INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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*Mitchell E. Daniels, Jr.*
*Governor*

*Thomas W. Easterly*
*Commissioner*

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant

DATE: December 12, 2006

RE: Iroquois Bio-Energy Company, LLC / 073-23591-00037

FROM: Nisha Sizemore
Chief, Permits Branch
Office of Air Quality

# Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

(1) the date the document is delivered to the Office of Environmental Adjudication (OEA);
(2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
(3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

The petition must include facts demonstrating that you are either the applicant, a person aggrieved or adversely affected by the decision or otherwise entitled to review by law. Please identify the permit, decision, or other order for which you seek review by permit number, name of the applicant, location, date of this notice and all of the following:

(1) the name and address of the person making the request;
(2) the interest of the person making the request;
(3) identification of any persons represented by the person making the request;
(4) the reasons, with particularity, for the request;
(5) the issues, with particularity, proposed for considerations at any hearing; and
(6) identification of the terms and conditions which, in the judgment of the person making the request, would be appropriate in the case in question to satisfy the requirements of the law governing documents of the type issued by the Commissioner.

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.

Enclosures
FNPER.dot 03/23/06

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Indianapolis, Indiana 46204-2251
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December 12, 2006

Keith Gibson
Iroquois Bio-Energy Company, LLC
P.O. Box 218
Rensselaer, Indiana 47978-7265

Re: 073-23591-00037
Second Significant Permit Revision to
FESOP No. 073-16720-00037

Dear Mr. Gibson:

Iroquois Bio-Energy Company, LLC was issued a Federally Enforceable State Operating Permit No. 073-16720-00037 on January 8, 2004 for the new construction and operation of a stationary ethanol production plant. A letter requesting changes to this permit was received on August 30, 2006. Pursuant to the provisions of 326 IAC 2-8-11.1(f) a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document.

The revision consists of adding a 59.8 MMBtu/hr natural gas-fired combustion turbine and adjusting the existing FESOP limits. After extensive evaluation and deliberation, IDEM has concluded that certain permit conditions that are routinely appealed in FESOPs could be altered in a manner that would be less burdensome on the Permittee but would still ensure that sources can demonstrate compliance with State and Federal Regulations on a continual basis. The Permittee has requested that such changes be made to their existing permit. These changes, including the relaxation of compliance monitoring frequency, are being made, pursuant to 326 IAC 2-8-11.1(f).

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions
The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated there under, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

4. Pursuant to 326 IAC 2-1.1-9 (Revocation), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please find enclosed the entire revised permit.

Pursuant to Contract No. A305-5-65, IDEM, OAQ has assigned the processing of this application to Eastern Research Group, Inc., (ERG). Therefore, questions should be directed to Yu-Lien Chu, ERG, 1600 Perimeter Park Drive, Morrisville, North Carolina 27560, or call (919) 386-1024 to speak directly to Ms. Chu. Questions may also be directed to Duane Van Laningham at IDEM, OAQ, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2251, or call (800) 451-6027 and ask for Duane Van Laningham or extension 3-6878, or dial (317) 233-6878.

Sincerely,

Original signed by

Nisha Sizemore, Chief
Permits Branch
Office of Air Quality

Attachments

ERG/YC

cc: File – Jasper County
Jasper County Health Department
Air Compliance Section Inspector – Wanda Stanfield
Compliance Data Section
Administrative and Development
Technical Support and Modeling - Michele Boner

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# FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)

## Iroquois Bio-Energy Company, LLC
## 751 W. State Road 114
## Rensselaer Indiana 47978-7265

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

**The Permittee must comply with all conditions of this permit. Noncompliance with any provision of this permit is grounds for enforcement action, permit termination, revocation and reissuance, or modification; or for denial of a permit renewal application. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action, provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.**

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-8 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.

| Operation Permit No.: 073-16720-00037 | |
|---|---|
| Issued by: Original Signed by Paul Dubenetzky<br>Paul Dubenetzky, Branch Chief<br>Office of Air Quality | Issuance Date: January 8, 2004<br><br>Expiration Date: January 8, 2009 |

First Significant Permit Revision No.: 073-20945-00037, issued July 22, 2005

| Second Significant Permit Revision<br>No.: 073-23591-00037 | Pages Affected: 8, 11-26, 29, 30, 32-39, 41, 60-66, 68, 72, and 73 |
|---|---|
| Original signed by<br><br>Nisha Sizemore, Chief<br>Permits Branch<br>Office of Air Quality | Issuance Date: December 12, 2006<br><br>Expiration Date: January 8, 2009 |

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## SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 through A.3 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

### A.1 General Information [326 IAC 2-8-3(b)

The Permittee owns and operates an ethanol manufacturing plant.

| | |
|---|---|
| Authorized Individual: | General Manager |
| Source Address: | 751 W. State Road 114, Rensselaer, Indiana 47978-7265 |
| Mailing Address: | P. O. Box 218, Rensselaer, Indiana 47978-0218 |
| SIC Code: | 2869 |
| County Location: | Jasper County |
| Source Location Status: | Attainment for all criteria pollutants |
| Source Status: | Federally Enforceable State Operating Permit (FESOP)<br>Minor Source, under PSD Rules;<br>Minor Source, Section 112 of the Clean Air Act<br>1 of 28 Source Categories |

### A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

This emission source consists of the following emission units and pollution control devices:

(a) One (1) grain receiving and storage operation, identified as P20, to be constructed in 2005, with a maximum capacity of 420 tons of grain per hour, controlled by baghouse C20, exhausting through stack S20, and consisting of the following:

(1) One (1) grain unloading operation.

(2) One (1) elevator leg.

(3) One (1) storage bin fill conveyor.

(4) Four (4) grain storage silos, with a total storage capacity of less than 1,000,000 bushels.

(5) One (1) storage bin emptying conveyor.

(6) One (1) day storage bin, with a maximum capacity of 5,000 bushels.

(b) Two (2) hammermills, identified as P30, to be constructed in 2005, each with a maximum capacity of 100 tons of grain per hour, controlled by baghouse C30, and exhausting through stack S30.

(c) One (1) Distiller's Dried Grains and Solubles (DDGS) cooling system, identified as P70, to be constructed in 2005, with a maximum throughput rate of 20 tons of DDGS per hour, equipped with an integral cyclone and controlled by baghouse C70, and exhausting through stack S70.

(d) One (1) DDGS loadout operation, identified as P90, to be constructed in 2005, with a maximum throughput rate of 400 tons/hr, controlled by baghouse C90, and exhausting through stack S90.

(e) One (1) fermentation process, identified as P40, to be constructed in 2005, with a maximum throughput rate of 6,500 gallons per hour, consisting of four (4) fermenters and

one (1) beer well system, controlled by a $CO_2$ scrubber C40, and exhausting through stack S40.

(f) One (1) recuperative thermal oxidizer/heat recovery steam generator, identified as C10, to be constructed in 2005, using natural gas and process waste gases from the dryers as fuels, with a maximum heat input capacity of 125 MMBtu/hr, and exhausting through stack S10.

(g) One (1) mashing, cooking and liquefication operation, identified as P10, to be constructed in 2005, with a maximum wet dryer feed rate of 48 tons of wet cake (with 65% water) per hour, controlled by recuperative thermal oxidizer/heat recovery steam generator C10, exhausting through stack S10, consisting of the following:

(1) Meal conveying operations.

(2) One (1) mash mixer, where process water and/or hot water is added to meal to form mash.

(3) Two (2) slurry tanks, where ammonia is added to mash as needed to adjust pH levels, each with a maximum capacity of 16,000 gallons.

(4) One (1) cook tube, where steam is injected to sterilize mash and gelatinize starch, with a maximum capacity of 5,000 gallons.

(5) One (1) flash tank, with a maximum capacity of 2,000 gallons.

(6) One (1) receiver tank.

(7) One (1) yeast tank, with a maximum capacity of 21,000 gallons.

(h) One (1) distillation and dehydration operation, to be constructed in 2005, controlled by recuperative thermal oxidizer/heat recovery steam generator C10, exhausting through stack S10, and consisting of the following:

(1) One (1) beer column.

(2) One (1) side stripper.

(3) One (1) rectifier column.

(4) One (1) 190 proof condenser.

(5) Three (3) molecular sieves.

(6) One (1) 200 proof condenser.

(7) Three (3) centrifuges.

(8) One (1) centrate storage tank, with a maximum capacity of 990 gallons.

(9) Eight (8) evaporators.

(i) Two (2) natural gas fired DDGS dryers in series, identified as Dryers A and B, each with a maximum heat input capacity of 42 MMBtu/hr and a maximum throughput rate of 20 tons of DDGS per hour, controlled by recuperative thermal oxidizer/heat recovery steam generator C10, and exhausting through stack S10.

(j) One (1) natural gas-fired combustion turbine, identified as CT, to be constructed in 2006, with a maximum heat input capacity of 59.8 MMBtu/hr and a maximum power output of 5.2 Megawatts, and exhausting through stack S-T.

(k) One (1) ethanol loading terminal for both trucks and railcars, identified as P50, constructed in 2005, with a maximum loading rate of 36,000 gallons per hour for truck loading and a maximum loading rate of 72,000 gallons per hour for railcar loading. The truck loading process is controlled by an open flare C50, which is fueled by natural gas and has a maximum heat input capacity of 6.4 MMBtu/hr, and exhausting through stack S50.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This source also includes the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Combustion source flame safety purging on startup.

(b) A gasoline fuel transfer dispensing operation handling less than or equal to 1,300 gallons per day and filling storage tanks having a capacity equal to or less than 10,500 gallons.

(c) A petroleum fuel other than gasoline dispensing facility, having a storage tank capacity less than or equal to 10,500 gallons, and dispensing 3,500 gallons per day or less.

