units P010,P011,P013 and P014 shall not exceed 1.0 tons shall per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Visible PE shall not exceed 20% opacity, as a six-minute average

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

d. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for Total HAPS and individual HAP.

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

For HAPS (for but not limited to, the compounds listed in the Midwest Scaling Protocol in Version 1.6 dated August 2004), Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

For individual HAP, Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

e. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (P017) - P017 - DDGS storage

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Fugitive Particulate Emissions (PE) shall not exceed **0.1 ton per rolling 12-month period**. Best available control measures that are sufficient to minimize or eliminate visible PE of fugitive dust (See Sections A.2.a through A.2.e) See A.2.i below. See A.2.f below.
OAC rule 3745-17-08(B)	**See A.2.g below.**
OAC rule 3745-17-07(B)	**See A.2.h below.**

2. Additional Terms and Conditions

2.a The permittee shall employ best available control measures on all load-in and load-out operations associated with the storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the permittee's application, the permittee has committed to minimize fugitive emissions exiting into the ambient air by keeping all DDGS storage piles in a four sided building enclosure and maintaining the DDGS at a moist state (10% or greater). The building housing the DDGS storage pile will provide a control efficiency of 80% for fugitive emissions.

In addition to the above mentioned control measures, the permittee shall maintain minimal drop heights for stackers and front-loaders on all load-in and load-out operations, and chemical stabilization/dust suppressants and/or watering/sprinkling systems at sufficient treatment frequencies to ensure compliance.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

The operator shall avoid dragging any front-end loader bucket along the ground. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.b The above-mentioned control measure(s) shall be employed for each load-in and load-out operation of each storage pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Any required implementation of the control measure(s) shall continue during any such operation until further observation confirms that use of the measure(s) is unnecessary.

2.c The permittee shall employ best available control measures for wind erosion from the surfaces of all storage piles for the purpose of ensuring compliance with the above-mentioned applicable requirements. In accordance with the application, the permittee has committed to perform one or more of the following: (chemical stabilization, watering/sprinkling systems/hoses, covering the storage piles) to ensure compliance. Nothing in this paragraph shall prohibit the permittee from employing other control measures to ensure compliance.

2.d The above-mentioned control measure(s) shall be employed for wind erosion from each pile if the permittee determines, as a result of the inspection conducted pursuant to the monitoring section of this permit, that the control measure(s) are necessary to ensure compliance with the above-mentioned applicable requirements. Implementation of the control measure(s) shall not be necessary for a storage pile 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.

2.e Implementation of the above-mentioned control measures in accordance with the terms and conditions of this permit is appropriate and sufficient to satisfy the requirements of OAC rule 3745-31-05(A)(3).

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

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

2.h 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.i Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

a. Use of a four sided storage enclosure and maintenance of material at or above 10% moisture, resulting in no visible particulate emissions, except for one minute during any 60-minute period.

B. Operational Restrictions

1. The maximum annual processing rate for this emissions unit shall not exceed 41,000,000 bushels of corn, based upon a rolling, 12-month summation of the corn processing rate.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the processing levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Corn Processing Rate(bushels)
1	3,416,666
1-2	6,833,332
1-3	10,249,998
1-4	13,666,664
1-5	17,083,330
1-6	20,499,996
1-7	23,916,662
1-8	27,333,328
1-9	30,749,994
1-10	34,166,660
1-11	37,583,326
1-12	41,000,000

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual corn processing limitation shall be based upon a rolling, 12-month summation of the number of bushels of corn processed.

C. Monitoring and/or Recordkeeping Requirements

1. Except as otherwise provided in this section, the permittee shall perform inspections of each load-in operation at each storage pile in accordance with the following frequencies:

   storage pile identification minimum load-in inspection frequency

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

all	daily

2. Except as otherwise provided in this section, the permittee shall perform inspections of each load-out operation at each storage pile in accordance with the following frequencies:

storage pile identification	minimum load-out inspection frequency
all	daily

3. Except as otherwise provided in this section, the permittee shall perform inspections of the wind erosion from pile surfaces associated with each storage pile in accordance with the following frequencies:

storage pile identification	minimum wind erosion inspection frequency
all	daily

4. No inspection shall be necessary for wind erosion from the surface of a storage pile when the pile is covered with snow and/or ice and for any storage pile activity 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.

5. The purpose of the inspections is to determine the need for implementing the control measures specified in this permit for load-in and load-out of a storage pile, and wind erosion from the surface of a storage pile. The inspections shall be performed during representative, normal storage pile operating conditions.

6. 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, for wind erosion from pile surfaces, the total number of days

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

where snow and/or ice cover or precipitation were sufficient to not require the control measure(s).

The information required in 6.d. shall be kept separately for (i) the load-in operations, (ii) the load-out operations, and (iii) the pile surfaces (wind erosion), and shall be updated on a calendar quarter basis within 30 days after the end of each calendar quarter.

7. The permittee shall maintain monthly records of the rolling, 12-month summation of fugitive PE from this emissions unit, in tons.

8. The permittee shall maintain daily records of the following information:

   a. the quantity of corn processed, in bushels, for each day; and

   b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the quantity of corn processed, in bushels.

   Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative corn processing rate, in bushels, for each calendar month.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation 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.

2. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

3. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the quantity of corn processed; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable quantity of corn processed . These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

E. Testing Requirements

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

   a. Emissions Limitations:

      Fugitive PE shall not exceed **0.1 ton per rolling 12-month period**.

      Applicable Compliance Method: Compliance shall be calculated using AP-42 Table 9.9.1-1 (March 2003) for the fugitive grain storage/shipping emissions and the following calculation:

      Storage Pile Emissions = (total DDGS throughput / yr) * (emission factor) * (1 - capture efficiency) * (1 ton / 2000lbs)
      Receiving Emissions = (384,321 tons of DDGS /yr) * (0.0033 lb/ton grain) * (1 - 80%) * (1 ton / 2000 lbs)
      Receiving Emissions = 0.1 ton per year

   b. Emission Limitation:
      There shall be no visible PE except for a period of time not to exceed one minute in any 60-minute observation period.

      Applicable Compliance Method:
      Compliance with the visible PE limitations for the storage piles identified 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").

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (P018) - P018 - DDGS Handling and Transfer

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Particulate emissions(PE) from the stack of the baghouse controlling emissions from this emissions unit shall not exceed 0.3 ton per rolling 12-month period. See A.2.c below. See A.2.a below. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1).
OAC rule 3745-17-11(B)(1)	The emissions limitation specified by this rule are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(C).
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
40 CFR 60 Subpart DD	See Section A.2.b below

2. Additional Terms and Conditions

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

2.b 40 CFR Part 60, Subpart DD (Standards of Performance for Grain Elevators), is applicable to grain elevators with a permanent grain storage capacity greater than 2.5 million U.S. bushels. The permanent grain storage capacity of this facility is less than 2.5 million bushels. Therefore, 40 CFR Part 60, Subpart DD, is not applicable.

2.c Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

a. Use of a baghouse with a maximum outlet concentration not to exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

B. Operational Restrictions

1. The maximum annual processing rate for this emissions unit shall not exceed 41,000,000 bushels of corn, based upon a rolling, 12-month summation of the corn processing rate.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the processing levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Corn Processing Rate(bushels)
1	3,416,666
1-2	6,833,332
1-3	10,249,998
1-4	13,666,664
1-5	17,083,330
1-6	20,499,996
1-7	23,916,662
1-8	27,333,328
1-9	30,749,994
1-10	34,166,660
1-11	37,583,326
1-12	41,000,000

   After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual corn processing limitation shall be based upon a rolling, 12-month summation of the number of bushels of corn processed.

2. The permittee shall operate the baghouse controlling the emissions from this emissions unit at all times when this emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

1. The permittee shall properly install, operate, and maintain equipment to monitor the pressure drop, in inches of water, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across the baghouse on a continuous basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop reading immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be established during the most recent emissions test that demonstrated the emissions units to be in compliance or the baghouse pressure drop range shall be 2 to 6 inches of water until such testing is completed.

   This range is effective for the duration of this permit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emission unit. The date and time of the visible emission checks and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations logs:

   a. the color of the emissions;

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

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

3. The permittee shall maintain monthly records of the rolling, 12-month summation of PE from this emissions unit, in tons.

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

a. the quantity of corn processed, in bushels, for each day; and

b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the quantity of corn processed, in bushels.

Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative corn processing rate, in bushels, for each calendar month.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

a. each period of time when the pressure drop across the baghouse was outside of the acceptable range;

b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

particulate emissions. These reports shall be submitted to the Central District Office(CDO) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit annual reports which specify the total PE emissions in tons per rolling 12-month period from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

4. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the quantity of corn processed; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable quantity of corn processed . These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

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

   a. Emission Limitations: PE from the stack of the baghouse controlling emissions from this emissions unit shall not exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

      Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

      ii. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PE.

      iii. The following test method(s) shall be employed to demonstrate compliance with the allowable emission rate(s) for PE: Methods 1-5 and 202 or Methods 1-4, 201A, and 202 of 40 CFR Part 60, Appendix A

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

b. Emissions Limitation: PE from the stack of the baghouse controlling emissions from this emissions unit shall not exceed 0.3 ton per rolling 12-month period.

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Visible particulate emissions from the stack of the baghouse controlling emissions from this emission units shall not exceed 20% opacity, as a six-minute average.

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

F. Miscellaneous Requirements

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (P019) - P019 - DDGS loadout for truck

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	**Particulate emissions(PE) from the stack of the baghouse controlling emissions from this emissions unit shall not exceed 0.2 ton per rolling 12-month period.** **Combined Fugitive PE from P019 and P020 shall not exceed 0.03 ton per rolling 12-month period.** **See A.2.a below.** **The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1).**
OAC rule 3745-17-11(B)(1)	The emissions limitation specified by this rule are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(C).
OAC rule 3745-17-08(B)	See A.2.c below.
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-17-07(B)	See A.2.b below.
40 CFR 60 Subpart DD	See A.2.d below.

2. Additional Terms and Conditions

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

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).

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

2.d 40 CFR Part 60, Subpart DD (Standards of Performance for Grain Elevators), is applicable to grain elevators with a permanent grain storage capacity greater than 2.5 million U.S. bushels. The permanent grain storage capacity of this facility is less than 2.5 million bushels. Therefore, 40 CFR Part 60, Subpart DD, is not applicable.

2.e Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3): Use of a baghouse with a maximum outlet concentration not to exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

B. Operational Restrictions

1. The maximum annual processing rate for this emissions unit shall not exceed 41,000,000 bushels of corn, based upon a rolling, 12-month summation of the corn processing rate.

   To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the processing levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Corn Processing Rate(bushels)
1	3,416,666
1-2	6,833,332
1-3	10,249,998
1-4	13,666,664
1-5	17,083,330
1-6	20,499,996
1-7	23,916,662
1-8	27,333,328
1-9	30,749,994
1-10	34,166,660
1-11	37,583,326
1-12	41,000,000

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual corn processing limitation shall be based upon a rolling, 12-month summation of the number of bushels of corn processed.

2. The permittee shall operate the baghouse controlling the emissions from this emissions unit at all times when this 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, in inches of water, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across the baghouse on a continuous basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop reading immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be established during the most recent emissions test that demonstrated the emissions units to be in compliance or the baghouse pressure drop range shall be 2 to 6 inches of water until such testing is completed.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

This range is effective for the duration of this permit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emission unit. The date and time of the visible emission checks and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations logs:

   a. the color of the emissions;

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

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

3. The permittee shall maintain monthly records of the rolling, 12-month summation of PE from this emissions unit, in tons.

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

   a. the quantity of corn processed, in bushels, for each day; and

   b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the quantity of corn processed, in bushels.

   Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative corn processing rate, in bushels, for each calendar month.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the acceptable range;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Central District Office(CDO) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit annual reports which specify the total PE emissions in tons per rolling 12-month period from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

4. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the quantity of corn processed; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable quantity of corn processed . These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

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

a. Emission Limitations: PE from the stack of the baghouse controlling emissions from this emissions unit, shall not exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

ii. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PE.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable emission rate(s) for PE: Methods 1-5 and 202 or Methods 1-4, 201A, and 202 of 40 CFR Part 60, Appendix A

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

b. Emissions Limitation: PE from the stack of the baghouse controlling emissions from this emissions unit shall not exceed 0.2 ton per rolling 12-month period.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Visible particulate emissions from the stack of the baghouse controlling emissions from this emission units shall not exceed 20% opacity, as a six-minute average.

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

d. Emissions Limitation: Combined Fugitive PE from P019 and P020 shall not exceed 0.03 ton per rolling 12-month period.

Applicable Compliance Method: Compliance shall be calculated using AP-42 Table 9.9.1-1 (March 2003) for the fugitive grain receiving emissions and the following calculation:

Receiving Emissions = (total DDGS throughput / yr) * (emission factor) * (1 - capture efficiency) * (1 ton / 2000lbs)

Receiving Emissions = (384,322 tons of DDGS /yr) * (0.0033 lb/ton grain) * (1 - 95%) * (1 ton / 2000 lbs)
Receiving Emissions = 0.03 ton per year

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (P020) - P020 - DDGS loadout for rail

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Particulate emissions(PE) from the stack of the baghouse controlling emissions from this emissions unit shall not exceed 0.2 ton per rolling 12-month period. Combined Fugitive PE from P019 and P020 shall not exceed **0.03 ton per rolling 12-month period**. See A.2.a below. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1).
OAC rule 3745-17-11(B)(1)	The emissions limitation specified by this rule are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(C).
OAC rule 3745-17-08(B)	See A.2.c below.
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.
OAC rule 3745-17-07(B)	See A.2.b below.
40 CFR 60 Subpart DD	See A.2.d below.