(d) Cleaners and solvents characterized as:

(1) having a vapor pressure equal to or less than two (2.0) kilo Pascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pound per square inch) measured at thirty-eight (38) degrees Centigrade (one hundred (100) degrees Fahrenheit); or

(2) having a vapor pressure equal to or less than seven-tenths (0.7) kilo Pascal (five (5) millimeters of mercury or one-tenth (0.1) pound per square inch) measured at twenty (20) degrees Centigrade (sixty-eight (68) degrees Fahrenheit);

the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) months.

(e) One (1) process cooling tower, identified as P80, with a maximum water circulation rate of 1,200,00 gallons per hour, consisting of four (4) cells.

(f) Blowdown for any of the following:

(1) Sight glass.

(2) Boilers.

(3) Cooling tower.

(4) Compressors.

(5) Pumps.

(g) Replacement or repair of bags in baghouses, and filters in other air filtration equipment.

(h) Heat exchanger cleaning and repair.
(i) Paved roads and parking lots with public access.

(j) Diesel fired emergency generators not exceeding 1,600 horsepower, including one (1) emergency diesel fired water pump, identified as EP-16, with a maximum power output of 190 hp.

(k) Filter or coalescer media changeout.

(l) Other emission units, not regulated by a NESHAP, with PM10, $NO_x$, and $SO_2$ emissions less than five (5) pounds per hour or twenty-five (25) pounds per day, CO emissions less than twenty-five (25) pounds per day, VOC emissions less than three (3) pounds per hour or fifteen (15) pounds per day, lead emissions less than six-tenths (0.6) tons per year or three and twenty-nine hundredths (3.29) pounds per day, and emitting greater than one (1) pound per day but less than five (5) pounds per day or one (1) ton per year of a single HAP, or emitting greater than one (1) pound per day but less than twelve and five tenths (12.5) pounds per day or two and five tenths (2.5) ton per year of any combination of HAPs:

(1) Two (2) final product storage tanks, identified as TK61 and TK62, constructed in 2005, which store denatured ethanol, each with a maximum capacity of 500,000 gallons, and equipped with internal floating roofs.

(2) Two (2) shift tanks, identified as TK63 and TK65, constructed in 2005, which store 190 and 200 proof ethanol, each with a maximum capacity of 100,000 gallons, and equipped with internal floating roofs.

(3) One (1) denaturant (gasoline) storage tank, identified as TK64, constructed in 2005, which stores gasoline, with a maximum capacity of 100,000 gallons, and equipped with an internal floating roof.

(4) One (1) additive tank, identified as Additive TK, constructed in 2005, which stores corrosion inhibitor, with a maximum capacity of 2,301 gallons.

(5) One (1) thin stillage tank, constructed in 2005, with a maximum capacity of 146,000 gallons.

(6) One (1) syrup tank, constructed in 2005, with a maximum capacity of 51,000 gallons.

(7) One (1) cook water tank, constructed in 2005, with a maximum capacity of 146,000 gallons.

(8) Two (2) liquefaction tanks, constructed in 2005, each with a maximum capacity of 51,000 gallons.

(9) One (1) whole stillage tank, constructed in 2005, with a maximum capacity of 51,000 gallons.

(10) Two (2) methanators, used to clean up the contact waste water that will be recirculated back into the cook tank, exhausting to the DDGS dryers as supplement fuel. When the dryers are down, methane emissions from the methanators are controlled by flare C60, which has a maximum heat input capacity of 3.2 MMBtu/hr and exhausts through stack S60.

(11) Heat exchangers, identified as mash coolers, which are part of the mashing, cooking and liquefaction operations.

## A.4 FESOP Applicability [326 IAC 2-8-2]

This source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

## SECTION B GENERAL CONDITIONS

### B.1 Definitions [326 IAC 2-8-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

### B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

### B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4][326 IAC 2-8]

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 and 326 IAC 2-8 when prior to the start of operation, the following requirements are met:

(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.

(b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.

(c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

### B.4 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

(a) This permit, 073-16720-00037, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).

(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

### B.5 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or

(b) the emission unit to which the condition pertains permanently ceases operation.

### B.6 Enforceability [326 IAC 2-8-6]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM , the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

### B.7 Severability [326 IAC 2-8-4(4)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.8 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

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

B.9 Duty to Provide Information [326 IAC 2-8-4(5)(E)]

(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.

(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.11 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]

(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1)

B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) The annual compliance certification report shall include the following:

(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;

(2) The compliance status;

(3) Whether compliance was continuous or intermittent;

(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and

(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The notification which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]

(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.14 Emergency Provisions [326 IAC 2-8-12]

(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly

signed, contemporaneous operating logs or other relevant evidence that describe the following:

(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;

(2) The permitted facility was at the time being properly operated;

(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;

(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or
Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

(B) Any steps taken to mitigate the emissions; and

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(6) The Permittee immediately took all reasonable steps to correct the emergency.

(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.

(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.

(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.

(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.

(g) Operations may continue during an emergency only if the following conditions are met:

(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:

(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and

(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

B.15 Prior Permits Superseded [326 IAC 2-1.1-9.5]

(a) All terms and conditions of permits established prior to 073-16720-00037 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised, or

(3) deleted

(b) All previous registrations and permits are superseded by this permit.

B.16 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.

B.17 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that

exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.18 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:

(1) That this permit contains a material mistake.

(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.

(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]

(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]

B.19 Permit Renewal [326 IAC 2-8-3(h)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40) The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.20 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1] [40 CFR 72]

(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this .

(b) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 operating permit amendments and permit modifications for purposes of the acid rain portion of a Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]

(c) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(d) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.21 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;

(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);

(4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).

(b) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade emissions increases and decreases at in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).

(c) Alternative Operating Scenarios Federally Enforceable State Operating Permit
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.22 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2326 IAC 2-8-11.1.

B.23 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC13-30-3-1]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;

(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;

(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and

(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize

any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.24 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.

(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management
Permits Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.25 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]

(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.

(b) Failure to pay may result in administrative enforcement action or revocation of this permit.

(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.26 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

**SECTION C SOURCE OPERATION CONDITIONS**

Entire Source

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable;

(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and

(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.

(b) The potential to emit particulate matter (PM) from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) not applicable.

(c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.6 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.7 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) Procedures for Asbestos Emission Control
The Permittee shall comply with the applicable emission control procedures in 326 IAC

14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

(f) Demolition and Renovation
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).

(g) Indiana Accredited Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

**Testing Requirements [326 IAC 2-8-4(3)]**

C.9 Performance Testing [326 IAC 3-6]

(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

**Compliance Requirements [326 IAC 2-1.1-11]**

C.10 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

**Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]**

C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If

required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.

C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

**Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]**

C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

within 180 days from the date on which this source commences operation).

The ERP does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.

(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.

(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

(f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.16 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records;

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]

(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.

(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.

(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

**Stratospheric Ozone Protection**

C.20 Compliance with 40 CFR 82 and 326 IAC 22-1

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:

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

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

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

## SECTION D.1 FACILITY OPERATION CONDITIONS

**Facility Description [326 IAC 2-8-4(10)]**

(a) One (1) grain receiving and storage operation, identified as P20, to be constructed in 2005, with a maximum capacity of 420 tons of grain per hour, controlled by baghouse C20, exhausting through stack S20, and consisting of the following:

(1) One (1) grain unloading operation.

(2) One (1) elevator leg.

(3) One (1) storage bin fill conveyor.

(4) Four (4) grain storage silos, with a total storage capacity of less than 1,000,000 bushels.

(5) One (1) storage bin emptying conveyor.

(6) One (1) day storage bin, with a maximum capacity of 5,000 bushels.

(b) Two (2) hammermills, identified as P30, to be constructed in 2005, each with a maximum capacity of 100 tons of grain per hour, controlled by baghouse C30, and exhausting through stack S30.

(c) One (1) Distiller's Dried Grains and Solubles (DDGS) cooling system, identified as P70, to be constructed in 2005, with a maximum throughput rate of 20 tons of DDGS per hour, equipped with an integral cyclone and controlled by baghouse C70, and exhausting through stack S70.

(d) One (1) DDGS loadout operation, identified as P90, to be constructed in 2005, with a maximum throughput rate of 400 tons/hr, controlled by baghouse C90, and exhausting through stack S90.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

D.1.1 PM Emissions [326 IAC 2-2]

The PM emissions from the following units shall not exceed the emission limits listed in the table below.

| Unit ID | Unit Description | PM Limit (lbs/hr) |
|---|---|---|
| P20 | Grain Receiving and Storage | 1.34 |
| P30 | Hammermills | 0.60 |
| P70 | DDGS Cooling System | 0.38 |
| P90 | DDGS Loadout | 0.16 |

Combined with the PM emissions from thermal oxidizer/heat recovery steam generator (C10), flare C50, unpaved roads, and insignificant activities, the PM emissions from the entire source are limited to less than 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

D.1.2 FESOP Limits [326 IAC 2-8-4] [326 IAC 2-2]

(a) PM10 emissions from these units shall not exceed the emission limits listed in the table below:

| Unit ID | Unit Description | PM10 Limit (lbs/hr) |
|---|---|---|
| P20 | Grain Receiving and Storage | 1.34 |
| P30 | Hammermills | 0.60 |
| P70 | DDGS Cooling System | 0.38 |
| P90 | DDGS Loadout | 0.16 |

(b) The DDGS production rate shall not exceed 162,218 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) VOC emissions from the DDGS cooling system (P70) shall not exceed 0.1 pounds per ton of DDGS produced.

(d) Total HAP emissions from the DDGS cooling system (P70) shall not exceed 0.01 pounds per ton of DDGS produced.

Combined with the emissions from other emission units, the PM10 and VOC emissions from the entire source are each limited to less than 100 tons/yr, the HAPs emissions from the entire source are limited to less than 10 tons/yr for a single HAP and less than 25 tons/yr for total HAPs. Therefore, the requirements of 326 IAC 2-7 (Part 70 Program) and 326 IAC 2-2 (PSD) are not applicable.

D.1.3 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, particulate emissions from each of the following operations shall not exceed the pound per hour limit listed in the table below:

| Unit ID | Process Description | Max. Throughput Rate (tons/hr) | Particulate Emission Limit (lbs/hr) |
|---|---|---|---|
| P20 | Grain Receiving and Storage Operation | 420 | 66.9 |
| P30 | Each of the Hammermills | 100 | 51.3 |
| P70 | DDGS Cooling System | 20 | 30.5 |
| P90 | DDGS Loadout Operation | 400 | 66.3 |

The pounds per hour limitations were calculated using one of the following equations:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

**Compliance Determination Requirements**

D.1.5 PM and PM10 Control

(a) In order to comply with Conditions D.1.1, D.1.2(a), and D.1.3, each of the following emission units shall be controlled by the associated baghouse, as listed in the table below, when these units are in operation:

| Unit ID | Process Description | Baghouse ID |
|---|---|---|
| P20 | Grain Receiving and Storage Operation | C20 |
| P30 | Each of the Hammermills | C30 |
| P70 | DDGS Cooling System | C70 |
| P90 | DDGS Loadout Operation | C90 |

(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.1.6 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.1.2(c) and (d), the Permittee shall perform VOC and HAP testing for the DDGS cooling system (P70) within 60 days after achieving the maximum capacity, but not later than 180 days after initial startup, utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

D.1.7 Visible Emissions Notations

(a) Visible emission notations of the baghouse stack exhausts (stacks S20, S30, S70, and S90) shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.1.8 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses used in conjunction with the grain receiving and storage operation (P20), the hammermills (P30), the DDGS cooling system (P70), and the DDGS loadout operation (P90) at least once per day when these units are in operation. When for any one reading the pressure drop across the baghouse is outside the normal range of 3.0 to 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

D.1.9 Broken or Failed Bag Detection

(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.

**Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

D.1.10 Record Keeping Requirements

(a) To document compliance with Condition D.1.2(b), the Permittee shall maintain monthly records of the DDGS produced.

(b) To document compliance with Condition D.1.7, the Permittee shall maintain daily records of visible emission notations of the baghouse stack exhausts.

(c) To document compliance with Condition D.1.8, the Permittee shall maintain daily records of the pressure drop during normal operation.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.11 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2(b) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

## SECTION D.2 FACILITY OPERATION CONDITIONS

**Facility Description [326 IAC 2-8-4(10)]:**

(e) One (1) fermentation process, identified as P40, to be constructed in 2005, with a maximum throughput rate of 6,500 gallons per hour, consisting of four (4) fermenters and one (1) beer well system, controlled by a $CO_2$ scrubber C40, and exhausting through stack S40.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

D.2.1 VOC and HAP Emissions [326 IAC 2-2] [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP), the Permittee shall comply with the following for the fermentation process:

(a) The ethanol production rate shall not exceed 50 million gallons (MMgal) per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) VOC emissions shall not exceed 1.8 pounds per 1,000 gallons of ethanol produced.

(c) Acetaldehyde emissions shall not exceed 0.245 pounds per 1,000 gallons of ethanol produced.

(d) Total HAP emissions shall not exceed 0.271 pounds per 1,000 gallons of ethanol produced.

Combined with the VOC emissions from other emission units, the VOC emissions from the entire source are limited to less than 100 tons/yr, and the HAP emissions from the entire source are limited to less than 10 tons/yr for a single HAP and less than 25 tons/yr for total HAPs. Therefore, the requirements of 326 IAC 2-7 (Part 70 Program) and 326 IAC 2-2 (PSD) are not applicable.

D.2.2 Best Available Control Technology [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (General Reduction Requirements), the Permittee shall control the fermentation process with a BACT (Best Available Control Technology) which has been determined to be the following:

(a) The VOC emissions from the fermentation process shall be controlled by wet scrubber C40.

(b) The control efficiency for the wet scrubber C40 shall be at least 98%; or the outlet VOC concentration shall not exceed 20 ppmv when the inlet VOC concentration is lower than 200 ppmv.

(c) The capture efficiency shall be 100% as defined in EPA Method 204.

(d) VOC emissions from wet scrubber C40 shall not exceed 1.8 pounds per 1,000 gallons of ethanol produced.

D.2.3 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and its control device.

**Compliance Determination Requirements**

D.2.4 VOC and HAP Control

In order to comply with Conditions D.2.1 and D.2.2, wet scrubber C40 shall be in operation and control emissions from the fermentation process at all times that this process is in operation.

D.2.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

Within 60 days after achieving the maximum production rate at which this facility will be operated, but not later than 180 days after commencing operation, the Permittee shall conduct a performance test to perform VOC (including emission rate and overall control efficiency) and acetaldehyde testing for scrubber C40 utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

D.2.6 Parametric Monitoring

The Permittee shall monitor and record the flow rate of scrubber C40 at least once per day when the fermentation process is in operation. When for any one reading the flow rate of the scrubber is less than the minimum of 35 gallons per minute, or a minimum flow established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A flow rate that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

The instruments used for determining the flow rate shall comply with Section C - Instrument Specifications of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

**Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

D.2.7 Record Keeping Requirements

(a) To document compliance with Condition D.2.1(a), the Permittee shall maintain monthly records of the total ethanol production rate.

(b) To document compliance with Condition D.2.6, the Permittee shall maintain once per day records of flow rate for scrubber C40 during normal operation.

(c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.8 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.2.1(a) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

## SECTION D.3 FACILITY OPERATION CONDITIONS

**Facility Description [326 IAC 2-8-4(10)]**

(f) One (1) recuperative thermal oxidizer/heat recovery steam generator, identified as C10, to be constructed in 2005, using natural gas and process waste gases from the dryers as fuels, with a maximum heat input capacity of 125 MMBtu/hr, and exhausting through stack S10.

(g) One (1) mashing, cooking and liquefication operation, identified as P10, to be constructed in 2005, with a maximum wet dryer feed rate of 48 tons of wet cake (with 65% water) per hour, controlled by recuperative thermal oxidizer/heat recovery steam generator C10, exhausting through stack S10, consisting of the following:

(1) Meal conveying operations.

(2) One (1) mash mixer, where process water and/or hot water is added to meal to form mash.

(3) Two (2) slurry tanks, where ammonia is added to mash as needed to adjust pH levels, each with a maximum capacity of 16,000 gallons.

(4) One (1) cook tube, where steam is injected to sterilize mash and gelatinize starch, with a maximum capacity of 5,000 gallons.

(5) One (1) flash tank, with a maximum capacity of 2,000 gallons.

(6) One (1) receiver tank.

(7) One (1) yeast tank, with a maximum capacity of 21,000 gallons.

(h) One (1) distillation and dehydration operation, to be constructed in 2005, controlled by recuperative thermal oxidizer/heat recovery steam generator C10, exhausting through stack S10, and consisting of the following:

(1) One (1) beer column.

(2) One (1) side stripper.

(3) One (1) rectifier column.

(4) One (1) 190 proof condenser.

(5) Three (3) molecular sieves.

(6) One (1) 200 proof condenser.

(7) Three (3) centrifuges.

(8) One (1) centrate storage tank, with a maximum capacity of 990 gallons.

(9) Eight (8) evaporators.

(i) Two (2) natural gas fired DDGS dryers in series, identified as Dryers A and B, each with a maximum heat input capacity of 42 MMBtu/hr and a maximum throughput rate of 20 tons of DDGS per hour, controlled by recuperative thermal oxidizer/heat recovery steam generator C10, and exhausting through stack S10.

**SECTION D.3 FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-8-4(10)]**
**(Continued)**

(j) One (1) natural gas-fired combustion turbine, identified as CT, to be constructed in 2006, with a maximum heat input capacity of 59.8 MMBtu/hr and a maximum power output of 5.2 Megawatts, and exhausting through stack S-T.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

D.3.1 PM Emissions [326 IAC 2-2]

The PM emissions from recuperative thermal oxidizer/heat recovery steam generator C10, which is used to control the DDGS dryers and distillation and dehydration process, shall not exceed 0.2 pounds per ton of DDGS produced.

Combined with the PM emissions from other emission units, the PM emissions from the entire source are limited to less than 100 tons/yr. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

D.3.2 FESOP Limits [326 IAC 2-8-4] [326 IAC 2-2]

(a) The DDGS production rate shall not exceed 162,218 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) PM10 emissions from stack S10 shall not exceed 3.70 lbs/hr or 0.2 pounds per ton of DDGS produced.

(c) VOC emissions from stack S10 shall not exceed 5.55 lbs/hr or 0.3 pounds per ton of DDGS produced.

(d) $SO_2$ emissions from stack S10 shall not exceed 8.52 lbs/hr or 0.46 pounds per ton of DDGS produced.

(e) Acetaldehyde emissions from stack S10 shall not exceed 0.39 lbs/hr or 0.021 pounds per ton of DDGS produced.