2. Additional Terms and Conditions

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

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).

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

2.d 40 CFR Part 60, Subpart DD (Standards of Performance for Grain Elevators), is applicable to grain elevators with a permanent grain storage capacity greater than 2.5 million U.S. bushels. The permanent grain storage capacity of this facility is less than 2.5 million bushels. Therefore, 40 CFR Part 60, Subpart DD, is not applicable.

2.e Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

a. Use of a baghouse with a maximum outlet concentration not to exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

B. Operational Restrictions

1. The maximum annual processing rate for this emissions unit shall not exceed 41,000,000 bushels of corn, based upon a rolling, 12-month summation of the corn processing rate.

To ensure enforceability during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall not exceed the processing levels specified in the following table:

Month(s)	Maximum Allowable Cumulative Corn Processing Rate(bushels)
1	3,416,666
1-2	6,833,332
1-3	10,249,998
1-4	13,666,664
1-5	17,083,330
1-6	20,499,996
1-7	23,916,662
1-8	27,333,328
1-9	30,749,994
1-10	34,166,660
1-11	37,583,326
1-12	41,000,000

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual corn processing limitation shall be based upon a rolling, 12-month summation of the number of bushels of corn processed.

2. The permittee shall operate the baghouse controlling the emissions from this emissions unit at all times when this 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, in inches of water, across the baghouse during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the pressure drop, in inches of water, across the baghouse on a continuous basis.

   Whenever the monitored value for the pressure drop deviates from the range specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

   In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the pressure drop reading immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

   The acceptable range for the pressure drop across the baghouse shall be established during the most recent emissions test that demonstrated the emissions units to be in compliance or the baghouse pressure drop range shall be 2 to 6 inches of water until such testing is completed.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

This range is effective for the duration of this permit. In addition, approved revisions to the range will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emission unit. The date and time of the visible emission checks and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations logs:

   a. the color of the emissions;

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

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

3. The permittee shall maintain monthly records of the rolling, 12-month summation of PE from this emissions unit, in tons.

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

   a. the quantity of corn processed, in bushels, for each day; and

   b. beginning after the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the rolling, 12-month summation of the quantity of corn processed, in bushels.

   Also, during the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, the permittee shall record the cumulative corn processing rate, in bushels, for each calendar month.

D. Reporting Requirements

1. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the pressure drop across the baghouse was outside of the acceptable range;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the pressure drop into compliance with the acceptable range, was determined to be necessary and was not taken; and

d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Central District Office(CDO) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit annual reports which specify the total PE emissions in tons per rolling 12-month period from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

4. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month limitation on the quantity of corn processed; and for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, all exceedances of the maximum allowable quantity of corn processed . These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

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

a. Emission Limitations: PE from the stack of the baghouse controlling emissions from this emissions unit, shall not exceed 0.005 grain of particulate emissions (PE) per dry standard cubic foot of exhaust gases (gr/dscf).

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

ii. The emission testing shall be conducted to demonstrate compliance with the allowable emission rate for PE.

iii. The following test method(s) shall be employed to demonstrate compliance with the allowable emission rate(s) 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; and

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

b. Emissions Limitation: PE from the stack of the baghouse controlling emissions from this emissions unit shall not exceed 0.2 ton per rolling 12-month period.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

c. Emissions Limitation: Visible particulate emissions from the stack of the baghouse controlling emissions from this emission units shall not exceed 20% opacity, as a six-minute average.

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

d. Emissions Limitation: Combined Fugitive PE from P019 and P020 shall not exceed 0.03 ton per rolling 12-month period.

Applicable Compliance Method: Compliance shall be calculated using AP-42 Table 9.9.1-1 (March 2003) for the fugitive grain receiving emissions and the following calculation:

Receiving Emissions = (total DDGS throughput / yr) * (emission factor) * (1 - capture efficiency) * (1 ton / 2000lbs)
Receiving Emissions = (384,322 tons of DDGS /yr) * (0.0033 lb/ton grain) * (1 - 95%) * (1 ton / 2000 lbs)
Receiving Emissions = 0.03 ton per year

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (P021) - P021 - Cooling Tower

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Particulate emissions (PE) shall not exceed 2.2 tons per rolling 12-month period. See A.2.a below. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1) and 3745-17-11(B)(1).
OAC rule 3745-17-11(B)(1)	The emissions limitation specified by this rule are less stringent than the emissions limitations established pursuant to OAC rule 3745-31-05(C).
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed 20% opacity as a 6-minute average, except as provided by the rule.

2. Additional Terms and Conditions

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

2.b Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

a. Use of a high efficiency drift eliminator with ***a minimum drift elimination rate of 0.001% and*** a maximum circulating water total dissolved solids content of 2,750 parts per million (ppm), as averaged on a weekly basis.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

B. Operational Restrictions

1. The total dissolved solids content of the circulating cooling tower water shall not exceed 2,750 parts per million (ppm), daily maximum.

2. The permittee shall operate the drift eliminator controlling the emissions from this emissions unit at all times when this emissions unit is in operation.

C. Monitoring and/or Recordkeeping Requirements

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

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

2. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emission unit. The date and time of the visible emission checks and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations logs:

   a. the color of the emissions;

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

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

3. The permittee shall maintain monthly records of the rolling, 12-month summation of PE from this emissions unit, in tons.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports to the Ohio EPA, Central District Office (CDO) which identify any exceedances of the average total dissolved solids content listed in Section B.1 above. These reports shall be submitted to the Ohio EPA, CDO in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

2. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the baghouse stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Central District

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

Office(CDO) by January 31 and July 31 of each year and shall cover the previous 6-month period.

3. The permittee shall submit annual reports which specify the total PE emissions in tons per rolling 12-month period from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

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 method:

   a. Emissions Limitation: PE shall not exceed 2.2 tons per rolling 12-month period.

      Applicable Compliance Method: Compliance with the annual limitation shall be based upon the records required by C.3 and shall be calculated by multiplying the maximum circulating water flow (2,160,000 gal/hr) by the density of water (8.34 lb/gal), the percent drift (0.001%), the total dissolved solids concentration, in PPM, and the number of hours operated during the week. i.e., 2,160,000 X 8.34 X 0.00001 X (2,750/1,000,000) X 8760 X (1/2000)= 2.17 tons per rolling 12 month period.

   b. Emissions Limitation: Visible emissions from this emissions unit shall not exceed 20% opacity, as a six-minute average.

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

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (P023) DDGS Dryer/*Cooler* no. 1

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions shall not exceed 2.77 pounds per hour. Sulfur dioxide emissions shall not exceed 5.60 pounds per hour. Nitrogen Oxides emissions shall not exceed 7.95 pounds per hour. Carbon monoxide emissions shall not exceed 5.53 pounds per hour. Volatile Organic Compound emissions shall not exceed 3.35 pounds per hour. Visible particulate emissions from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average. The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-09(DD), 3745-31-05(C) and 40 CFR Part 60, Subpart VV
OAC rule 3745-31-05(C)	Particulate emissions shall not exceed 12.4 tons per rolling, 12-month period. Sulfur dioxide emissions shall not exceed 24.4 tons per rolling, 12-month period. Nitrogen Oxides emissions shall not exceed 34.9 tons per rolling, 12-month period. Carbon monoxide emissions shall not exceed 24.6 tons per rolling, 12-month period. Volatile Organic Compound emissions shall not exceed 15.0 tons

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	per rolling, 12-month period. Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period. Total emissions for any individual HAP from emissions units B001-B003, J001-J002, P010-P014,P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period.
OAC rule 3745-21-09(DD)	See the requirements for emissions unit P801.
OAC rule 3745-21-08(B)	See Section A.2.c below.
OAC rule 3745-18-06	See Section A.2.b below.
OAC rule 3745-17-10(B)(1)	The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(A)(1)	The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
40 CFR Part 60, Subpart A	See A.I.2.g below.
40 CFR Part 60, Subpart VV	See the requirements for emissions unit P801.

2. Additional Terms and Conditions

2.a The rolling 12-month allowable emission rates are based on the annual production of 115,800,000 gallons of denatured ethanol.

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

2.c The permittee has satisfied 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

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 permittee shall control VOC emissions from this emissions unit through the use of a Thermal Oxidizer with a minimum control efficiency of 98%.

2.e The permittee shall maintain enclosures and vent all the emissions to the thermal oxidizers to ensure compliance.

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

2.g This emissions unit is subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency under 40 CFR Part 60. The application and enforcement of these standards are delegated to Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

B. Operational Restrictions

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

2. The permittee shall operate the low NOx burners system at all times this emissions unit is in operation.

3. The permittee shall install, operate and maintain equipment to continuously monitor and record the NOx emissions from this emissions unit.

4. The permittee shall install, operate and maintain equipment to continuously monitor and record the CO emissions from this emissions unit.

5. Any wetcake generated by a malfunction or process upset shall be removed from the facility within 48 hours.

C. Monitoring and/or Recordkeeping Requirements

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

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the combustion temperature, in degrees Fahrenheit, within the thermal oxidizer during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

maintained in accordance with the manufacturer's recommendations, instructions, and operating manual(s). The permittee shall record the combustion temperature, in degrees Fahrenheit, within the thermal oxidizer on a daily basis.

Whenever the monitored value for the combustion temperature deviates from the value specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment to the acceptable value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the combustion temperature reading immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable value for the average combustion temperature within the thermal oxidizer, for all 3-hour blocks of time, when the emissions unit was in operation, shall not be more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance or the minimum average combustion temperature within the thermal oxidizer recommended by the thermal oxidizer manufacturer until such testing is completed.

This value is effective for the duration of this permit. In addition, approved revisions to the value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

3. The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The date and time of the visible emissions check and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and color of the emissions;

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

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

4. The permittee shall maintain the following monthly records:

a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

b. the rolling, 12-month summation of emissions of each individual HAP from this emissions unit, in tons.

c. the rolling, 12-month summation of total HAP emissions from this emissions unit, in tons.

d. the rolling, 12-month summation of VOC emissions from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T001-T005, in tons.

e. the rolling, 12-month summation of emissions of each individual HAP from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005, in tons.

f. the rolling, 12-month summation of total HAP emissions from emissions units B001-B003, J001-J002, P010-P014, P022-P024 and T003-T005, in tons.

5. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Hexane
TLV (mg/m^3): 176.24
Maximum Hourly Emission Rate (lbs/hr): 0.16
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 8.05 (entire facility)
MAGLC (ug/m^3): 4,196

Pollutant: Acetaldehyde
TLV (mg/m^3): 33.20

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Maximum Hourly Emission Rate (lbs/hr): 0.44
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 92.74 (entire facility)
MAGLC (ug/m^3): 790

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

Pollutant: Formaldehyde
TLV (mg/m^3): 0.272
Maximum Hourly Emission Rate (lbs/hr): 0.24
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 2.39 (entire facility)
MAGLC (ug/m^3): 6.47

Pollutant: Acetic Acid
TLV (mg/m^3): 24.54
Maximum Hourly Emission Rate (lbs/hr): 1.44
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 13.16 (entire facility)
MAGLC (ug/m^3): 584

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

   a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

   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.).

7. 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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

8. The permittee shall maintain the following monthly records:

   a. the rolling, 12-month summation of particulate emissions, in tons;

   b. the rolling, 12-month summation of SO2 emissions, in tons;

   c. the rolling, 12-month summation of NOx, in tons;

   d. the rolling, 12-month summation of CO, in tons; and

9. Prior to the installation of the continuous NOx monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6 for approval by the Ohio EPA, Central Office. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NOx monitoring system meets the requirements of Performance Specification 2 and 6. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Ohio EPA, Central District Office upon request.

   Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

10. The permittee shall install, operate, and maintain equipment to continuously monitor and record NOx emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

    The permittee shall maintain records of data obtained by the continuous NOx monitoring system including, but not limited to:

    a. emissions of NOx in parts per million on an instantaneous (one-minute) basis;

    b. emissions of NOx in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

    c. results of quarterly cylinder gas audits;

    d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

    e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

f. hours of operation of the emissions unit, continuous NOx monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NOx monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NOx monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

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

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

12. Prior to the installation of the continuous CO monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2 for approval by the Ohio EPA, Central Office. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO monitoring system meets the requirements of Performance Specification 2. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Ohio EPA, Central District Office upon request.

    Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

13. The permittee shall install, operate, and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million on an instantaneous (one-minute) basis;

b. emissions of CO in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

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

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

D. Reporting Requirements

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in the emissions unit. These reports shall be submitted to the Ohio EPA, Central District Office within 30 days after the deviation occurs.

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the combustion temperature within the thermal oxidizer was not equal to the acceptable value;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the combustion temperature into compliance with the acceptable value, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

   These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

4. The permittee shall submit annual reports which specify the following:

   a. the total VOC emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   b. the total emissions of each individual HAP in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   c. the total HAP emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

d. the total emissions of each individual HAP in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year; and

e. the total HAP emissions , in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year;

These reports shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

5. The permittee shall submit an annual report to the director the Ohio EPA, Central District Office in writing, of whether the operations of the source are consistent with the information regarding the operations that was used to conduct the modeling. The director may consider any significant departure from the operations of the source described in the permit to install application that results in greater emissions than the emissions rate modeled to determine the ground level concentration as a modification and require the owner or operator to submit a permit to install application for the increased emissions. This report shall be submitted by January 31 of each year.

6. The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO and other associated monitors;

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

iii. the location of the continuous CO monitor;

iv. the exceedance report as detailed in (a) above;

v. the total CO emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous CO monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (b)(xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

7. The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NOx monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office, documenting all instances of NOx emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NOx and other associated monitors;

iii. the location of the continuous NOx monitor;

iv. the exceedance report as detailed in (a) above;

v. the total NOx emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NOx monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. the results of any relative accuracy test audit showing the continuous NOx monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous NOx monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous NOx monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (b)(xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

8. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

9. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitations. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

E. Testing Requirements

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

   a. Emission Limitations: The permittee shall control VOC emissions from this emissions unit through the use of a Thermal Oxidizer with a minimum control efficiency of 98%; Particulate emissions shall not exceed 2.77 pounds per hour; Sulfur dioxide emissions shall not exceed 5.60 pounds per hour; Nitrogen Oxides emissions shall not exceed 7.95 pounds per hour; Carbon monoxide emissions shall not exceed 5.53 pounds per hour; Volatile Organic Compound emissions shall not exceed 3.35 pounds per hour.

      Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

      ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NOx, CO, VOC, SO2 and PE and to determine the overall control efficiency of the control equipment serving this emissions unit.

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

      For PE,

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

Methods 1-5 and 202 or Methods 1-4, 201A, and 202 of 40 CFR Part 60, Appendix A

For NOx, Methods 1-4 and 7E of 40 CFR Part 60, Appendix A

For SO2, Methods 1-4 and 6C of 40 CFR Part 60, Appendix A

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

For VOC, Methods 1-4, 18 and 25 or 25A of 40 CFR Part 60, Appendix A or Method 320 of 40 CFR Part 63, Appendix A.

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

b. Emissions Limitation: Particulate emissions shall not exceed 12.4 tons per rolling, 12-month period; Sulfur dioxide emissions shall not exceed 24.4 tons per

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

rolling, 12-month period; Nitrogen Oxides emissions shall not exceed 34.9 tons per rolling, 12-month period; Carbon monoxide emissions shall not exceed 24.6 tons per rolling, 12-month period; Volatile Organic Compound emissions shall not exceed 15.0 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual limitation for particulate emissions, sulfur dioxide, nitrogen oxides and volatile organic compounds shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit. Compliance with the annual limitation carbon monoxide shall be determined based upon the summation of hourly emissions derived from the records required by C.13.b above.

c. Emissions Limitation: Visible PE shall not exceed 10% opacity, as a six-minute average

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

d. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

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

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for Total HAPS and individual HAP.

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

For HAPS (for but not limited to, the compounds listed in the Midwest Scaling Protocol in Version 1.6 dated August 2004), Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

For individual HAP, Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

e. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

derived from the most recent stack test with the design capacity of the emission unit.

2. Within 60 days of the effective date of this permit, the permittee shall conduct certification tests of the continuous CO monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate) and 6; and ORC section 3704.03(I).

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

   Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6 and ORC section 3704.03(I).

   Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

3. Within 60 days of the effective date of this permit, the permittee shall conduct certification tests of the continuous NOx monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

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

   Certification of the continuous NOx monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

   Ongoing compliance with the NOx emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

2. The following source is subject to the applicable provision of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR part 60.

Source Number	Source Description	NSPS Regulation (Subpart)
P023	DDGS Dryer No. 1	Dc

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

iv. Construction date (no later than 30 days after such date);
v. Actual start-up date (within 15 days after such date); and
vi. Date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC- Air Quality Modeling and Planning
P.O. Box 1049
Columbus, OH 43216-1049

and

Central District Office
Division of Air Pollution Control
P.O. Box 1049
Columbus, OH 43216

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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 - (P024) DDGS dryer/*Cooler* no. 2

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions shall not exceed 2.77 pounds per hour. Sulfur dioxide emissions shall not exceed 4.15 pounds per hour. Nitrogen Oxides emissions shall not exceed 7.95 pounds per hour. Carbon monoxide emissions shall not exceed 5.53 pounds per hour. Volatile Organic Compound emissions shall not exceed 3.35 pounds per hour. Visible particulate emissions from the stack serving this emissions unit shall not exceed 10% opacity as a six-minute average. The requirements of this rule also include compliance with the requirements of OAC rules 3745-21-09(DD), 3745-31-05(C) and 40 CFR Part 60, Subpart VV.
OAC rule 3745-31-05(C)	Particulate emissions shall not exceed 12.4 tons per rolling, 12-month period. Sulfur dioxide emissions shall not exceed 18.4 tons per rolling, 12-month period. Nitrogen Oxides emissions shall not exceed 34.9 tons per rolling, 12-month period. Carbon monoxide emissions shall not exceed 24.6 tons per rolling, 12-month period. Volatile Organic Compound emissions shall not exceed 15.0 tons

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
	per rolling, 12-month period. Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period. Total emissions for any individual HAP from emissions units B001-B003, J001-J002, P010-P014,P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period.
OAC rule 3745-21-09(DD)	See the requirements for emissions unit P801.
OAC rule 3745-21-08(B)	See Section A.2.c below.
OAC rule 3745-18-06	See Section A.2.b below.
OAC rule 3745-17-10(B)(1)	The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(A)(1)	The emission limitations specified by this rule is less stringent than the emission limitations established pursuant to OAC rule 3745-31-05(A)(3).
40 CFR Part 60, Subpart A	See A.I.2.g below.
40 CFR Part 60, Subpart VV	See the requirements for emissions unit P801.

2. Additional Terms and Conditions

2.a The rolling 12-month allowable emission rates are based on the annual production of 115,800,000 gallons of denatured ethanol.

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

2.c The permittee has satisfied 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

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 permittee shall control VOC emissions from this emissions unit through the use of a Thermal Oxidizer with a minimum control efficiency of 98%.

2.e The permittee shall maintain enclosures and vent all the emissions to the thermal oxidizers to ensure compliance.

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

2.g This emissions unit is subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency under 40 CFR Part 60. The application and enforcement of these standards are delegated to Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.

B. Operational Restrictions

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

2. The permittee shall operate the low NOx burners system at all times this emissions unit is in operation.

3. The permittee shall install, operate and maintain equipment to continuously monitor and record the NOx emissions from this emissions unit.

4. The permittee shall install, operate and maintain equipment to continuously monitor and record the CO emissions from this emissions unit.

5. Any wetcake generated by a malfunction or process upset shall be removed from the facility within 48 hours.

C. Monitoring and/or Recordkeeping Requirements

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

2. The permittee shall properly install, operate, and maintain equipment to continuously monitor and record the combustion temperature, in degrees Fahrenheit, within the thermal oxidizer during operation of this emissions unit, including periods of startup and shutdown. The monitoring equipment shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

operating manual(s). The permittee shall record the combustion temperature, in degrees Fahrenheit, within the thermal oxidizer on a daily basis.

Whenever the monitored value for the combustion temperature deviates from the value specified below, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation: the date and time the deviation began and the magnitude of the deviation at that time, the date(s) the investigation was conducted, the names of the personnel who conducted the investigation, and the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment to the acceptable value specified below, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken: a description of the corrective action, the date it was completed, the date and time the deviation ended, the total period of time (in minutes) during which there was a deviation, the combustion temperature reading immediately after the corrective action, and the names of the personnel who performed the work. Investigation and records required by this paragraph does not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The acceptable value for the average combustion temperature within the thermal oxidizer, for all 3-hour blocks of time, when the emissions unit was in operation, shall not be more than 50 degrees Fahrenheit below the average temperature maintained during the most recent emissions test that demonstrated the emissions unit to be in compliance or the minimum average combustion temperature within the thermal oxidizer recommended by the thermal oxidizer manufacturer until such testing is completed.

This value is effective for the duration of this permit. In addition, approved revisions to the value will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of an administrative modification.

3. The permittee shall perform daily checks, when this emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The date and time of the visible emissions check and the presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

   a. the location and color of the emissions;

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

4. The permittee shall maintain the following monthly records:

a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

b. the rolling, 12-month summation of emissions of each individual HAP from this emissions unit, in tons.

c. the rolling, 12-month summation of total HAP emissions from this emissions unit, in tons.

d. the rolling, 12-month summation of VOC emissions from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T001-T005, in tons.

e. the rolling, 12-month summation of emissions of each individual HAP from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005, in tons.

f. the rolling, 12-month summation of total HAP emissions from emissions units B001-B003, J001-J002, P010-P014, P022-P024 and T003-T005, in tons.

5. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Hexane
TLV (mg/m^3): 176.24
Maximum Hourly Emission Rate (lbs/hr): 0.16
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 8.05 (entire facility)
MAGLC (ug/m^3): 4,196

Pollutant: Acetaldehyde
TLV (mg/m^3): 33.20
Maximum Hourly Emission Rate (lbs/hr): 0.44
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 92.74 (entire facility)

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

MAGLC (ug/m^3): 790

Pollutant: Formaldehyde
TLV (mg/m^3): 0.272
Maximum Hourly Emission Rate (lbs/hr): 0.24
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 2.39 (entire facility)
MAGLC (ug/m^3): 6.47

Pollutant: Acetic Acid
TLV (mg/m^3): 24.54
Maximum Hourly Emission Rate (lbs/hr): 1.44
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 13.16 (entire facility)
MAGLC (ug/m^3): 584

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

   a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

   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.).

7. 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) meet(s) the definition of a "modification"

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

8. The permittee shall maintain the following monthly records:

   a. the rolling, 12-month summation of particulate emissions, in tons;

   b. the rolling, 12-month summation of SO2 emissions, in tons;

   c. the rolling, 12-month summation of NOx, in tons;

   d. the rolling, 12-month summation of CO, in tons; and

9. Prior to the installation of the continuous NOx monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6 for approval by the Ohio EPA, Central Office. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous NOx monitoring system meets the requirements of Performance Specification 2 and 6. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Ohio EPA, Central District Office upon request.

   Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

10. The permittee shall install, operate, and maintain equipment to continuously monitor and record NOx emissions from this emissions unit in units of the applicable standard(s). The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

    The permittee shall maintain records of data obtained by the continuous NOx monitoring system including, but not limited to:

    a. emissions of NOx in parts per million on an instantaneous (one-minute) basis;

    b. emissions of NOx in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

    c. results of quarterly cylinder gas audits;

    d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous NOx monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous NOx monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous NOx monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

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

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

12. Prior to the installation of the continuous CO monitoring system, the permittee shall submit information detailing the proposed location of the sampling site in accordance with the siting requirements in 40 CFR Part 60, Appendix B, Performance Specifications 2 for approval by the Ohio EPA, Central Office. The Ohio EPA, Central Office shall approve the proposed sampling site and certify that the continuous CO monitoring system meets the requirements of Performance Specification 2. Once received, the letter/document of certification shall be maintained on-site and shall be made available to the Ohio EPA, Central District Office upon request.

    Each continuous monitoring system consists of all the equipment used to acquire and record data in units of all applicable standard(s), and includes the sample extraction and transport hardware, sample conditioning hardware, analyzers, and data processing hardware and software.

13. The permittee shall install, operate, and maintain equipment to continuously monitor and record CO emissions from this emissions unit in units of the applicable standard(s).

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

The continuous monitoring and recording equipment shall comply with the requirements specified in 40 CFR Parts 60.

The permittee shall maintain records of data obtained by the continuous CO monitoring system including, but not limited to:

a. emissions of CO in parts per million on an instantaneous (one-minute) basis;
b. emissions of CO in pounds per hour and in all units of the applicable standard(s) in the appropriate averaging period;

c. results of quarterly cylinder gas audits;

d. results of daily zero/span calibration checks and the magnitude of manual calibration adjustments;

e. results of required relative accuracy test audit(s), including results in units of the applicable standard(s);

f. hours of operation of the emissions unit, continuous CO monitoring system, and control equipment;

g. the date, time, and hours of operation of the emissions unit without the control equipment and/or the continuous CO monitoring system;

h. the date, time, and hours of operation of the emissions unit during any malfunction of the control equipment and/or the continuous CO monitoring system; as well as,

i. the reason (if known) and the corrective actions taken (if any) for each such event in (g) and (h).

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

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

D. Reporting Requirements

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in the emissions unit. These reports shall be submitted to the Ohio EPA, Central District Office within 30 days after the deviation occurs.

2. The permittee shall submit quarterly reports that identify the following information concerning the operation of the control equipment during the operation of this emissions unit:

   a. each period of time when the combustion temperature within the thermal oxidizer was not equal to the acceptable value;

   b. an identification of each incident of deviation described in (a) where a prompt investigation was not conducted;

   c. an identification of each incident of deviation described in (a) where prompt corrective action, that would bring the combustion temperature into compliance with the acceptable value, was determined to be necessary and was not taken; and

   d. an identification of each incident of deviation described in (a) where proper records were not maintained for the investigation and/or the corrective action.

   These quarterly reports shall be submitted (i.e., postmarked) by January 31, April 30, July 31, and October 31 of each year; and each report shall cover the previous calendar quarter.

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

4. The permittee shall submit annual reports which specify the following:

   a. the total VOC emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   b. the total emissions of each individual HAP in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   c. the total HAP emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

d. the total emissions of each individual HAP in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year; and

e. the total HAP emissions , in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year;

These reports shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

5. The permittee shall submit an annual report to the director the Ohio EPA, Central District Office in writing, of whether the operations of the source are consistent with the information regarding the operations that was used to conduct the modeling. The director may consider any significant departure from the operations of the source described in the permit to install application that results in greater emissions than the emissions rate modeled to determine the ground level concentration as a modification and require the owner or operator to submit a permit to install application for the increased emissions. This report shall be submitted by January 31 of each year.