(f) The hourly CO and NOx emissions from the DDGS dryers and the TO/HRSG system (C10), which vent through a single stack (S10) shall not exceed the following:

| Emission Units | CO Emission Limit (lbs/hr) | NOx Emission Limit (lbs/hr) |
|---|---|---|
| Stack C10 when either one or both of the DDGS dryers are in operation | 22.2 | 20.9 |
| Stack C10 when both of the DDGS dryers are not in operation | 10.5 | 12.5 |

(g) The hourly CO and NOx emissions from the combustion turbine (CT) shall not exceed the following:

| Emission Units | CO Emission Limit (lbs/hr) | NOx Emission Limit (lbs/hr) |
|---|---|---|
| Combustion Turbine CT | 7.10 | 5.84 |

(h) Total CO emissions from the DDGS dryers, the TO/HRSG system (C10), and the

combustion turbine (CT) shall not exceed 98.2 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly CO emissions shall be calculated using the following equation:

CO Emissions (tons/month) = (22.5 X + 10.5 Y + 7.1 Z) / 2000

Where
X = the operating hours of TO/HRSG system C10 when at least one of the DDGS dryers is in operation (hours/month)
Y = the operating hours of TO/HRSG system C10 when both of the DDGS dryers are not in operation (hours/month)
Z = the operating hours for combustion turbine CT (hours/month)

(i) Total NOx emissions from the DDGS dryers, the TO/HRSG system (C10), and the combustion turbine (CT) shall not exceed 97.4 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly NOx emissions shall be calculated using the following equation:

NOx Emissions (tons/month) = (20.9 X + 12.5 Y + 5.84 Z) / 2000

Where
X = the operating hours of TO/HRSG system C10 when at least one of the DDGS dryers is in operation (hours/month)
Y = the operating hours of TO/HRSG system C10 when both of the DDGS dryers are not in operation (hours/month)
Z = the operating hours for combustion turbine CT (hours/month)

Combined with the emissions from other emission units, the PM10, VOC, $SO_2$, CO, and NOx emissions from the entire source are each limited to less than 100 tons/yr, and the HAPs emissions from the entire source are limited to less than 10 tons/yr for a single HAP and less than 25 tons/yr for total HAPs. Therefore, the requirements of 326 IAC 2-7 (Part 70 Program) and 326 IAC 2-2 (PSD) are not applicable.

D.3.3 Best Available Control Technology [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (General Reduction Requirements), the Permittee shall control the VOC emissions from the DDGS dryers and the distillation and dehydration process with a BACT (Best Available Control Technology) which has been determined to be the following:

(a) The VOC emissions from the distillation and dehydration process and DDGS dyers shall be controlled by recuperative thermal oxidizer/heat recovery steam generator C10.

(b) The destruction efficiency for recuperative thermal oxidizer/heat recovery steam generator C10 shall be at least 98%.

(c) The capture efficiency shall be 100% as defined in EPA Method 204.

(d) The VOC emissions from the recuperative thermal oxidizer/heat recovery steam generator (C10) shall not exceed 5.55 lbs/hr or 0.3 pounds per ton of DDGS produced.

D.3.4 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to recuperative thermal oxidizer/heat recovery steam generator C10, except when otherwise specified in 40 CFR Part 60, Subpart Db.

D.3.5 NOx Emissions [326 IAC 12-1][40 CFR 60, Subpart Db]

(a) Pursuant to 40 CFR 60.44b, the NOx emissions from thermal oxidizer/heat recovery steam generator C10 shall not exceed 0.1 lbs/MMBtu.

(b) Pursuant to 40 CFR 60.48b(g)(2), the Permittee shall monitor the operating conditions for thermal oxidizer/heat recovery steam generator C10 and predict nitrogen oxides emission rates as specified in a plan submitted pursuant to 40 CFR 60.49b(c).

D.3.6 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in Condition D.3.7 except when otherwise specified in 40 CFR 60, Subpart VV.

D.3.7 New Source Performance Standards [326 IAC 12] [40 CFR 60]

Pursuant to 326 IAC 12 (40 CFR 60, Subpart VV) the Permittee shall satisfy the requirements of 40 CFR 60.482 through 60.487, as applicable and listed in Section E.1, for equipment leaks from pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, and flanges or other connectors in VOC service.

D.3.8 Particulate Emissions [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from the 125 MMBtu per hour heat input recuperative thermal oxidizer/heat recovery steam generator (C10) shall be limited to 0.31 pounds per MMBtu heat input.

The limit was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where Pt = emission rate limit (lbs/MMBtu)
Q = total source heat input capacity (MMBtu/hr)

D.3.9 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, particulate emissions from each of the following operations shall not exceed the pound per hour limit listed in the table below:

| Process Description | Max. Throughput Rate (tons/hr) | Particulate Emission Limit (lbs/hr) |
|---|---|---|
| Mashing, Cooking, and Liquefaction Operation | 42 | 44.2 |
| Each of the DDGS Dryers | 20 | 30.5 |

The pounds per hour limitations were calculated using one of the following equations:

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 4.10\ P^{0.67}$ where E = rate of emission in pounds per hour and
P = process weight rate in tons per hour

Interpolation and extrapolation of the data for the process weight rate in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$E = 55.0\ P^{0.11} - 40$ where E = rate of emission in pounds per hour; and
P = process weight rate in tons per hour

D.3.10 Standard of Performance for Stationary Combustion Turbines [40 CFR Part 60, Subpart KKKK]

Pursuant to 40 CFR Part 60, Subpart KKKK, the Permittee shall comply with the requirements of Section E.2 for the natural gas fired combustion turbine (CT).

D.3.11 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and their control devices.

**Compliance Determination Requirements**

D.3.12 VOC and HAP Control

In order to comply with Conditions D.3.2 and D.3.3, the recuperative thermal oxidizer/heat recovery steam generator (C10) shall be in operation and control emissions from the DDGS dryers and the distillation and dehydration process at all times that these units are in operation.

D.3.13 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11] [40 CFR 60 Subpart Db] 326 IAC 2-2]

(a) Pursuant to 40 CFR 60.46(b)(c) and in order to demonstrate compliance with Conditions D.3.2(f) and D.3.5(a), the Permittee shall perform NOx testing for thermal oxidizer/heat recovery steam generator C10 when the DDGS dryers are in operation within 60 days after achieving the maximum capacity, but not later than 180 days after initial startup, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(b) In order to demonstrate compliance with Conditions D.3.1, D.3.2, D.3.3, D.3.8, and D.3.9, and the Permittee shall perform PM, PM10, VOC (including emission rate and overall control efficiency), $SO_2$, CO, and acetaldehyde testing for recuperative thermal oxidizer/heat recovery steam generator C10 when the DDGS dryers are in operation within 60 days after achieving the maximum capacity, but not later than 180 days after initial startup, utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensible PM-10. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(c) In order to demonstrate compliance with Condition D.3.2(f), the Permittee shall perform CO and NOx testing for TO/HRSG system C10 when the DDGS dryers are not in operation, within 60 days after achieving the maximum capacity, but not later than 180 days after initial startup, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(d) In order to demonstrate compliance with Condition D.3.2(g), the Permittee shall perform CO and NOx testing for combustion turbine CT within 60 days after achieving the maximum capacity, but not later than 180 days after initial startup, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.

**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

D.3.14 Visible Emissions Notations

(a) Visible emission notations of the stack exhaust from stack S10 shall be performed once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

D.3.15 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the recuperative thermal oxidizer/heat recovery steam generator C10 for measuring operating temperature. For the purpose of this condition, continuous means no less than once per minute. The output of this system shall be recorded as a 3-hour average. From the date of issuance of this permit until the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour average temperature of 1,450E F.

(b) The Permittee shall determine the hourly average temperature from the most recent valid stack test that demonstrates compliance with limits in Conditions D.3.2 and D.3.3, as approved by IDEM.

(c) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour average temperature as observed during the compliant stack test.

D.3.16 Parametric Monitoring

(a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with limits in Conditions D.3.2 and D.3.3, as approved by IDEM.

(b) The duct pressure or fan amperage shall be observed at least once per day when the recuperative thermal oxidizer/heat recovery steam generator (C10) is in operation. On and after the date the approved stack test results are available, the duct pressure or fan amperage shall be maintained within the normal range as established in most recent compliant stack test.

**Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

D.3.17 Record Keeping Requirements

(a) To document compliance with Condition D.3.2(a), the Permittee shall maintain monthly records of the weight of DDGS produced.

(b) To document compliance with Conditions D.3.2(h) and (i), the Permittee shall maintain monthly records of the following:

(1) The operating hours of the TO/HRSG system (C10).

(2) The operating hours when one or both of the DDGS dryers are in operation.

(3) The operating hours of the combustion turbine (CT).

(4) The calculated monthly CO and NOx emissions from the TO/HRSG system (C10), the DDGS dryers, and the combustion turbine (CT).

(5) The CO and NOx emissions for each compliance period.

(c) To document compliance with Condition D.3.5, the Permittee shall maintain records of the operating parameters as specified in a plan submitted pursuant to 40 CFR 60.49b(c) for

the recuperative thermal oxidizer/heat recovery steam generator (C10). These records shall be sufficient to estimate the NOx emissions from the recuperative thermal oxidizer/heat recovery steam generator (C10).

(d) To document compliance with Condition D.3.14, the Permittee shall maintain records of daily visible emission notations of the stack S10.

(e) To document compliance with Condition D.3.15, the Permittee shall maintain continuous temperature records for the thermal oxidizer and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(f) To document compliance with Condition D.3.16, the Permittee shall maintain daily records of the duct pressure or fan amperage for the thermal oxidizer/heat recovery steam generator.

(g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.3.18 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.3.2(a), (h), and (i) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

D.3.19 Recordkeeping Requirements [40 CFR 60, Subpart Db] [326 IAC 12]

(a) Pursuant to 40 CFR 60.49b(d), the Permittee shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor individually for natural gas for the reporting period. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of each calendar month.

(b) Pursuant to 40 CFR 60.49b(g), the Permittee shall maintain records of the following information for each steam generating unit operating day:

(1) Calendar date.

(2) The average hourly nitrogen oxides emission rates (expressed as $NO_2$) (ng/J or lb/million Btu heat input) measured or predicted.