6. The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous CO monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office, documenting all instances of CO emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous CO and other associated monitors;

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

iii. the location of the continuous CO monitor;

iv. the exceedance report as detailed in (a) above;

v. the total CO emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous CO monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. the results of any relative accuracy test audit showing the continuous CO monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous CO monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous CO monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (b)(xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit.

7. The permittee shall comply with the following quarterly reporting requirements for the emissions unit and its continuous NOx monitoring system:

a. Pursuant to the monitoring, record keeping, and reporting requirements for continuous monitoring systems contained in 40 CFR 60.7 and 60.13(h) and the requirements established in this permit, the permittee shall submit reports within 30 days following the end of each calendar quarter to the Ohio EPA, Central District Office, documenting all instances of NOx emissions in excess of any applicable limit specified in this permit, 40 CFR Part 60, OAC Chapter 3745-23, and any other applicable rules or regulations. The report shall document the date, commencement and completion times, duration, and magnitude of each exceedance, as well as the reason (if known) and the corrective actions taken (if

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

any) for each exceedance. Excess emissions shall be reported in units of the applicable standard(s). If there are no excess emissions during the calendar quarter, the permittee shall submit a statement to that effect.

b. These quarterly reports shall be submitted by January 30, April 30, July 30, and October 30 of each year and shall include the following:

i. the facility name and address;

ii. the manufacturer and model number of the continuous NOx and other associated monitors;

iii. the location of the continuous NOx monitor;

iv. the exceedance report as detailed in (a) above;

v. the total NOx emissions for the calendar quarter (tons);

vi. the total operating time (hours) of the emissions unit;

vii. the total operating time of the continuous NOx monitoring system while the emissions unit was in operation;

viii. results and date of quarterly cylinder gas audits;

ix. results and date of the relative accuracy test audit(s), including results in units of the applicable standard(s), (during appropriate quarter(s));

x. the results of any relative accuracy test audit showing the continuous NOx monitor out-of-control and the compliant results following any corrective actions;

xi. the date, time, and duration of any/each malfunction* of the continuous NOx monitoring system, emissions unit, and/or control equipment;

xii. the date, time, and duration of any downtime* of the continuous NOx monitoring system and/or control equipment while the emissions unit was in operation; and

xiii. the reason (if known) and the corrective actions taken (if any) for each event in (b)(xi) and (b)(xii).

Each report shall address the operations conducted and data obtained during the previous calendar quarter.* each downtime and malfunction event shall be reported regardless if there is an exceedance of any applicable limit

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

8. The permittee shall submit semiannual written reports that (a) identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit and (b) describe any corrective actions taken to eliminate the visible particulate emissions. These reports shall be submitted to the Ohio EPA, Central District Office by January 31 and July 31 of each year and shall cover the previous 6-month period.

9. The permittee shall submit quarterly deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitations. These reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

10. The permittee shall submit annual reports which specify the total emissions of all HAPS from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005, in tons per rolling 12-month period for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

11. The permittee shall submit annual reports which specify the total emissions of each single HAP from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005, in tons per rolling 12-month period for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

E. Testing Requirements

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

   a. Emission Limitations: The permittee shall control VOC emissions from this emissions unit through the use of a Thermal Oxidizer with a minimum control efficiency of 98%; Particulate emissions shall not exceed 2.77 pounds per hour; Sulfur dioxide emissions shall not exceed 4.15 pounds per hour; Nitrogen Oxides emissions shall not exceed 7.95 pounds per hour; Carbon monoxide emissions shall not exceed 5.53 pounds per hour; Volatile Organic Compound emissions shall not exceed 3.35 pounds per hour.

      Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

      i. The emission testing shall be conducted within 60 days after achieving the maximum production rate at which the emissions units will be

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

operated, but not later than 180 days after initial startup of such emissions units.

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for NOx, CO, VOC, SO2 and PE and to determine the overall control efficiency of the control equipment serving this emissions unit.

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

For PE,

Methods 1-5 and 202 or Methods 1-4, 201A, and 202 of 40 CFR Part 60, Appendix A

For NOx, Methods 1-4 and 7E of 40 CFR Part 60, Appendix A

For SO2, Methods 1-4 and 6C of 40 CFR Part 60, Appendix A

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

For VOC, Methods 1-4, 18 and 25 or 25A of 40 CFR Part 60, Appendix A or Method 320 of 40 CFR Part 63, Appendix A.

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

b. Emissions Limitation: Particulate emissions shall not exceed 12.4 tons per rolling, 12-month period; Sulfur dioxide emissions shall not exceed 18.4 tons per rolling, 12-month period; Nitrogen Oxides emissions shall not exceed 34.9 tons per rolling, 12-month period; Carbon monoxide emissions shall not exceed 24.6 tons per rolling, 12-month period; Volatile Organic Compound emissions shall not exceed 15.0 tons per rolling, 12-month period.

Applicable Compliance Method: Compliance with the annual limitation for particulate emissions, sulfur dioxide, nitrogen oxides and volatile organic compounds shall be determined based upon the emissions testing required above. The permittee shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit. Compliance with the annual limitation carbon monoxide shall be determined based upon the summation of hourly emissions derived from the records required by C.13.b above.

c. Emissions Limitation: Visible PE shall not exceed 10% opacity, as a six-minute average

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

d. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014,P021, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

ii. The emission testing shall be conducted to demonstrate compliance with the allowable mass emission rates for Total HAPS and individual HAP.

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

For HAPS (for but not limited to, the compounds listed in the Midwest Scaling Protocol in Version 1.6 dated August 2004), Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

For individual HAP, Methods 1-4, and 18 of 40 CFR Part 60, Appendix A or 320 of 40 CFR Part 63, Appendix A

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

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

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, Central District Office. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s). Failure to submit such notification for review and approval prior to the test(s) may result in the Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

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

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

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

report, where warranted, with prior approval from the Ohio EPA, Central District Office.

e. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 14.2 tons per rolling 12-month period; Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance with the annual limitation shall be determined based upon the emissions testing required above. The permittee

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

shall demonstrate on-going compliance by multiplying the emission factor derived from the most recent stack test with the design capacity of the emission unit.

2. Within 60 days of the effective date of this permit, the permittee shall conduct certification tests of the continuous CO monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specification 4 or 4a (as appropriate) and 6; and ORC section 3704.03(I).

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

   Certification of the continuous CO monitoring system shall be granted upon determination by the Ohio EPA Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 4 or 4a (as appropriate) and 6 and ORC section 3704.03(I).

   Ongoing compliance with the CO emission limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the requirements of 40 CFR Part 60.

3. Within 60 days of the effective date of this permit, the permittee shall conduct certification tests of the continuous NOx monitoring system in units of the applicable standard(s), to demonstrate compliance with 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

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

   Certification of the continuous NOx monitoring system shall be granted upon determination by the Ohio EPA, Central Office that the system meets the requirements of 40 CFR Part 60, Appendix B, Performance Specifications 2 and 6; and ORC section 3704.03(I).

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Ongoing compliance with the NOx emissions limitations contained in this permit, 40 CFR Part 60, and any other applicable standard(s) shall be demonstrated through the data collected as required in the Monitoring and Record keeping Section of this permit; and through demonstration of compliance with the quality assurance/quality control plan, which shall meet the testing and recertification requirements of 40 CFR Part 60.

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

2. The following source is subject to the applicable provision of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR part 60.

Source Number	Source Description	NSPS Regulation (Subpart)
P024	DDGS Dryer No. 2	Dc

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

vii. Construction date (no later than 30 days after such date);
viii. Actual start-up date (within 15 days after such date); and
ix. Date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC- Air Quality Modeling and Planning
P.O. Box 1049
Columbus, OH 43216-1049

and

Central District Office
Division of Air Pollution Control
P.O. Box 1049
Columbus, OH 43216

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (P025) - P025 - methanators

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	VOC emissions shall not exceed 0.2 ton per rolling, 12-month period. NOx emissions shall not exceed 0.1 ton per rolling, 12-month period. SO_2 emissions shall not exceed 0.4 ton per rolling, 12-month period. Particulate emissions shall not exceed 0.03 ton per rolling, 12-month period. CO emissions shall not exceed 1.1 ton per rolling, 12-month period. See Section A.2.f.
OAC rule 3745-21-09(DD)	See the requirements for emissions unit P801.
OAC rule 3745-21-08(B)	See Section A.2.d below.
OAC rule 3745-18-06	See Section A.2.c below.
40 CFR Part 60, Subpart VV	See the requirements for emissions unit P801.

2. Additional Terms and Conditions

2.a The flare shall meet the following requirements:

i. the flare shall be designed for and operated with no visible emissions except for periods not to exceed a total of five minutes during any one hundred twenty consecutive minutes; and

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

ii. the flare shall be operated with an electric arc ignition system. The electric arc ignition system arcing shall pulse continually and shall be monitored to detect any failure.

iii. The flare shall be operated with a flame present at all times.

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

2.c The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by complying with the requirements established pursuant to OAC rule3745-21-07(E) 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 U.S. EPA approves the revision to OAC rule 3745-21-08, the requirements to satisfy "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

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.f Permit to Install 01-12115 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):

a. Use of a back up flare system with a required minimum control efficiency of 98%, by weight, for VOC.

B. Operational Restrictions

1. The back-up flare associated with this emissions unit shall combust only biomethanator off-gases and shall not operate more than 500 hours per year.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

2. Emissions from this emissions unit shall be vented to emissions unit P023 or P024. When emissions unit P023 and P024 are not operating, emissions from this emissions unit shall be vented to the back-up flare.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of each start-up time and shut-down time of the flare associated with this emission unit and shall specify the total down time, the shut-down time and start-up time of emissions units P023 and P024.

2. Annually the permittee shall collect a representative sample of the methanator gas. Each annual methanator gas sample shall be analyzed for methane content (percent). The sampling and analysis shall be performed in accordance with 40 CFR Part 60, Appendix A, Method 18.
3. The permittee shall properly install, operate, and maintain a device to continuously monitor the electric arc ignition system when the emissions unit is in operation. The monitoring device and any recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

   The permittee shall comply with the following monitoring and record keeping requirements on the flare controlling this emissions unit:

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

   b. 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 electric arc ignition system is not operating properly;

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

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

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

4. The permittee shall maintain monthly records of the rolling, 12-month summation of CO, NOx, SO_2, PE, and VOC,, in tons.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports that identify all exceedances of the following:

   a. the rolling, 12-month methanator gas production rate limitations for the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit;

   b. the rolling, 12-month summation of VOC, NOx, CO, SO_2 and particulate emissions.

   This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

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

   a. all monitored parameters (i.e., thermocouple or equivalent device and vent stream flow indicator);

   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 electric arc ignition system on the flare is not functioning properly;

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

3. These quarterly deviation reports shall be submitted in accordance with the reporting requirements specified in Part 1 - General Terms and Conditions, Section A of this permit.

4. The permittee shall submit annual reports which specify the total VOC, NOx, CO, SO_2 and particulate emissions from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

E. Testing Requirements

1. Compliance with the emission limitations contained in this permit shall be determined in accordance with the following methods:

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

Emission Limitation - CO emissions shall not exceed 1.1 ton per rolling, 12-month period.

Applicable Compliance Method - Compliance with the allowable mass emission rate for carbon monoxide may be determined by utilizing the AP-42 emission factor of 750 lbs of CO per million cubic feet of methane gas, the maximum hourly gas production of 8,500 standard cubic feet of methanator gas per hour and the records maintained in Section C.2 of this permit.

2. Emission Limitation - VOC emissions from this emissions unit shall not exceed 0.2 ton per rolling 12-month period.

   Applicable Compliance Method - **Compliance with the annual limitations shall be based upon the emission factor of 120.6 lbs of VOC per million cubic feet of methane gas and the records maintained in C.1 of this permit**.

3. Emission Limitation - SO_2 emissions from this emissions unit shall not exceed 0.4 ton per rolling 12-month period.

   Applicable Compliance Method - **Compliance with the annual limitations shall be based upon an emission factor of 169.4 lbs of SO2 per million cubic feet of methanator** gas and the records maintained in C.1 and C.2 of this permit.

4. Emission Limitation - NO_x emissions from this emissions unit shall not exceed 0.1 ton per rolling 12-month period.

   Applicable Compliance Method - Compliance with the annual limitations shall be based upon AP-42 emission factor of 40 lbs of NO_x per million cubic feet of methane gas and the records maintained in C.1 and C.2 of this permit.

5. Emission Limitation - Particulate emissions from this emissions unit shall not exceed 0.03 ton per rolling 12-month period.

   Applicable Compliance Method - Compliance with the annual limitations shall be based upon AP-42 emission factor of 17 lbs of PE per million cubic feet of methane gas and the records maintained in C.1 and C.2 of this permit.

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (P801) - P801 - Leaks / Fugitives

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Volatile Organic Compound (VOC) emissions shall not exceed 9.15 tons per rolling 12-month period. See Section A.2.b.
OAC rule 3745-21-09(DD)	See Section A.2.c and A.2.d below.
40 CFR Part 60, Subpart A	See A.I.2.e below.
40 CFR Part 60, Subpart VV	See Section F.2 below.

2. Additional Terms and Conditions

2.a The rolling 12-month allowable emission rates are based on the annual production of 115,800,000 gallons of denatured ethanol.