(3) The 30-day average nitrogen oxides emission rates (ng/J or lb/million Btu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceding 30 steam generating unit operating days.

(4) Identification of the steam generating unit operating days when the calculated 30-day average nitrogen oxides emission rates are in excess of the nitrogen oxides emissions standards under 40 CFR 60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken.

(5) Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken.

(6) Identification of the times when emission data have been excluded from the calculation of average emission rates and the reasons for excluding data.

(7) Identification of "F" factor used for calculations, method of determination, and type of fuel combusted.

(8) Identification of the times when the pollutant concentration exceeded full span of the continuous monitoring system.

(9) Description of any modifications to the continuous monitoring system that could affect the ability of the continuous monitoring system to comply with Performance Specification 2 or 3.

(c) All records shall be maintained in accordance with Section C - General Recordkeeping Requirements, of this permit.

D.3.20 Reporting Requirements [40 CFR 60, Subpart Db] [326 IAC 12]

(a) Pursuant to 40 CFR 60.49b(a), the Permittee shall submit notification of the date of initial startup, as provided by 40 CFR 60.7. This notification shall include the information specified in 40 CFR 60.49b(a)(1) through (4).

(b) Pursuant to 40 CFR 60.49b(b), the Permittee shall submit the performance test data from the initial performance test using the applicable performance specifications in appendix B. The Permittee shall submit to the Administrator the maximum heat input capacity data from the demonstration of the maximum heat input capacity of the affected facility.

(c) Pursuant to 40 CFR 60.49b(h), the Permittee shall submit excess emission reports for any excess emissions which occurred during the reporting period.

(d) Pursuant to 40 CFR 60.49b(i), the Permittee shall submit reports containing the information recorded under 40 CFR 60.49b(g) and Condition D.4.24(b).

(e) Pursuant to 40 CFR 60.49b(v), the Permittee may submit electronic quarterly reports for NOx in lieu of submitting the written reports required. The format of each quarterly electronic report shall be coordinated with IDEM, OAQ. The electronic report(s) shall be submitted no later than 30 days after the end of the calendar quarter and shall be accompanied by a certification statement, indicating whether compliance with the applicable emission standards and minimum data requirements of this subpart was achieved during the reporting period. Before submitting reports in the electronic format, the Permittee shall coordinate with IDEM, OAQ to obtain their agreement to submit reports in this alternative format.

(f) Pursuant to 40 CFR 60.49b(w), the Permittee shall submit the above reports each six (6) month period. All reports shall be submitted to the Administrator and IDEM, and shall be postmarked by the 30th day following the end of the reporting period.

## SECTION D.4 FACILITY OPERATION CONDITIONS

**Facility Description [326 IAC 2-8-4(10)]:**

(k) One (1) ethanol loading terminal for both trucks and railcars, identified as P50, to be constructed in 2005, with a maximum loading rate of 36,000 gallons per hour for truck loading and a maximum loading rate of 72,000 gallons per hour for railcar loading. The truck loading process is controlled by an open flare C50, which is fueled by natural gas and has a maximum heat input capacity of 6.4 MMBtu/hr, and exhausting through stack S50.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

D.4.1 FESOP Limits [326 IAC 2-2] [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP), the Permittee shall comply with the following emission limits for the ethanol loading terminal:

(a) The total ethanol loadout rate (including trucks and railcars) shall not exceed 50 million gallons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The truck loadout process shall not exceed 2.5 million gallons per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) The VOC/HAP emissions from the flare C50 shall not exceed 0.69 lbs/hr.

(c) CO emissions from flare C50 shall not exceed 0.13 lbs/kgal.

(d) NOx emissions from flare C50 shall not exceed 0.10 lbs/kgal.

Combined with the VOC, CO, NOx and HAP emissions from other emission units, the VOC, CO, and NOx emissions from the entire source are each limited to less than 100 tons/yr and the total HAP emissions from the entire source are limited to less than 10 tons/yr. Therefore, the requirements of 326 IAC 2-7 (Part 70 Program) and 326 IAC 2-2 (PSD) are not applicable.

D.4.2 VOC Emissions [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (BACT), the Permittee shall collect and control the VOC emissions from the ethanol loading terminal, when loading ethanol to trucks, with a Best Available Control Technology (BACT). The BACT for this unit has been determined to be the following:

(a) The VOC emissions from the ethanol loading terminal shall be collected and controlled by open flare C50 when loading denatured ethanol to trucks.

(b) The overall control efficiency (including destruction efficiency and capture efficiency) for flare C50 shall be at least 98%.

(c) The VOC emissions from the flare C50 shall not exceed 0.69 lbs/hr.

D.4.3 General Provisions Relating to NSPS [326 IAC 12-1][40 CFR Part 60, Subpart A]

The provisions of 40 CFR 60, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 12-1, apply to the facility described in Condition D.4.4 except when otherwise specified in 40 CFR 60, Subpart VV.

D.4.4 Equipment Leaks of VOC [326 IAC 12][40 CFR 60, Subpart VV]

Pursuant to 40 CFR 60, Subpart VV, the Permittee shall comply with the requirement of Section E.1 for pumps; compressors; pressure relief devices in gas/vapor service; sampling connection systems; open-ended valves or lines; and valves.

D.4.5 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for this facility and any control device.

**Compliance Determination Requirements**

D.4.6 VOC and HAP Control

In order to comply with Conditions D.4.1(c) and D.4.2, flare C50 shall be in operation and control emissions from the ethanol loading terminal at all times when this unit is loading ethanol to trucks.

**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

D.4.7 Flare Pilot Flame

In order to comply with Conditions D.4.1 and D.4.2, the Permittee shall monitor the presence of a flare pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame when the ethanol loading terminal is in operation and is loading ethanol to trucks.

**Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

D.4.8 Record Keeping Requirements

(a) To document compliance with Condition D.4.1(a), the Permittee shall maintain monthly records of the total amount of denatured ethanol loaded out.

(b) To document compliance with Condition D.4.1(b), the Permittee shall maintain monthly records of the amount of denatured ethanol loaded out to trucks.

(c) To document compliance with Condition D.4.8, the Permittee shall maintain records of temperature or other parameters sufficient to demonstrate the presence of a pilot flame when the loading terminal is in operation and is loading ethanol to trucks.

(d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.9 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.4.1(a) and (b) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

## SECTION D.5 FACILITY OPERATION CONDITIONS

**Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities**

(l) Other emission units, not regulated by a NESHAP, with PM10, $NO_x$, and $SO_2$ emissions less than five (5) pounds per hour or twenty-five (25) pounds per day, CO emissions less than twenty-five (25) pounds per day, VOC emissions less than three (3) pounds per hour or fifteen (15) pounds per day, lead emissions less than six-tenths (0.6) tons per year or three and twenty-nine hundredths (3.29) pounds per day, and emitting greater than one (1) pound per day but less than five (5) pounds per day or one (1) ton per year of a single HAP, or emitting greater than one (1) pound per day but less than twelve and five tenths (12.5) pounds per day or two and five tenths (2.5) ton per year of any combination of HAPs:

(10) Two (2) methanators, used to clean up the contact waste water that will be recirculated back into the cook tank, exhausting to the DDGS dryers as supplement fuel. When the dryers are down, methane emissions from the methanators are controlled by flare C60, which has a maximum heat input capacity of 3.2 MMBtu/hr and exhausts through stack S60.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

D.5.1 FESOP Limits [326 IAC 2-2] [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP), the operating hours of the biomethanator flare EP-15 shall be less than 500 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

Combined with the emissions from other emission units, the emissions from the entire source are limited to less than 100 tons/yr for CO and NOx. Therefore, the requirements of 326 IAC 2-7 (Part 70 Program) and 326 IAC 2-2 (PSD) are not applicable.

**Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

D.5.2 Record Keeping Requirements

(a) To document compliance with Condition D.5.1, the Permittee shall maintain monthly records of the operating hours of the biomethanator flare EP-15.

(b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.5.3 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.5.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

## SECTION D.6 FACILITY OPERATION CONDITIONS

**Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities**

(l) Other emission units, not regulated by a NESHAP, with PM10, $NO_x$, and $SO_2$ emissions less than five (5) pounds per hour or twenty-five (25) pounds per day, CO emissions less than twenty-five (25) pounds per day, VOC emissions less than three (3) pounds per hour or fifteen (15) pounds per day, lead emissions less than six-tenths (0.6) tons per year or three and twenty-nine hundredths (3.29) pounds per day, and emitting greater than one (1) pound per day but less than five (5) pounds per day or one (1) ton per year of a single HAP, or emitting greater than one (1) pound per day but less than twelve and five tenths (12.5) pounds per day or two and five tenths (2.5) ton per year of any combination of HAPs:

(1) Two (2) final product storage tanks, identified as TK61 and TK62, constructed in 2005, which store denatured ethanol, each with a maximum capacity of 500,000 gallons, and equipped with internal floating roofs.

(2) Two (2) shift tanks, identified as TK63 and TK65, constructed in 2005, which store 190 and 200 proof ethanol, each with a maximum capacity of 100,000 gallons, and equipped with internal floating roofs.

(3) One (1) denaturant (gasoline) storage tank, identified as TK64, constructed in 2005, which stores gasoline, with a maximum capacity of 100,000 gallons, and equipped with an internal floating roof.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

D.6.1 New Source Performance Standards [326 IAC 12][40 CFR 60 Subpart Kb]

Pursuant to 40 CFR Part 60.112b(a)(1), the Permittee shall equip storage tanks TK 61 through TK 65 with an internal floating roof meeting the following specifications:

(a) 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.

(b) 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:

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

(2) 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.

(3) 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.

(c) 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.

(d) 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.

(e) 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.

(f) 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.

(g) 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.

(h) 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.

(i) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.