2.b Permit to Install 01-12113 for this air contaminant source takes into account the use of a Leak Detection and Repair (LDAR) program, whenever this air contaminant source is in operation, as a voluntary restriction as proposed by the permittee. This restriction allows the permittee to avoid Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

2.c The permittee shall include the appropriate process equipment and regulated components in a Leak Detection and Repair (LDAR) program. The LDAR program shall comply with the appropriate provisions (including 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 Part 60, Subpart VV (Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry). In the case of overlapping provisions, the permittee shall comply with the more stringent requirement.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

2.e **This emissions unit is subject to the applicable provisions of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency under 40 CFR Part 60. The application and enforcement of these standards are delegated to Ohio EPA. The requirements of 40 CFR Part 60 are also federally enforceable.**

B. Operational Restrictions

1. See Section F.2 below for the requirements of 40 CFR Part 60, Subpart VV.

C. Monitoring and/or Recordkeeping Requirements

1. See Section F.2 below for the requirements of 40 CFR Part 60, Subpart VV.

2. The permittee shall maintain monthly records of the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

3. The permit to install for this emissions unit was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied to this emissions unit for each toxic pollutant, using data from the permit to install application, and modeling was performed for the toxic pollutant(s) emitted at over a ton per year using the SCREEN 3.0 model or other Ohio EPA approved model. The predicted 1-hour maximum ground-level concentration result(s) from the use of the SCREEN 3.0 (or other approved) model, was compared to the Maximum Acceptable Ground-Level Concentration (MAGLC), calculated as required in Engineering Guide #70. The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: Ethanol
TLV (mg/m^3): 1884
Maximum Hourly Emission Rate (lbs/hr): 1.88
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m^3): 449.32 (entire facility)
MAGLC (ug/m^3): 44,863

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

   a. changes in the composition of the materials used or the use of new materials, that would result in the emission of a compound or chemical with a lower Threshold Limit Value (TLV) than the lowest TLV previously modeled, as documented in the most current version of the American Conference of Governmental Industrial Hygienists' (ACGIH's) handbook entitled "TLVs and BEIs" ("Threshold Limit Values for Chemical Substances and Physical Agents, Biological Exposure Indices");

   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) meet(s) the definition of a "modification" under other provisions of the rule, then the permittee shall obtain a final permit to install prior to the change.

D. Reporting Requirements

1. See Section F.2 below for the requirements of 40 CFR Part 60, Subpart VV.

2. The permittee shall submit annual reports which specify the total VOC emissions in tons per rolling 12-month period from this emissions unit for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

3. The permittee shall submit an annual report to the director the Ohio EPA, Central District Office in writing, of whether the operations of the source are consistent with the information regarding the operations that was used to conduct the modeling. The director may consider any significant departure from the operations of the source described in the permit to install application that results in greater emissions than the emissions rate modeled to determine the ground level concentration as a modification and require the owner or operator to submit a permit to install application for the increased emissions. This report 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:

   a. Emissions Limitation: VOC emissions shall not exceed 9.15 tons per rolling 12-month period.

      Applicable Compliance Method: Compliance shall be based upon the record keeping requirements in Section C.2 above and shall be calculated using the estimated component count based on similar ethanol plants and emission factors from 'Protocol for Equipment Leak Emission Estimates', EPA-453/R-95-017, Table 5-2. No testing is specifically required by this permit but, if appropriate, may be requested pursuant to OAC rule 3745-15-04(A). Such testing would be required to comply with methods described in OAC rule 3745-21-10 for volatile organic compounds.

2. See Section F.2 below for the requirements of 40 CFR Part 60, Subpart VV.

F. Miscellaneous Requirements

1. In accordance with OAC rule 3745-35-07, the following terms in this permit are federally enforceable: Sections A, B, C, D, and E.

2. 40 CFR Part 60, Subpart VV—Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

   § 60.480 Applicability and designation of affected facility.

   (a) (1) The provisions of this subpart apply to affected facilities in the synthetic organic chemicals manufacturing industry.

   (2) The group of all equipment (defined in §60.481) within a process unit is an affected facility.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

(b) Any affected facility under paragraph (a) of this section that commences construction or modification after January 5, 1981, shall be subject to the requirements of this subpart.

(c) Addition or replacement of equipment for the purpose of process improvement which is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.

(d) (1) If an owner or operator applies for one or more of the exemptions in this paragraph, then the owner or operator shall maintain records as required in §60.486(i).

(2) Any affected facility that has the design capacity to produce less than 1,000 Mg/yr (1,102 ton/yr) is exempt from §60.482.

(3) If an affected facility produces heavy liquid chemicals only from heavy liquid feed or raw materials, then it is exempt from §60.482.

(4) Any affected facility that produces beverage alcohol is exempt from §60.482.

(5) Any affected facility that has no equipment in VOC service is exempt from §60.482.

(e) *Alternative means of compliance*—(1) *Option to comply with part 65.* Owners or operators may choose to comply with the provisions of 40 CFR part 65, subpart F, to satisfy the requirements of §§60.482 through 60.487 for an affected facility. When choosing to comply with 40 CFR part 65, subpart F, the requirements of §60.485(d), (e), and (f), and §60.486(i) and (j) still apply. Other provisions applying to an owner or operator who chooses to comply with 40 CFR part 65 are provided in 40 CFR 65.1.
(2) *Part 60, subpart A.* Owners or operators who choose to comply with 40 CFR part 65, subpart F must also comply with §§60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for that equipment. All sections and paragraphs of subpart A of this part that are not mentioned in this paragraph (e)(2) do not apply to owners or operators of equipment subject to this subpart complying with 40 CFR part 65, subpart F, except that provisions required to be met prior to implementing 40 CFR part 65 still apply. Owners and operators who choose to comply with 40 CFR part 65, subpart F, must comply with 40 CFR part 65, subpart A.

§ 60.481 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act or in subpart A of part 60, and the following terms shall have the specific meanings given them.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Capital expenditure means, in addition to the definition in 40 CFR 60.2, an expenditure for a physical or operational change to an existing facility that:

(a) Exceeds P, the product of the facility's replacement cost, R, and an adjusted annual asset guideline repair allowance, A, as reflected by the following equation: P = R × A, where

(1) The adjusted annual asset guideline repair allowance, A, is the product of the percent of the replacement cost, Y, and the applicable basic annual asset guideline repair allowance, B, divided by 100 as reflected by the following equation:
A = Y × (B ÷ 100);

(2) The percent Y is determined from the following equation: Y = 1.0 −- 0.575 log X, where X is 1982 minus the year of construction; and

(3) The applicable basic annual asset guideline repair allowance, B, is selected from the following table consistent with the applicable subpart:

Table for Determining Applicable for B

Subpart applicable to facility	Value of B to be used in equation
VV	12.5
DDD	12.5
GGG	7.0
KKK	4.5

Closed vent system means a system that is not open to the atmosphere and that is composed of hard-piping, ductwork, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device or back to a process.

Connector means flanged, screwed, welded, or other joined fittings used to connect two pipe lines or a pipe line and a piece of process equipment.

Control device means an enclosed combustion device, vapor recovery system, or flare.
Distance piece means an open or enclosed casing through which the piston rod travels, separating the compressor cylinder from the crankcase.

Double block and bleed system means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

Duct work means a conveyance system such as those commonly used for heating and ventilation systems. It is often made of sheet metal and often has sections connected by screws or crimping. Hard-piping is not ductwork.

Equipment means each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by this subpart.

First attempt at repair means to take rapid action for the purpose of stopping or reducing leakage of organic material to atmosphere using best practices.

Fuel gas means gases that are combusted to derive useful work or heat.

Fuel gas system means the offsite and onsite piping and flow and pressure control system that gathers gaseous stream(s) generated by onsite operations, may blend them with other sources of gas, and transports the gaseous stream for use as fuel gas in combustion devices or in-process combustion equipment, such as furnaces and gas turbines, either singly or in combination.

Hard-piping means pipe or tubing that is manufactured and properly installed using good engineering judgement and standards such as ASME B31.3, Process Piping (available from the American Society of Mechanical Engineers, PO Box 2900, Fairfield, NJ 07007–2900).

In gas/vapor service means that the piece of equipment contains process fluid that is in the gaseous state at operating conditions.

In heavy liquid service means that the piece of equipment is not in gas/vapor service or in light liquid service.

In light liquid service means that the piece of equipment contains a liquid that meets the conditions specified in §60.485(e).

In-situ sampling systems means nonextractive samplers or in-line samplers.

In vacuum service means that equipment is operating at an internal pressure which is at least 5 kilopascals (kPa)(0.7 psia) below ambient pressure.

In VOC service means that the piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight. (The provisions of §60.485(d) specify how to determine that a piece of equipment is not in VOC service.)

Liquids dripping means any visible leakage from the seal including spraying, misting, clouding, and ice formation.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Open-ended valve or line means any valve, except safety relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.

Pressure release means the emission of materials resulting from system pressure being greater than set pressure of the pressure relief device.

Process improvement means routine changes made for safety and occupational health requirements, for energy savings, for better utility, for ease of maintenance and operation, for correction of design deficiencies, for bottleneck removal, for changing product requirements, or for environmental control.

Process unit means components assembled to produce, as intermediate or final products, one or more of the chemicals listed in §60.489 of this part. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.

Process unit shutdown means a work practice or operational procedure that stops production from a process unit or part of a process unit. An unscheduled work practice or operational procedure that stops production from a process unit or part of a process unit for less than 24 hours is not a process unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping production are not process unit shutdowns.

Quarter means a 3-month period; the first quarter concludes on the last day of the last full month during the 180 days following initial startup.

Repaired means that equipment is adjusted, or otherwise altered, in order to eliminate a leak as indicated by one of the following: an instrument reading of 10,000 ppm or greater, indication of liquids dripping, or indication by a sensor that a seal or barrier fluid system has failed.

Replacement cost means the capital needed to purchase all the depreciable components in a facility.

Sampling connection system means an assembly of equipment within a process unit used during periods of representative operation to take samples of the process fluid. Equipment used to take nonroutine grab samples is not considered a sampling connection system.

Sensor means a device that measures a physical quantity or the change in a physical quantity such as temperature, pressure, flow rate, pH, or liquid level.

Synthetic organic chemicals manufacturing industry means the industry that produces, as intermediates or final products, one or more of the chemicals listed in §60.489.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

Volatile organic compounds or VOC means, for the purposes of this subpart, any reactive organic compounds as defined in §60.2 Definitions.

§ 60.482-1 Standards: General.

(a) Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of §§60.482–1 through 60.482–10 or §60.480(e) for all equipment within 180 days of initial startup.

(b) Compliance with §§60.482–1 to 60.482–10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in §60.485.

(c) (1) An owner or operator may request a determination of equivalence of a means of emission limitation to the requirements of §§60.482–2, 60.482–3, 60.482–5, 60.482–6, 60.482–7, 60.482–8, and 60.482–10 as provided in §60.484.
(2) If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of §§60.482–2, 60.482–3, 60.482–5, 60.482–6, 60.482–7, 60.482–8, or 60.482–10, an owner or operator shall comply with the requirements of that determination.

(d) Equipment that is in vacuum service is excluded from the requirements of §§60.482–2 to 60.482–10 if it is identified as required in §60.486(e)(5).

§ 60.482-2 Standards: Pumps in light liquid service.

(a) (1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in §60.485(b), except as provided in §60.482–1(c) and paragraphs (d), (e), and (f) of this section.
(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

(b) (1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
(2) If there are indications of liquids dripping from the pump seal, a leak is detected.

(c) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.
(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a), *Provided* the following requirements are met:

(1) Each dual mechanical seal system is—

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

(ii) Equipment with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of §60.482–10; or
(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(2) The barrier fluid system is in heavy liquid service or is not in VOC service.

(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.

(4) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.

(5) (i) Each sensor as described in paragraph (d)(3) is checked daily or is equipped with an audible alarm, and

(ii) The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(6) (i) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph (d)(5)(ii), a leak is detected.

(ii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.

(iii) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) Any pump that is designated, as described in §60.486(e)(1) and (2), for no detectable emission, as indicated by an instrument reading of less than 500 ppm

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump:

(1) Has no externally actuated shaft penetrating the pump housing,

(2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in §60.485(c), and

(3) Is tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.

(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of §60.482–10, it is exempt from paragraphs (a) through (e) of this section.

(g) Any pump that is designated, as described in §60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of this section if:

(1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section; and

(2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (c) of this section if a leak is detected.

(h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (a)(2) and (d)(4) of this section, and the daily requirements of paragraph (d)(5) of this section, provided that each pump is visually inspected as often as practicable and at least monthly.

§ 60.482-3 Standards: Compressors.

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in §60.482–1(c) and paragraph (h) and (i) of this section.

(b) Each compressor seal system as required in paragraph (a) shall be:

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

(1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or
(2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of §60.482–10; or
(3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.

(c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.

(d) Each barrier fluid system as described in paragraph (a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.

(e) (1) Each sensor as required in paragraph (d) shall be checked daily or shall be equipped with an audible alarm.
(2) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under paragraph (e)(2), a leak is detected.

(g) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(h) A compressor is exempt from the requirements of paragraphs (a) and (b) of this section, if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of §60.482–10, except as provided in paragraph (i) of this section.

(i) Any compressor that is designated, as described in §60.486(e) (1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a)–(h) if the compressor:

(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in §60.485(c); and

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

(2) Is tested for compliance with paragraph (i)(1) of this section initially upon designation, annually, and at other times requested by the Administrator.

(j) Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of §60.14 or §60.15 is exempt from §60.482(a), (b), (c), (d), (e), and (h), provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of paragraphs (a) through (e) and (h) of this section.

§ 60.482-4 Standards: Pressure relief devices in gas/vapor service.

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in §60.485(c).

(b) (1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in §60.482–9.

(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in §60.485(c).

(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in §60.482–10 is exempted from the requirements of paragraphs (a) and (b) of this section.

(d) (1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d)(2) of this section.

(2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in §60.482–9.

§ 60.482-5 Standards: Sampling connection systems.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

(a) Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system, except as provided in §60.482–1(c). Gases displaced during filling of the sample container are not required to be collected or captured.

(b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph

(a) of this section shall comply with the requirements specified in paragraphs (b)(1) through (4) of this section:

(1) Return the purged process fluid directly to the process line; or

(2) Collect and recycle the purged process fluid to a process; or

(3) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of §60.482–10; or

(4) Collect, store, and transport the purged process fluid to any of the following systems or facilities:

(i) A waste management unit as defined in 40 CFR 63.111, if the waste management unit is subject to, and operated in compliance with the provisions of 40 CFR part 63, subpart G, applicable to Group 1 wastewater streams;

(ii) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266; or

(iii) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261.

(c) In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section.

§ 60.482-6 Standards: Open-ended valves or lines.

(a) (1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482–1(c).
(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.

(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) at all other times.

(d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b) and (c) of this section.

(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious over pressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of this section are exempt from the requirements of paragraphs (a) through (c) of this section.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

§ 60.482-7 Standards: Valves in gas/vapor service and in light liquid service.

(a) Each valve shall be monitored monthly to detect leaks by the methods specified in §60.485(b) and shall comply with paragraphs (b) through (e), except as provided in paragraphs (f), (g), and (h), §60.483–1, 2, and §60.482–1(c).

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c) (1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.

(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.

(d) (1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in §60.482–9.

(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(e) First attempts at repair include, but are not limited to, the following best practices where practicable:

(1) Tightening of bonnet bolts;

(2) Replacement of bonnet bolts;

(3) Tightening of packing gland nuts;

(4) Injection of lubricant into lubricated packing.

(f) Any valve that is designated, as described in §60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) if the valve:

(1) Has no external actuating mechanism in contact with the process fluid,

(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in §60.485(c), and

(3) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

(g) Any valve that is designated, as described in §60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) if:

(1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a), and

(2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.

(h) Any valve that is designated, as described in §60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) if:

(1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.

(2) The process unit within which the valve is located either becomes an affected facility through §60.14 or §60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and

(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.

§ 60.482-8 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.

(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures:

(1) The owner or operator shall monitor the equipment within 5 days by the method specified in §60.485(b) and shall comply with the requirements of paragraphs (b) through (d) of this section.

(2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c) (1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) First attempts at repair include, but are not limited to, the best practices described under §60.482–7(e).

§ 60.482-9 Standards: Delay of repair.

(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.

(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.

(c) Delay of repair for valves will be allowed if:
(1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and

(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with §60.482–10.

(d) Delay of repair for pumps will be allowed if:
(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and

(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.

(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.

§ 60.482-10 Standards: Closed vent systems and control devices.

(a) Owners or operators of closed vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

(b) Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent.

(c) Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C.

(d) Flares used to comply with this subpart shall comply with the requirements of §60.18.

(e) Owners or operators of control devices used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.

(f) Except as provided in paragraphs (i) through (k) of this section, each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (f)(1) and (f)(2) of this section.

(1) If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall comply with the requirements specified in paragraphs (f)(1)(i) and (f)(1)(ii) of this section:

(i) Conduct an initial inspection according to the procedures in §60.485(b); and

(ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.

(2) If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall:

(i) Conduct an initial inspection according to the procedures in §60.485(b); and

(ii) Conduct annual inspections according to the procedures in §60.485(b).

(g) Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in paragraph (h) of this section.

(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

(2) Repair shall be completed no later than 15 calendar days after the leak is detected.

(h) Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.

(i) If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section.

(j) Any parts of the closed vent system that are designated, as described in paragraph (l)(1) of this section, as unsafe to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (j)(1) and (j)(2) of this section:

(1) The owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs (f)(1)(i) or (f)(2) of this section; and

(2) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.

(k) Any parts of the closed vent system that are designated, as described in paragraph (l)(2) of this section, as difficult to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (k)(1) through (k)(3) of this section:

(1) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and

(2) The process unit within which the closed vent system is located becomes an affected facility through §§60.14 or 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

(3) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.

(l) The owner or operator shall record the information specified in paragraphs (l)(1) through (l)(5) of this section.
(1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.

(2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.

(3) For each inspection during which a leak is detected, a record of the information specified in §60.486(c).

(4) For each inspection conducted in accordance with §60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(5) For each visual inspection conducted in accordance with paragraph (f)(1)(ii) of this section during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.

(m) Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.

§ 60.483-1 Alternative standards for valves—allowable percentage of valves leaking.

(a) An owner or operator may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.

(b) The following requirements shall be met if an owner or operator wishes to comply with an allowable percentage of valves leaking:

(1) An owner or operator must notify the Administrator that the owner or operator has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in §60.487(d).

(2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Administrator.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

(3) If a valve leak is detected, it shall be repaired in accordance with §60.482–7(d) and (e).

(c) Performance tests shall be conducted in the following manner:
(1) All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in §60.485(b).

(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(3) The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility.

(d) Owners and operators who elect to comply with this alternative standard shall not have an affected facility with a leak percentage greater than 2.0 percent.

§ 60.483-2 Alternative standards for valves—skip period leak detection and repair.

(a) (1) An owner or operator may elect to comply with one of the alternative work practices specified in paragraphs (b)(2) and (3) of this section.

(2) An owner or operator must notify the Administrator before implementing one of the alternative work practices, as specified in §60.487(d).

(b) (1) An owner or operator shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in §60.482–7.

(2) After 2 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 1 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(3) After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 3 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.

(4) If the percent of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in §60.482–7 but can again elect to use this section.

(5) The percent of valves leaking shall be determined by dividing the sum of valves found leaking during current monitoring and valves for which repair has

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

been delayed by the total number of valves subject to the requirements of this section.
(6) An owner or operator must keep a record of the percent of valves found leaking during each leak detection period.

§ 60.484 Equivalence of means of emission limitation.

(a) Each owner or operator subject to the provisions of this subpart may apply to the Administrator for determination of equivalence for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in this subpart.

(b) Determination of equivalence to the equipment, design, and operational requirements of this subpart will be evaluated by the following guidelines:

(1) Each owner or operator applying for an equivalence determination shall be responsible for collecting and verifying test data to demonstrate equivalence of means of emission limitation.

(2) The Administrator will compare test data for the means of emission limitation to test data for the equipment, design, and operational requirements.

(3) The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements.

(c) Determination of equivalence to the required work practices in this subpart will be evaluated by the following guidelines:

(1) Each owner or operator applying for a determination of equivalence shall be responsible for collecting and verifying test data to demonstrate equivalence of an equivalent means of emission limitation.

(2) For each affected facility for which a determination of equivalence is requested, the emission reduction achieved by the required work practice shall be demonstrated.

(3) For each affected facility, for which a determination of equivalence is requested, the emission reduction achieved by the equivalent means of emission limitation shall be demonstrated.

(4) Each owner or operator applying for a determination of equivalence shall commit in writing to work practice(s) that provide for emission reductions equal

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

to or greater than the emission reductions achieved by the required work practice.

(5) The Administrator will compare the demonstrated emission reduction for the equivalent means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in paragraph (c)(4).

(6) The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the required work practice.

(d) An owner or operator may offer a unique approach to demonstrate the equivalence of any equivalent means of emission limitation.

(e) (1) After a request for determination of equivalence is received, the Administrator will publish a notice in the Federal Register and provide the opportunity for public hearing if the Administrator judges that the request may be approved.

(2) After notice and opportunity for public hearing, the Administrator will determine the equivalence of a means of emission limitation and will publish the determination in the Federal Register.

(3) Any equivalent means of emission limitations approved under this section shall constitute a required work practice, equipment, design, or operational standard within the meaning of section 111(h)(1) of the Clean Air Act.

(f) (1) Manufacturers of equipment used to control equipment leaks of VOC may apply to the Administrator for determination of equivalence for any equivalent means of emission limitation that achieves a reduction in emissions of VOC achieved by the equipment, design, and operational requirements of this subpart.

(2) The Administrator will make an equivalence determination according to the provisions of paragraphs (b), (c), (d), and (e) of this section.

§ 60.485 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

(b) The owner or operator shall determine compliance with the standards in §§60.482, 60.483, and 60.484 as follows:

(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:

(i) Zero air (less than 10 ppm of hydrocarbon in air); and

(ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

(c) The owner or operator shall determine compliance with the no detectable emission standards in §§60.482–2(e), 60.482–3(i), 60.482–4, 60.482–7(f), and 60.482–10(e) as follows:

(1) The requirements of paragraph (b) shall apply.

(2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.

(d) The owner or operator shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:

(1) Procedures that conform to the general methods in ASTM E260–73, 91, or 96, E168–67, 77, or 92, E169–63, 77, or 93 (incorporated by reference—see §60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.

(2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.

(3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, paragraphs (d) (1) and (2) of this section shall be used to resolve the disagreement.

(e) The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply:

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

(1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 °C (1.2 in. H_2O at 68 °F). Standard reference texts or ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17) shall be used to determine the vapor pressures.

(2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H_2O at 68 °F) is equal to or greater than 20 percent by weight.

(3) The fluid is a liquid at operating conditions.

(f) Samples used in conjunction with paragraphs (d), (e), and (g) of this section shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

(g) The owner or operator shall determine compliance with the standards of flares as follows:
(1) Method 22 shall be used to determine visible emissions.
(2) A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.

(3) The maximum permitted velocity for air assisted flares shall be computed using the following equation:

$$V_{max} = K_1 + K_2 H_T$$

Where:
V_{max} = Maximum ermitted velocity, m/sec (ft/sec)
H_T = Net heating value of the gas being combusted, MJ/scm (Btu/scf).
K_1 = 8.706 m/sec (metric units)
= 28.56 ft/sec (English units)
K_2 = 0.7084 m^4 /(MJ-sec) (metric units)
= 0.087 ft^4 /(Btu-sec) (English units)
(4) The net heating value (HT) of the gas being combusted in a flare shall be computed using the following equation:

$$H_r = K \sum_{i=1}^{n} C_i \; H_i$$

Where:
K = Conversion constant, 1.740×10^7 (g-mole)(MJ)/ (ppm-scm-kcal) (metric units)
= 4.674×10^8 [(g-mole)(Btu)/(ppm-scf-kcal)] (English units)
C_i = Concentration of sample component “i,” ppm

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

H_i = net heat of combustion of sample component "i" at 25 °C and 760 mm Hg (77 °F and 14.7 psi), kcal/g-mole
(5) Method 18 and ASTM D2504–67, 77, or 88 (Reapproved 1993) (incorporated by reference—see §60.17) shall be used to determine the concentration of sample component "i."
(6) ASTM D2382–76 or 88 or D4809–95 (incorporated by reference—see §60.17) shall be used to determine the net heat of combustion of component "i" if published values are not available or cannot be calculated.
(7) Method 2, 2A, 2C, or 2D, as appropriate, shall be used to determine the actual exit velocity of a flare. If needed, the unobstructed (free) cross-sectional area of the flare tip shall be used.

§ 60.486 Recordkeeping requirements.

(a) (1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.
(2) An owner or operator of more than one affected facility subject to the provisions of this subpart may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility.

(b) When each leak is detected as specified in §§60.482–2, 60.482–3, 60.482–7, 60.482–8, and 60.483–2, the following requirements apply:

(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.

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

(3) The identification on equipment except on a valve, may be removed after it has been repaired.

(c) When each leak is detected as specified in §§60.482–2, 60.482–3, 60.482–7, 60.482–8, and 60.483–2, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:

(1) The instrument and operator identification numbers and the equipment identification number.

(2) The date the leak was detected and the dates of each attempt to repair the leak.

(3) Repair methods applied in each attempt to repair the leak.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

(4) "Above 10,000" if the maximum instrument reading measured by the methods specified in §60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.

(5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.

(6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.

(7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.

(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.

(9) The date of successful repair of the leak.

(d) The following information pertaining to the design requirements for closed vent systems and control devices described in §60.482–10 shall be recorded and kept in a readily accessible location:
(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.

(2) The dates and descriptions of any changes in the design specifications.

(3) A description of the parameter or parameters monitored, as required in §60.482–10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.

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

(5) Dates of startups and shutdowns of the closed vent systems and control devices required in §§60.482–2, 60.482–3, 60.482–4, and 60.482–5.

(e) The following information pertaining to all equipment subject to the requirements in §§60.482–1 to 60.482–10 shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for equipment subject to the requirements of this subpart.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

(2) (i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of §§60.482–2(e), 60.482–3(i) and 60.482–7(f).

(ii) The designation of equipment as subject to the requirements of §60.482–2(e), §60.482–3(i), or §60.482–7(f) shall be signed by the owner or operator.

(3) A list of equipment identification numbers for pressure relief devices required to comply with §60.482–4.

(4)(i) The dates of each compliance test as required in §§60.482–2(e), 60.482–3(i), 60.482–4, and 60.482–7(f).

(ii) The background level measured during each compliance test.

(iii) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(f) The following information pertaining to all valves subject to the requirements of §60.482–7(g) and (h) and to all pumps subject to the requirements of §60.482–2(g) shall be recorded in a log that is kept in a readily accessible location:

(1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.