D.6.2 New Source Performance Standards [326 IAC 12][40 CFR 60 Subpart VV]

Pursuant to 326 IAC 12 (40 CFR 60, Subpart VV) the Permittee shall satisfy the requirements of 40 CFR 60.482 through 60.487, as applicable, for equipment leaks from pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, and flanges or other connectors in VOC service.

**Compliance Determination Requirements**

D.6.3 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11][326 IAC 12][40 CFR 60.113b(a)(1)]

After installing the internal floating roofs required in Condition D.1.1, the Permittee shall:

(a) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel. 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 Permittee shall repair the items before filling the storage vessel.

(b) For vessels equipped with a double-seal system, the Permittee shall:

(1) Visually inspect the vessel as specified in part (c) and part (d) of this Condition; or

(2) Visually inspect the vessel as specified in part (d) of this Condition only, at least once every five years.

(c) For storage vessels equipped with a liquid-mounted or mechanical shoe primary seal, or for vessels equipped with a double-seal system where the Permittee elects to do so:

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 within 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 OAQ in the inspection report required in 40 CFR 60.115b(a)(3). Such a request for an extension must document that alternate storage capacity is unavailable and specify a schedule of actions the company will take that will assure that the control equipment will be repaired or the vessel will be emptied as soon as possible.

This inspection shall be repeated at least once every 12 months.

(d) For all storage vessels:

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.

This inspection shall be repeated at least once every 10 years, unless more frequent inspections are required elsewhere in this permit.

D.6.4 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11][326 IAC 12][40 CFR 60 Subpart VV]

The Permittee shall conduct performance tests for equipment leaks in accordance with 40 CFR 60 Subpart VV and Condition E.1.19, as applicable.

**Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]**

D.6.5 Parametric Monitoring [326 IAC 12][40 CFR 60 Subpart VV]

The Permittee shall develop and conduct a monitoring program for this facility addressing equipment leaks in accordance with 40 CFR 60 Subpart VV and Conditions E.1.1 through E.1.7, as applicable.

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

D.6.6 NSPS Reporting Requirements [40 CFR 60.113b(a)(5)][40 CFR 60.115b(a)(3) and (4)]

(a) The Permittee shall notify OAQ in writing at least 30 days prior to

(1) an initial filling, or

(2) a refilling after a complete emptying

of storage tanks TK 61 through TK 65 to afford OAQ the opportunity to have an observer present.

(b) If the inspection is not planned and the Permittee could not have known about the inspection 30 days in advance of refilling the tank, the Permittee shall notify OAQ 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 Administrator at least 7 days prior to the refilling.

(c) If any of the conditions described in Condition D.6.3(c) are detected during the annual visual inspection, a report shall be furnished to OAQ 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.

(d) After each inspection required by Condition D.6.3(d) 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 Condition D.6.3(d), a report shall be furnished to OAQ within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications and list each repair made.

D.6.7 Record Keeping Requirements [40 CFR 115b(a)]

(a) After installing control equipment in accordance with Condition D.6.1, the Permittee shall keep a record of each inspection performed as required by Condition D.6.3. 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).

(b) For storage tanks TK 61 through TK 65, the Permittee shall keep readily-accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel, for the life of each vessel.

(c) The Permittee shall maintain records for equipment leaks within this facility in accordance with 40 CFR 60 Subpart VV, as applicable.

(d) All records other than those in part (b) shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.6.8 Reporting Requirements [40 CFR 115b(a)(1)]

After installing control equipment in accordance with Condition D.6.1, the Permittee shall furnish OAQ with a report that describes the control equipment and certifies that the control equipment meets the specifications of 40 CFR 60.112b(a)(1) and 40 CFR 60.113b(a)(1). This report shall be an attachment to the notification required by Condition D.6.6.

## SECTION E.1 40 CFR 60, Subpart VV - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

E.1.1 Standards: Pumps in Light Liquid Service [326 IAC 12][40 CFR 60, Subpart VV]

Pursuant to 40 CFR 60.482-2 (Standards: Pumps in Light Liquid Service), the Permittee shall comply with the following requirements:

(a) Each pump in light liquid service shall:

(1) be monitored monthly to detect leaks by the methods specified in Condition E.1.10, except as provided in this condition; and

(2) be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected. If there are indications of liquids dripping from the pump seal, a leak is detected.

(c) 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 Condition E.1.9. A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.

(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of Condition E.1.1(a), provided the following requirements are met:

(1) Each dual mechanical seal system is:

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

(B) 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 Condition E.1.8; or

(C) 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) The following requirements are met:

(A) Each sensor as described in Condition E.1.1(d)(3) is checked daily or is equipped with an audible alarm;

(B) The Permittee determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.

(6) 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 Condition E.1.1(d)(5)(B), a leak is detected. 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 Condition E.1.9. A first attempt at repair shall be made no later than five (5) calendar days after each leak is detected.

(e) Any pump that is designated, as described in Condition E.1.11(d)(1) and (d)(2), for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Conditions E.1.1(a), (c), and (d) 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 Condition E.1.10(b), and

(3) Is tested for compliance with Condition E.1.1(e)(2) 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 Condition E.1.8, it is exempt from Conditions E.1.1(a) through (e).

(g) Any pump that is designated, as described in Condition E.1.11(e)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of Conditions E.1.1(a) and (d)(4) through (d)(6) if:

(1) The Permittee demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Condition E.1.1(a); and

(2) The Permittee 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 Condition E.1.1(c) 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 Conditions E.1.1(a)(2) and (d)(4), and the daily requirements of Condition E.1.1(d)(5), provided that each pump is visually inspected as often as practicable and at least monthly.

E.1.2 Standards: Pressure Relief Devices in Gas/Vapor Service [326 IAC 12][40 CFR 60, Subpart VV]

Pursuant to 40 CFR 60.482-4 (Standards: Pressure Relief Devices in Gas/Vapor Service), the Permittee shall comply with the following requirements:

(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 Condition E.1.9(b).

(b) 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 five (5) calendar days after the pressure release, except as provided in Condition E.1.8. No later than five (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 Condition E.1.9(b).

(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 Condition E.1.7 is exempted from the requirements of Conditions E.1.2(a) and (b).

(d) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of Conditions E.1.2(a) and (b), provided after each pressure release, a new rupture disk is 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 Condition E.1.8.

E.1.3 Standards: Sampling Connection Systems [326 IAC 12][40 CFR 60, Subpart VV]

Pursuant to 40 CFR 60.482-5 (Standards: Sampling Connection Systems), the Permittee shall comply with the following requirements:

(a) Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system. 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 Condition E.1.3(a) shall comply with the following requirements:

(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 Condition E.1.7; or

(4) Collect, store, and transport the purged process fluid to any of the following systems or facilities:

(A) 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;

(B) A treatment, storage, or disposal facility subject to regulation under 40 CFR Part 262, 264, 265, or 266; or

(C) 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 Conditions E.1.3(a) and (b).

E.1.4 Standards: Open-Ended Valves or Lines [326 IAC 12][40 CFR 60, Subpart VV]

Pursuant to 40 CFR 60.482-6 (Standards: Open-Ended Valves or Lines), the Permittee shall comply with the following requirements:

(a) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve. 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.

(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 Condition E.1.4(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 Conditions E.1.4(a), (b) and (c).

(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in Conditions E.1.4(a) through (c) are exempt from the requirements of Conditions E.1.4(a) through (c).

E.1.5 Standards: Valves in Gas/Vapor Service and in Light Liquid Service [326 IAC 12][40 CFR 60, Subpart VV]

Pursuant to 40 CFR 60.482-7 (Standards: Valves in Gas/Vapor Service and in Light Liquid Service), the Permittee shall comply with the following requirements:

(a) Each valve shall be monitored monthly to detect leaks by the methods specified in Condition E.1.9(a) and shall comply with Conditions E.1.5(b) through (e), except as provided in Conditions E.1.5(f), (g), and (h).

(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.

(c) Any valve for which a leak is not detected for two (2) successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected. If a leak is detected, the valve shall be monitored monthly until a leak is not detected for two (2) successive months.

(d) 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 Condition E.1.8. A first attempt at repair shall be made no later than five (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 Condition E.1.10(d)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of Condition E.1.5(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 Condition E.1.9(b), and

(3) Is tested for compliance with Condition E.1.5(f)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.

(g) Any valve that is designated, as described in Condition E.1.10(e)(1), as an unsafe-to-monitor valve is exempt from the requirements of Condition E.1.5(a) if:

(1) The Permittee demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with Condition E.1.5(a), and

(2) The Permittee 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 Condition E.1.10(e)(2), as a difficult-to-monitor valve is exempt from the requirements of Condition E.1.5(a) if:

(1) The Permittee demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than two (2) meters above a support surface.

(2) The process unit within which the valve is located either becomes an affected facility through 40 CFR 60.14 or 40 CFR 60.15 or the Permittee designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and

(3) The Permittee follows a written plan that requires monitoring of the valve at least once per calendar year.

E.1.6 Standards: Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Connectors [326 IAC 12][40 CFR 60, Subpart VV]

Pursuant to 40 CFR 60.482-8 (Standards: Pumps and Valves in Heavy Liquid Service, Pressure Relief Devices in Light Liquid or Heavy Liquid Service, and Connectors), the Permittee shall comply with the following requirements:

(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 Permittee shall follow either one of the following procedures:

(1) The Permittee shall monitor the equipment within five (5) days by the method specified in Condition E.1.9(a) and shall comply with the requirements of Conditions E.1.6(b) through (d).

(2) The Permittee 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) 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 Condition E.1.8. 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 Condition E.1.5(e).

E.1.7 Standards: Closed Vent Systems and Control Devices [326 IAC 12][40 CFR 60, Subpart VV]

Pursuant to 40 CFR 60.482-10 (Standards: Closed Vent Systems and Control Devices), the Permittee shall comply with the following requirements:

(a) For closed vent systems and control devices used to comply with the provisions of 40 CFR 60, Subpart VV, the Permittee shall comply with the provisions of this Condition.

(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 40 CFR 60.18.

(e) For control devices used to comply with the provisions of 40 CFR 60, Subpart VV, the Permittee shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.

(f) Except as provided in Conditions E.1.7(i) through (k), each closed vent system shall be inspected according to the procedures and schedule specified below:

(1) If the vapor collection system or closed vent system is constructed of hard-piping, the Permittee shall comply with the requirements specified in Conditions E.1.7(f)(1)(A) and (f)(1)(B):

(A) Conduct an initial inspection according to the procedures in Condition E.1.9(a); and

(B) 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 Permittee shall:

(A) Conduct an initial inspection according to the procedures in Condition E.1.9(a); and

(B) Conduct annual inspections according to the procedures in Condition E.1.9(a).

(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 Condition E.1.7(h).

(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.

(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 Permittee 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 Condition E.1.7(f)(1)(A) and (f)(2).

(j) Any parts of the closed vent system that are designated, as described in Condition E.1.7(l)(1), as unsafe to inspect are exempt from the inspection requirements of Conditions E.1.7(f)(1)(A) and (f)(2) if they comply with the following requirements:

(1) The Permittee 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 Conditions E.1.7(f)(1)(A) or (f)(2); and

(2) The Permittee 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 Condition E.1.7(l)(2), as difficult to inspect are exempt from the inspection requirements of Conditions E.1.7(f)(1)(A) and (f)(2) if they comply with the requirements specified below:

(1) The Permittee 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 40 CFR 60.14 and 60.15, or the Permittee designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and

(3) The Permittee 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 Permittee shall record the information specified below:

(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 Condition E.1.10(b).

(4) For each inspection conducted in accordance with Condition E.1.9(a) 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 Condition E.1.7(f)(1)(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.

(m) Closed vent systems and control devices used to comply with provisions of 40 CFR 60, Subpart VV shall be operated at all times when emissions may be vented to them.

E.1.8 Standards: Delay of Repair [326 IAC 12][40 CFR 60, Subpart VV]

Pursuant to 40 CFR 60.482-9 (Standards: Delay of Repair), the Permittee shall comply with the following requirements:

(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 Permittee 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 Condition E.1.7.

(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.

**Compliance Determination Requirements**

E.1.9 Test Methods and Procedures [326 IAC 12][40 CFR 60, Subpart VV]

Pursuant to 40 CFR 60.485 (Test Methods and Procedures), the Permittee shall comply with the following requirements:

(a) The Permittee shall determine compliance with the standards in Conditions E.1.1 through E.1.8 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:

(A) Zero air (less than 10 ppm of hydrocarbon in air); and

(B) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.

(b) The Permittee shall determine compliance with the no detectable emission standards in Conditions E.1.1(e), E.1.2, and E.1.5(f) as follows:

(1) The requirements of Condition E.1.10(a) 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.

(c) The Permittee 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 in 40 CFR 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, Conditions E.1.9(c) (1) and (2) shall be used to resolve the disagreement.

(d) The Permittee shall demonstrate that equipment is in light liquid service by showing that all the following conditions apply:

(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 in 40 CFR 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.

(e) Samples used in conjunction with Conditions E.1.9(c), (d), and (f) shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.

(f) The Permittee 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 permitted 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 ($H_T$) of the gas being combusted in a flare shall be computed using the following equation:

Where:

K = Conversion constant, $1.740 \times 10^{7}$ (g-mole)(MJ)/ (ppm-scm-kcal) (metric units) = $4.674 \times 10^{8}$ [(g-mole)(Btu)/(ppm-scf-kcal)] (English units)

$C_i$ = Concentration of sample component "i," ppm

$H_i$ = 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 in 40 CFR 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 in 40 CFR 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.

**Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]**

E.1.10 Recordkeeping Requirements [326 IAC 12][40 CFR 60, Subpart VV]

Pursuant to 40 CFR 60.486 (Recordkeeping Requirements), the Permittee shall comply with the following requirements:

(a) When each leak is detected as specified in Conditions E.1.1, E.1.5, and E.1.6, 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 Condition E.1.6(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.

(b) When each leak is detected as specified in Conditions E.1.1, E.1.5, and E.1.6, the following information shall be recorded in a log 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.

(4) "Above 10,000" if the maximum instrument reading measured by the methods specified in Condition E.1.10(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 employee 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.

(c) The following information pertaining to the design requirements for closed vent systems and control devices described in Condition E.1.7 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 Condition E.1.7(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 Conditions E.1.1, E.1.2, and E.1.3 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 Conditions E.1.1, E.1.2, and E.1.3.

(d) The following information pertaining to all equipment subject to the requirements in Conditions E.1.1 through E.1.8 and 40 CFR 60.482-1 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 40 CFR 60, Subpart VV.

(2) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of Conditions E.1.1(e) and E.1.5(f) and the designation of equipment as subject to the requirements of Conditions E.1.1(e) or E.1.5(f) shall be signed by the Permittee.

(3) A list of equipment identification numbers for pressure relief devices required to comply with Condition E.1.2.

(4) The following information:

(A) The dates of each compliance test as required in Conditions E.1.1(e), E.1.2, and E.1.5(f);

(B) The background level measured during each compliance test;

(C) The maximum instrument reading measured at the equipment during each compliance test.

(5) A list of identification numbers for equipment in vacuum service.

(e) The following information pertaining to all valves subject to the requirements of Conditions E.1.5(g) and (h) and to all pumps subject to the requirements of Conditions E.1.1(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.

(f) The following information shall be recorded for valves complying with Condition E.1.1:

(1) A schedule of monitoring.
(2) The percent of valves found leaking during each monitoring period.

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

(1) Design criterion required in Conditions E.1.1(d)(5) and explanation of the design criterion; and
(2) Any changes to this criterion and the reasons for the changes.

(h) 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.

(i) The provisions of 40 CFR 60.7 (b) and (d) do not apply to affected facilities subject to this subpart.

E.1.11 Reporting Requirements [326 IAC 12][40 CFR 60, Subpart VV]

Pursuant to 40 CFR 60.487 (Reporting Requirements), the Permittee shall comply with the following requirements:

(a) The Permittee shall submit semiannual reports to the Administrator and IDEM.

(b) All semiannual reports to the Administrator shall include the following information, summarized from the information required in Condition E.1.10.

(1) Process unit identification.

(2) For each month during the semiannual reporting period,
(A) Number of valves for which leaks were detected as described in Condition E.1.5(b),
(B) Number of valves for which leaks were not repaired as required in Condition E.1.5(d),
(C) Number of pumps for which leaks were detected as described in Conditions E.1.1(b) and E.1.1(d)(6),
(D) Number of pumps for which leaks were not repaired as required in Conditions E.1.1(c) and E.1.1(d)(6),
(E) 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.

(c) Revisions to items reported in the initial semiannual report if changes have occurred since the initial report or subsequent revisions to the initial report.

## SECTION E.2 40 CFR 60, Subpart KKKK—Standards of Performance for Stationary Combustion Turbines

**Facility Description [326 IAC 2-8-4(10)]:**

(j) One (1) natural gas-fired combustion turbine, identified as CT, to be constructed in 2006, with a maximum heat input capacity of 59.8 MMBtu/hr and a maximum power output of 5.2 Megawatts, and exhausting through stack S-T.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

**New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]**

E.2.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions for the natural gas fired combustion turbine (CT), except as otherwise specified in 40 CFR Part 60, Subpart KKKK.

(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance Branch, Office of Air Quality
100 North Senate Avenue,
Indianapolis, Indiana 46204-2251

E.2.2 Standard of Performance for Stationary Combustion Turbines Requirements [40 CFR Part 60, Subpart KKKK]

Pursuant to 40 CFR Part 60, Subpart KKKK, the Permittee shall comply with the provisions of Standard of Performance for Stationary Combustion Turbines for the natural gas fired combustion turbine (CT) as specified as follows:

**Subpart KKKK—Standards of Performance for Stationary Combustion Turbines**

**Source:** 71 FR 38497, July 6, 2006, unless otherwise noted.

**Introduction**

**§ 60.4300 What is the purpose of this subpart?**

This subpart establishes emission standards and compliance schedules for the control of emissions from stationary combustion turbines that commenced construction, modification or reconstruction after February 18, 2005.

**Applicability**

**§ 60.4305 Does this subpart apply to my stationary combustion turbine?**

(a) If you are the owner or operator of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005, your turbine is subject to this subpart. Only heat input to the combustion turbine should be included when determining whether or not this subpart is applicable to your turbine. Any additional heat input to associated heat recovery steam generators (HRSG) or duct burners should not be included when determining your peak heat input. However, this subpart does apply to emissions from any associated HRSG and duct burners.

(b) Stationary combustion turbines regulated under this subpart are exempt from the requirements of subpart GG of this part. Heat recovery steam generators and duct burners regulated under this subpart are exempted from the requirements of subparts Da, Db, and Dc of this part.

**Emission Limits**

**§ 60.4315 What pollutants are regulated by this subpart?**

The pollutants regulated by this subpart are nitrogen oxide ($NO_X$) and sulfur dioxide ($SO_2$).

**§ 60.4320 What emission limits must I meet for nitrogen oxides (NOX)?**

(a) You must meet the emission limits for $NO_X$ specified in Table 1 to this subpart.

**§ 60.4330 What emission limits must I meet for sulfur dioxide (SO2)?**

(a) If your turbine is located in a continental area, you must comply with either paragraph (a)(1) or (a)(2) of this section. If your turbine is located in Alaska, you do not have to comply with the requirements in paragraph (a) of this section until January 1, 2008.