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

(g) The following information shall be recorded for valves complying with §60.483–2:
(1) A schedule of monitoring.

(2) The percent of valves found leaking during each monitoring period.

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

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

(1) Design criterion required in §§60.482–2(d)(5) and 60.482–3(e)(2) and explanation of the design criterion; and

(2) Any changes to this criterion and the reasons for the changes.

(i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in §60.480(d):
(1) An analysis demonstrating the design capacity of the affected facility,

(2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and

(3) An analysis demonstrating that equipment is not in VOC service.

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

(k) The provisions of §60.7 (b) and (d) do not apply to affected facilities subject to this subpart. § 60.487 Reporting requirements.

(a) Each owner or operator subject to the provisions of this subpart shall submit semiannual reports to the Administrator beginning six months after the initial startup date.

(b) The initial semiannual report to the Administrator shall include the following information:
(1) Process unit identification.

(2) Number of valves subject to the requirements of §60.482–7, excluding those valves designated for no detectable emissions under the provisions of §60.482–7(f).

(3) Number of pumps subject to the requirements of §60.482–2, excluding those pumps designated for no detectable emissions under the provisions of §60.482–2(e) and those pumps complying with §60.482–2(f).

(4) Number of compressors subject to the requirements of §60.482–3, excluding those compressors designated for no detectable emissions under the provisions of §60.482–3(i) and those compressors complying with §60.482–3(h).

(c) All semiannual reports to the Administrator shall include the following information, summarized from the information in §60.486:
(1) Process unit identification.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

(2) For each month during the semiannual reporting period,

(i) Number of valves for which leaks were detected as described in §60.482(7)(b) or §60.483–2,

(ii) Number of valves for which leaks were not repaired as required in §60.482–7(d)(1),

(iii) Number of pumps for which leaks were detected as described in §60.482–2(b) and (d)(6)(i),

(iv) Number of pumps for which leaks were not repaired as required in §60.482–2(c)(1) and (d)(6)(ii),

(v) Number of compressors for which leaks were detected as described in §60.482–3(f),

(vi) Number of compressors for which leaks were not repaired as required in §60.482–3(g)(1), and

(vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.

(3) Dates of process unit shutdowns which occurred within the semiannual reporting period.

(4) Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.

(d) An owner or operator electing to comply with the provisions of §§60.483–1 or 60.483–2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.

(e) An owner or operator shall report the results of all performance tests in accordance with §60.8 of the General Provisions. The provisions of §60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.

(f) The requirements of paragraphs (a) through (c) of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

requirements of paragraphs (a) through (c) of this section, provided that they comply with the requirements established by the State.

§ 60.488 Reconstruction.

For the purposes of this subpart:
(a) The cost of the following frequently replaced components of the facility shall not be considered in calculating either the "fixed capital cost of the new components" or the "fixed capital costs that would be required to construct a comparable new facility" under §60.15: pump seals, nuts and bolts, rupture disks, and packings.
(b) Under §60.15, the "fixed capital cost of new components" includes the fixed capital cost of all depreciable components (except components specified in §60.488 (a)) which are or will be replaced pursuant to all continuous programs of component replacement which are commenced within any 2-year period following the applicability date for the appropriate subpart. (See the "Applicability and designation of affected facility" section of the appropriate subpart.) For purposes of this paragraph, "commenced" means that an owner or operator has undertaken a continuous program of component replacement or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of component replacement.

3. The following source is subject to the applicable provision of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR part 60.

Source Number	Source Description	NSPS Regulation (Subpart)
P801	Leaks / Fugitives	VV

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

x. Construction date (no later than 30 days after such date);
xi. Actual start-up date (within 15 days after such date); and
xii. Date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC- Air Quality Modeling and Planning
P.O. Box 1049
Columbus, OH 43216-1049

and

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

Central District Office
Division of Air Pollution Control
P.O. Box 1049
Columbus, OH 43216

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (T001) - T001 - 200,000 gal 200 proof ethanol storage tank.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Volatile Organic Compound (VOC) emissions shall not exceed 0.31 ton per rolling twelve month period. ***See Section A.2.b below.***
OAC rule 3745-21-09(L)	See Section A.2.a below.
40 CFR Part 60, Subpart Kb	See Section C.1 below.

2. Additional Terms and Conditions

2.a 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).

2.b Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3): Use of submerged fill and an internal floating roof.

B. Operational Restrictions

1. This above-ground storage tank shall only be used to store ethanol. The maximum true vapor pressure of the ethanol stored in this storage tank shall not exceed 0.74 pound per square inch absolute (psia).

2. The permittee shall not exceed a rolling 12-month period material throughput rate of 55.15 million gallons.

C. Monitoring and/or Recordkeeping Requirements

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

1. The permittee shall keep the following records per 40 CFR Part 60, Subpart Kb:

   a. the dimension of the storage vessel and an analysis showing the capacity of the storage vessel, kept for the life of the source; and

   b. a record of the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period, kept for at least 2 years.

2. The permittee shall maintain the following monthly records for this emissions unit:

   a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

   b. the rolling, 12-month summation of material throughput for this this emissions unit, in gallons.

D. Reporting Requirements

1. The permittee shall notify the Ohio EPA, Central District Office (CDO) within 30 days when the maximum true vapor pressure of the stored liquid exceeds 0.522 psia. 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.

2. The permittee shall submit annual deviation (excursion) reports to the Ohio EPA, CDO, 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.

3. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit, in tons per rolling 12-month period for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions of this permit shall be determined in accordance with the following method:

   Emission Limitation: Volatile Organic Compound (VOC) emissions shall not exceed 0.31 ton per rolling twelve month period.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Applicable Compliance Method: Compliance shall be determined by a performing calculations using the TANKS Program 4.0, or higher, or by other method acceptable to the Ohio EPA, CDO.

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (T002) - T002 - 200,000 gal 200 proof ethanol storage tank

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Volatile Organic Compound (VOC) emissions shall not exceed 0.31 ton per rolling twelve month period. ***See Section A.2.b below.***
OAC rule 3745-21-09(L)	See Section A.2.a below.
40 CFR Part 60, Subpart Kb	See Section C.1 below.

2. Additional Terms and Conditions

2.a 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).

2.b Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3): Use of submerged fill and an internal floating roof.

B. Operational Restrictions

1. This above-ground storage tank shall only be used to store ethanol. The maximum true vapor pressure of the ethanol stored in this storage tank shall not exceed 0.74 pound per square inch absolute (psia).

2. The permittee shall not exceed a rolling 12-month period material throughput rate of 55.15 million gallons.

C. Monitoring and/or Recordkeeping Requirements

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

1. The permittee shall keep the following records per 40 CFR Part 60, Subpart Kb:

   a. the dimension of the storage vessel and an analysis showing the capacity of the storage vessel, kept for the life of the source; and

   b. a record of the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period, kept for at least 2 years.

2. The permittee shall maintain the following monthly records for this emissions unit:

   a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

   b. the rolling, 12-month summation of material throughput for this this emissions unit, in gallons.

D. Reporting Requirements

1. The permittee shall notify the Ohio EPA, Central District Office (CDO) within 30 days when the maximum true vapor pressure of the stored liquid exceeds 0.522 psia. 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.

2. The permittee shall submit annual deviation (excursion) reports to the Ohio EPA, CDO, 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.

3. The permittee shall submit annual reports which specify the total VOC emissions from this emissions unit, in tons per rolling 12-month period for the previous calendar year. This report shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions of this permit shall be determined in accordance with the following method:

   Emission Limitation: Volatile Organic Compound (VOC) emissions shall not exceed 0.31 ton per rolling twelve month period.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Applicable Compliance Method: Compliance shall be determined by a performing calculations using the TANKS Program 4.0, or higher, or by other method acceptable to the Ohio EPA, CDO.

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (T003) - T003 - 1.6 mm-gallon denatured ethanol storage tank

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Volatile Organic Compound (VOC) emissions shall not exceed 0.28 ton per rolling twelve month period. Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 15.6 tons per rolling 12-month period. Total emissions for any individual HAP from emissions units B001-B003, J001-J002, P010-P014,P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period. See Section A.2.c below.
OAC rule 3745-21-09(L)	The requirements of this rule do not apply to this storage tank, since the maximum true vapor pressure of petroleum liquids (in pounds per square inch), as stored, will not exceed 1.0. See Sections A.2.a and Section C.1 below.
40 CFR Part 60, Subpart Kb	See Sections A.2.b, C.2 through C.6, D.1 and D.2 below.

2. Additional Terms and Conditions

2.a The maximum true vapor pressure of petroleum liquids (in pounds per square inch), as stored, will not exceed 0.84.

2.b Per 40 CFR Part 60, Subpart Kb, the fixed-roof vessel, equipped with an internal floating roof, must meet the following specifications:

i. 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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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.

ii. 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:

(a) 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.

(b) 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.

(c) 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.

iii. 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.

iv. 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.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

v. 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.

vi. 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.

vii. 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.

viii. 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.

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

2.c Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3): Use of submerged fill and an internal floating roof.

B. Operational Restrictions

1. This above-ground storage tank shall only be used to store denatured ethanol. The maximum true vapor pressure of the denatured ethanol stored in this storage tank shall not exceed 0.84 pound per square inch absolute (psia).

2. The permittee shall not exceed a rolling 12-month period material throughput rate of 57.91 million gallons.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of the following information in a readily accessible location for at least five years and shall make copies of the records available upon request:

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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 1.0 pound per square inch absolute.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

2. The permittee shall maintain the following monthly records for this emissions unit:

   a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

   b. the rolling, 12-month summation of material throughput for this this emissions unit, in gallons.

3. The permittee shall 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 the volatile organic liquid (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.

4. If the vessel is equipped with a liquid-mounted or mechanical shoe primary seal, the permittee shall 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 Ohio EPA, Central District Office (CDO) in the inspection report required in Section D.2.c below. 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.

5. If the vessel is equipped with a double-seal system as specified in Section A.2.d.ii.(b) above, the permittee shall:

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

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

6. The permittee shall 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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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 Section C.3 and C.4.b above and at intervals no greater than 5 years in the case of vessels specified in Section C.4.a above.

7. The permittee shall keep the following records per 40 CFR Part 60, Subpart Kb:

   a. the dimension of the storage vessel and an analysis showing the capacity of the storage vessel, kept for the life of the source; and

   b. a record of the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period, kept for at least 2 years.

      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.

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

9. The permittee shall maintain the following monthly records:

   a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

   b. the rolling, 12-month summation of emissions of each individual HAP from this emissions unit, in tons.

   c. the rolling, 12-month summation of total HAP emissions from this emissions unit, in tons.

   d. the rolling, 12-month summation of VOC emissions from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T001-T005, in tons.

   e. the rolling, 12-month summation of emissions of each individual HAP from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005, in tons.

   f. the rolling, 12-month summation of total HAP emissions from emissions units B001-B003, J001-J002, P010-P014, P022-P024 and T003-T005, in tons.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

D. Reporting Requirements

1. The permittee shall notify the Ohio EPA, CDO in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by Sections C.2 and C.5 above to afford the Ohio EPA, CDO the opportunity to have an observer present. If the inspection required by Section C.5 above is not planned and the permittee could not have known about the inspection 30 days in advance or refilling the tank, the permittee shall notify the Ohio EPA, CDO 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 Ohio EPA, CDO at least 7 days prior to the refilling.

2. After installation of this emissions unit with its associated control equipment (fixed roof and internal floating roof), the permittee shall meet the following requirements:

   a. furnish the Ohio EPA, CDO with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR Part 60, Subpart Kb. This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3);

   b. keep a record of each inspection performed as required in Sections C.2 through C.5 above. 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);

   c. if any of the conditions described in Section C.3 above are detected during the annual visual inspection required by Section C.3, a report shall be furnished to the Ohio EPA, CDO 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; and

   d. after each inspection required by Section C.4 above 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 Section C.4.b, a report shall be furnished to the Ohio EPA, CDO within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of Section C.2 and C.4 above and list each repair made.

   The permittee shall keep copies of all reports and records required by Section D.2 for at least 2 years.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

3. The permittee shall notify the director (the appropriate Ohio EPA, Central District Office within 30 days of the occurrence, of any period of time in which the automatic bleeder vents, rim vents, and all openings other than stub drains were not maintained as required in this permit.

4. The permittee shall submit annual deviation (excursion) reports to the Ohio EPA, CDO, 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.

5. The permittee shall submit annual reports which specify the following:

   a. the total VOC emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   b. the total emissions of each individual HAP in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   c. the total HAP emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   d. the total emissions of each individual HAP in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year; and

   e. the total HAP emissions , in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year;

   These reports shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions of this permit shall be determined in accordance with the following method:

   a. Emission Limitation: Volatile Organic Compound (VOC) emissions shall not exceed 0.28 ton per rolling twelve month period.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Applicable Compliance Method: Compliance shall be determined by a performing calculations using the TANKS Program 4.0, or higher, or by other method acceptable to the Ohio EPA, CDO.

b. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 15.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance shall be determined the records required by C.9 above.

c. Emission Limitation: Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance shall be determined the records required by C.9 above.

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

2. The following source is subject to the applicable provision of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR part 60.

Source Number	Source Description	NSPS Regulation (Subpart)
T003	1.6 mm-gal denatured ethanol storage tank	Kb

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

xiii. Construction date (no later than 30 days after such date);
xiv. Actual start-up date (within 15 days after such date); and
xv. Date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC- Air Quality Modeling and Planning

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

P.O. Box 1049
Columbus, OH 43216-1049

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

and

Central District Office
Division of Air Pollution Control
P.O. Box 1049
Columbus, OH 43216

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (T004) - T004 - 1.6 mm-gal denatured ethanol storage tank

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Volatile Organic Compound (VOC) emissions shall not exceed 0.28 ton per rolling twelve month period. Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 15.6 tons per rolling 12-month period. Total emissions for any individual HAP from emissions units B001-B003, J001-J002, P010-P014,P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period. See Section A.2.c below.
OAC rule 3745-21-09(L)	The requirements of this rule do not apply to this storage tank, since the maximum true vapor pressure of petroleum liquids (in pounds per square inch), as stored, will not exceed 1.0. See Sections A.2.a and Section C.1 below.
40 CFR Part 60, Subpart Kb	See Sections A.2.b, C.2 through C.6, D.1 and D.2 below.

2. Additional Terms and Conditions

2.a The maximum true vapor pressure of petroleum liquids (in pounds per square inch), as stored, will not exceed 0.84.

2.b Per 40 CFR Part 60, Subpart Kb, the fixed-roof vessel, equipped with an internal floating roof, must meet the following specifications:

i. 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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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.

ii. 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:

(a) 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.

(b) 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.

(c) 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.

iii. 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.

iv. 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.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

v. 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.

vi. 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.

vii. 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.

viii. 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.

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

2.c Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3): Use of submerged fill and an internal floating roof.

B. Operational Restrictions

1. This above-ground storage tank shall only be used to store denatured ethanol. The maximum true vapor pressure of the denatured ethanol stored in this storage tank shall not exceed 0.84 pound per square inch absolute (psia).

2. The permittee shall not exceed a rolling 12-month period material throughput rate of 57.91 million gallons.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of the following information in a readily accessible location for at least five years and shall make copies of the records available upon request:

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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 1.0 pound per square inch absolute.

2. The permittee shall maintain the following monthly records for this emissions unit:

a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

b. the rolling, 12-month summation of material throughput for this this emissions unit, in gallons.

3. The permittee shall 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 the volatile organic liquid (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.

4. If the vessel is equipped with a liquid-mounted or mechanical shoe primary seal, the permittee shall 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 Ohio EPA, Central District Office (CDO) in the inspection report required in Section D.2.c below. 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.

5. If the vessel is equipped with a double-seal system as specified in Section A.2.d.ii.(b) above, the permittee shall:

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

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

6. The permittee shall visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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 Section C.3 and C.4.b above and at intervals no greater than 5 years in the case of vessels specified in Section C.4.a above.

7. The permittee shall keep the following records per 40 CFR Part 60, Subpart Kb:

   a. the dimension of the storage vessel and an analysis showing the capacity of the storage vessel, kept for the life of the source; and

   b. a record of the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period, kept for at least 2 years.

      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.

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

9. The permittee shall maintain the following monthly records:

   a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

   b. the rolling, 12-month summation of emissions of each individual HAP from this emissions unit, in tons.

   c. the rolling, 12-month summation of total HAP emissions from this emissions unit, in tons.

   d. the rolling, 12-month summation of VOC emissions from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T001-T005, in tons.

   e. the rolling, 12-month summation of emissions of each individual HAP from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005, in tons.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

f. the rolling, 12-month summation of total HAP emissions from emissions units B001-B003, J001-J002, P010-P014, P022-P024 and T003-T005, in tons.

D. Reporting Requirements

1. The permittee shall notify the Ohio EPA, CDO in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by Sections C.2 and C.5 above to afford the Ohio EPA, CDO the opportunity to have an observer present. If the inspection required by Section C.5 above is not planned and the permittee could not have known about the inspection 30 days in advance or refilling the tank, the permittee shall notify the Ohio EPA, CDO 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 Ohio EPA, CDO at least 7 days prior to the refilling.

2. After installation of this emissions unit with its associated control equipment (fixed roof and internal floating roof), the permittee shall meet the following requirements:

   a. furnish the Ohio EPA, CDO with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR Part 60, Subpart Kb. This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3);

   b. keep a record of each inspection performed as required in Sections C.2 through C.5 above. 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);

   c. if any of the conditions described in Section C.3 above are detected during the annual visual inspection required by Section C.3, a report shall be furnished to the Ohio EPA, CDO 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; and

   d. after each inspection required by Section C.4 above 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 Section C.4.b, a report shall be furnished to the Ohio EPA, CDO within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of Section C.2 and C.4 above and list each repair made.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

The permittee shall keep copies of all reports and records required by Section D.2 for at least 2 years.

3. The permittee shall notify the director (the appropriate Ohio EPA, Central District Office within 30 days of the occurrence, of any period of time in which the automatic bleeder vents, rim vents, and all openings other than stub drains were not maintained as required in this permit.

4. The permittee shall submit annual deviation (excursion) reports to the Ohio EPA, CDO, 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.

5. The permittee shall submit annual reports which specify the following:

   a. the total VOC emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   b. the total emissions of each individual HAP in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   c. the total HAP emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   d. the total emissions of each individual HAP in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year; and

   e. the total HAP emissions , in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T003-T005 for the previous calendar year;

   These reports shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions of this permit shall be determined in accordance with the following method:

   a. Emission Limitation: Volatile Organic Compound (VOC) emissions shall not exceed 0.28 ton per rolling twelve month period.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Applicable Compliance Method: Compliance shall be determined by a performing calculations using the TANKS Program 4.0, or higher, or by other method acceptable to the Ohio EPA, CDO.

b. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 15.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance shall be determined the records required by C.9 above.

c. Emission Limitation: Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance shall be determined the records required by C.9 above.

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

2. The following source is subject to the applicable provision of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR part 60.

Source Number	Source Description	NSPS Regulation (Subpart)
T004	1.6 mm-gal denatured ethanol storage tank	Kb

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

xvi. Construction date (no later than 30 days after such date);
xvii. Actual start-up date (within 15 days after such date); and
xviii. Date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

Ohio Environmental Protection Agency

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

DAPC- Air Quality Modeling and Planning
P.O. Box 1049
Columbus, OH 43216-1049

and

Central District Office
Division of Air Pollution Control
P.O. Box 1049
Columbus, OH 43216

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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 - (T005) - T005 - 200,000-gal denaturant storage tank

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Volatile Organic Compound (VOC) emissions shall not exceed 0.9 ton per rolling twelve month period. Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 15.6 tons per rolling 12-month period. Total emissions for any individual HAP from emissions units B001-B003, J001-J002, P010-P014,P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period. ***See Section A.2.c below.***
OAC rule 3745-21-09(L)	See Sections A.2.a and Section C.1 below.
40 CFR Part 60, Subpart Kb	See Sections A.2.b, C.2 through C.6, D.1 and D.2 below.

2. Additional Terms and Conditions

2.a The permittee shall install the following control equipment and shall maintain tank vents, seals, and or covers as follows:

i. the fixed roof storage tank shall be equipped with an internal floating roof;

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

iii. 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.

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

2.b Per 40 CFR Part 60, Subpart Kb, the fixed-roof vessel, equipped with an internal floating roof, must meet the following specifications:

i. 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.

ii. 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:

(a) 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.

(b) 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.

(c) 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.

iii. 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.

iv. 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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

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

v. 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.

vi. 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.

vii. 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.

viii. 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.

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

2.c Permit to Install 01-12113 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3): Use of submerged fill and an internal floating roof.

B. Operational Restrictions

1. This above-ground storage tank shall only be used to store natural gasoline to be used as an ethanol denaturant.

2. The permittee shall not exceed a rolling 12-month period material throughput rate of 57.91 million gallons.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain records of the following information in a readily accessible location for at least five years and shall make copies of the records available upon request:

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

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

b. the maximum true vapor pressure (in pounds per square inch absolute), as stored, of each liquid that has a maximum true vapor pressure greater 1.0 pound per square inch absolute.

2. The permittee shall maintain the following monthly records for this emissions unit:

a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

b. the rolling, 12-month summation of material throughput for this this emissions unit, in gallons.

3. The permittee shall 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 the volatile organic liquid (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.

4. If the vessel is equipped with a liquid-mounted or mechanical shoe primary seal, the permittee shall 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 Ohio EPA, Central District Office (CDO) in the inspection report required in Section D.2.c below. 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.

5. If the vessel is equipped with a double-seal system as specified in Section A.2.d.ii.(b) above, the permittee shall:

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

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

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

6. The permittee shall 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 Section C.3 and C.4.b above and at intervals no greater than 5 years in the case of vessels specified in Section C.4.a above.

7. The permittee shall keep the following records per 40 CFR Part 60, Subpart Kb:

   a. the dimension of the storage vessel and an analysis showing the capacity of the storage vessel, kept for the life of the source; and

   b. a record of the volatile organic liquid (VOL) stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period, kept for at least 2 years.

      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.

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

9. The permittee shall maintain the following monthly records:

   a. the rolling, 12-month summation of VOC emissions from this emissions unit, in tons.

   b. the rolling, 12-month summation of emissions of each individual HAP from this emissions unit, in tons.

   c. the rolling, 12-month summation of total HAP emissions from this emissions unit, in tons.

   d. the rolling, 12-month summation of VOC emissions from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T005, in tons.

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

e. the rolling, 12-month summation of emissions of each individual HAP from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T005, in tons.

f. the rolling, 12-month summation of total HAP emissions from emissions units B001-B003, J001-J002, P010-P014, P022-P024 and T005, in tons.

D. Reporting Requirements

1. The permittee shall notify the Ohio EPA, CDO in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by Sections C.2 and C.5 above to afford the Ohio EPA, CDO the opportunity to have an observer present. If the inspection required by Section C.5 above is not planned and the permittee could not have known about the inspection 30 days in advance or refilling the tank, the permittee shall notify the Ohio EPA, CDO 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 Ohio EPA, CDO at least 7 days prior to the refilling.

2. After installation of this emissions unit with its associated control equipment (fixed roof and internal floating roof), the permittee shall meet the following requirements:

   a. furnish the Ohio EPA, CDO with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR Part 60, Subpart Kb. This report shall be an attachment to the notification required by 40 CFR 60.7(a)(3);

   b. keep a record of each inspection performed as required in Sections C.2 through C.5 above. 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);

   c. if any of the conditions described in Section C.3 above are detected during the annual visual inspection required by Section C.3, a report shall be furnished to the Ohio EPA, CDO 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; and

   d. after each inspection required by Section C.4 above 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 Section C.4.b, a report shall be furnished to the Ohio EPA, CDO within 30 days of the inspection. The report shall identify the storage

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

vessel and the reason it did not meet the specifications of Section C.2 and C.4 above and list each repair made.

The permittee shall keep copies of all reports and records required by Section D.2 for at least 2 years.

3. The permittee shall notify the director (the appropriate Ohio EPA, Central District Office within 30 days of the occurrence, of any period of time in which the automatic bleeder vents, rim vents, and all openings other than stub drains were not maintained as required in this permit.

4. The permittee shall submit annual deviation (excursion) reports to the Ohio EPA, CDO, 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.

5. The permittee shall submit annual reports which specify the following:

   a. the total VOC emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   b. the total emissions of each individual HAP in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   c. the total HAP emissions in tons per rolling, 12-month period from this emissions unit for the previous calendar year;

   d. the total emissions of each individual HAP in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T005 for the previous calendar year; and

   e. the total HAP emissions , in tons per rolling, 12-month period from emissions units B001-B003, J001-J002, P010-P014,P022-P024 and T005 for the previous calendar year;

   These reports shall be submitted by January 31 of each year. This requirement may be satisfied by including and identifying the specific emissions data from these emissions units in the annual Fee Emission Report.

E. Testing Requirements

1. Compliance with the emission limitation in Section A.1 of these terms and conditions of this permit shall be determined in accordance with the following method:

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

a. Emission Limitation: Volatile Organic Compound (VOC) emissions shall not exceed 0.9 ton per rolling twelve month period.

Applicable Compliance Method: Compliance shall be determined by a performing calculations using the TANKS Program 4.0, or higher, or by other method acceptable to the Ohio EPA, CDO.

b. Emission Limitation: Total HAP emissions from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 15.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance shall be determined the records required by C.9 above.

c. Emission Limitation: Total emissions for any individual HAP from emissions units B001-B003,J001-J002, P010-P014, P023-P024 and T003-T005 shall not exceed 8.6 tons per rolling 12-month period;

Applicable Compliance Method: Compliance shall be determined the records required by C.9 above.

F. Miscellaneous Requirements

1. The following terms for this emissions unit are federally enforceable: Sections A, B, C, D, and E above.

2. The following source is subject to the applicable provision of the New Source Performance Standards (NSPS) as promulgated by the United States Environmental Protection Agency, 40 CFR part 60.

Source Number	Source Description	NSPS Regulation (Subpart)
T005	200,000-gal denaturant storage tank	Kb

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

xix. Construction date (no later than 30 days after such date);
xx. Actual start-up date (within 15 days after such date); and
xxi. Date of performance testing (If required, at least 30 days prior to testing).

Reports are to be sent to:

\\cnas\dapc\prod\attachments\Facilities/0145020434/Permits/106411\522491.wpd

Ohio Environmental Protection Agency
DAPC- Air Quality Modeling and Planning
P.O. Box 1049
Columbus, OH 43216-1049

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd

and

Central District Office
Division of Air Pollution Control
P.O. Box 1049
Columbus, OH 43216

\\cnas\dapc\prod\attachments\/Facilities/0145020434/Permits/106411\522491.wpd