(2) You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng $SO_2$/J (0.060 lb $SO_2$/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.

**General Compliance Requirements**

**§ 60.4333 What are my general requirements for complying with this subpart?**

(a) You must operate and maintain your stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.

**Monitoring**

**§ 60.4340 How do I demonstrate continuous compliance for NOx if I do not use water or steam injection?**

(a) If you are not using water or steam injection to control $NO_X$ emissions, you must perform annual performance tests in accordance with §60.4400 to demonstrate continuous compliance. If the $NO_X$ emission result from the performance test is less than or equal to 75 percent of the $NO_X$ emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the $NO_X$ emission limit for the turbine, you must resume annual performance tests.

**§ 60.4365 How can I be exempted from monitoring the total sulfur content of the fuel?**

You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng $SO_2$/J (0.060 lb $SO_2$/MMBtu) heat input for units located in continental areas and 180 ng $SO_2$/J (0.42 lb $SO_2$/MMBtu) heat input for units located in noncontinental areas or a continental area that the Administrator determines does not have access to natural gas and that the removal of sulfur compounds would cause more environmental harm than benefit. You must use one of the following sources of information to make the required demonstration:

(a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less and 0.4 weight percent (4,000 ppmw) or less for noncontinental areas, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet and 140 grains of sulfur or less per 100 standard cubic feet for noncontinental areas, has potential sulfur emissions of less than less than 26 ng $SO_2$/J (0.060 lb $SO_2$/MMBtu) heat input for continental areas and has potential sulfur emissions of less than less than 180 ng $SO_2$/J (0.42 lb $SO_2$/MMBtu) heat input for noncontinental areas; or

**§ 60.4370 How often must I determine the sulfur content of the fuel?**

The frequency of determining the sulfur content of the fuel must be as follows:

(b) Gaseous fuel. If you elect not to demonstrate sulfur content using options in §60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day.

**Reporting**

**§ 60.4375 What reports must I submit?**

(b) For each affected unit that performs annual performance tests in accordance with §60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test.

**§ 60.4395 When must I submit my reports?**

All reports required under §60.7(c) must be postmarked by the 30th day following the end of each 6-month period.

**Performance Tests**

**§ 60.4400 How do I conduct the initial and subsequent performance tests, regarding NOX?**

(a) You must conduct an initial performance test, as required in §60.8. Subsequent $NO_X$ performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).

(1) There are two general methodologies that you may use to conduct the performance tests. For each test run:

(i) Measure the $NO_X$ concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of this part. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the $NO_X$ emission rate:

$$E = \frac{1.194 \times 10^{-7} * (NO_x)_c * Q_{std}}{P} \qquad \text{(Eq. 5)}$$

Where:

E = $NO_X$ emission rate, in lb/MWh

$1.194 \times 10^{-7}$ = conversion constant, in lb/dscf-ppm

$(NO_X)_c$ = average $NO_X$ concentration for the run, in ppm

$Q_{std}$ = stack gas volumetric flow rate, in dscf/hr

P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to §60.4350(f)(2); or

(ii) Measure the $NO_X$ and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of this part. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the $NO_X$ emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in §60.4350(f) to calculate the $NO_X$ emission rate in lb/MWh.

(2) Sampling traverse points for $NO_X$ and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.

(3) Notwithstanding paragraph (a)(2) of this section, you may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in appendix A of this part if the following conditions are met:

(i) You may perform a stratification test for $NO_X$ and diluent pursuant to

(A) [Reserved], or

(B) The procedures specified in section 6.5.6.1(a) through (e) of appendix A of part 75 of this chapter.

(ii) Once the stratification sampling is completed, you may use the following alternative sample point selection criteria for the performance test:

(A) If each of the individual traverse point $NO_X$ concentrations is within ±10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±5ppm or ±0.5 percent $CO_2$ (or $O_2$) from the mean for all traverse points, then you may use three points (located either 16.7, 50.0 and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points must be located along the measurement line that exhibited the highest average $NO_X$ concentration during the stratification test; or

(B) For turbines with a $NO_X$ standard greater than 15 ppm @ 15% $O_2$, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point $NO_X$ concentrations is within ±5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±3ppm or ±0.3 percent $CO_2$ (or $O_2$) from the mean for all traverse points; or

(C) For turbines with a $NO_X$ standard less than or equal to 15 ppm @ 15% $O_2$, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point $NO_X$ concentrations is within ±2.5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±1ppm or ±0.15 percent $CO_2$ (or $O_2$) from the mean for all traverse points.

(b) The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.

(4) Compliance with the applicable emission limit in §60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average $NO_X$ emission rate at each tested level meets the applicable emission limit in §60.4320.

(6) The ambient temperature must be greater than 0 °F during the performance test.

**§ 60.4410 How do I establish a valid parameter range if I have chosen to continuously monitor parameters?**

If you have chosen to monitor combustion parameters or parameters indicative of proper operation of $NO_X$ emission controls in accordance with §60.4340, the appropriate parameters must be continuously monitored and recorded during each run of the initial performance test, to establish acceptable operating ranges, for purposes of the parameter monitoring plan for the affected unit, as specified in §60.4355.

**§ 60.4415 How do I conduct the initial and subsequent performance tests for sulfur?**

(a) You must conduct an initial performance test, as required in §60.8. Subsequent $SO_2$ performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test). There are three methodologies that you may use to conduct the performance tests.

(1) If you choose to periodically determine the sulfur content of the fuel combusted in the turbine, a representative fuel sample would be collected following ASTM D5287 (incorporated by reference, see §60.17) for natural gas or ASTM D4177 (incorporated by reference, see §60.17) for oil. Alternatively, for oil, you may follow the procedures for manual pipeline sampling in section 14 of ASTM D4057 (incorporated by reference, see §60.17). The fuel analyses of this section may be performed either by you, a service contractor retained by you, the fuel vendor, or any other qualified agency. Analyze the samples for the total sulfur content of the fuel using:

(ii) For gaseous fuels, ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17).

**Definitions**

**§ 60.4420 What definitions apply to this subpart?**

As used in this subpart, all terms not defined herein will have the meaning given them in the Clean Air Act and in subpart A (General Provisions) of this part.

*Combined cycle combustion turbine* means any stationary combustion turbine which recovers heat from the combustion turbine exhaust gases to generate steam that is only used to create additional power output in a steam turbine.

*Combined heat and power combustion turbine* means any stationary combustion turbine which recovers heat from the exhaust gases to heat water or another medium, generate steam for useful purposes other than additional electric generation, or directly uses the heat in the exhaust gases for a useful purpose.

*Combustion turbine model* means a group of combustion turbines having the same nominal air flow, combustor inlet pressure, combustor inlet temperature, firing temperature, turbine inlet temperature and turbine inlet pressure.

*Combustion turbine test cell/stand* means any apparatus used for testing uninstalled stationary or uninstalled mobile (motive) combustion turbines.

*Diffusion flame stationary combustion turbine* means any stationary combustion turbine where fuel and air are injected at the combustor and are mixed only by diffusion prior to ignition.

*Duct burner* means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary combustion turbine, internal combustion engine, kiln, etc., to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a heat recovery steam generating unit.

*Efficiency* means the combustion turbine manufacturer's rated heat rate at peak load in terms of heat input per unit of power output—based on the higher heating value of the fuel.

*Emergency combustion turbine* means any stationary combustion turbine which operates in an emergency situation. Examples include stationary combustion turbines used to produce power for critical networks or equipment, including power supplied to portions of a facility, when electric power from the local utility is interrupted, or stationary combustion turbines used to pump water in the case of fire or flood, etc. Emergency stationary combustion turbines do not include stationary combustion turbines used as peaking units at electric utilities or stationary combustion turbines at industrial facilities that typically operate at low capacity factors. Emergency combustion turbines may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are required by the manufacturer, the vendor, or the insurance company associated with the turbine. Required testing of such units should be minimized, but there is no time limit on the use of emergency combustion turbines.

*Excess emissions* means a specified averaging period over which either (1) the $NO_X$ emissions are higher than the applicable emission limit in §60.4320; (2) the total sulfur content of the fuel being combusted in the affected facility exceeds the limit specified in §60.4330; or (3) the recorded value of a particular monitored parameter is outside the acceptable range specified in the parameter monitoring plan for the affected unit.

*Gross useful output* means the gross useful work performed by the stationary combustion turbine system. For units using the mechanical energy directly or generating only electricity, the gross useful work performed is the gross electrical or mechanical output from the turbine/generator set. For combined heat and power units, the gross useful work performed is the gross electrical or mechanical output plus the useful thermal output (i.e., thermal energy delivered to a process).

*Heat recovery steam generating unit* means a unit where the hot exhaust gases from the combustion turbine are routed in order to extract heat from the gases and generate steam, for use in a steam turbine or other device that utilizes steam. Heat recovery steam generating units can be used with or without duct burners.

*Integrated gasification combined cycle electric utility steam generating unit* means a coal-fired electric utility steam generating unit that burns a synthetic gas derived from coal in a combined-cycle gas turbine. No solid coal is directly burned in the unit during operation.

*ISO conditions* means 288 Kelvin, 60 percent relative humidity and 101.3 kilopascals pressure.

*Lean premix stationary combustion turbine* means any stationary combustion turbine where the air and fuel are thoroughly mixed to form a lean mixture before delivery to the combustor. Mixing may occur before or in the combustion chamber. A lean premixed turbine may operate in diffusion flame mode during operating conditions such as startup and shutdown, extreme ambient temperature, or low or transient load.

*Natural gas* means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1,100 British thermal units (Btu) per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.

*Noncontinental area* means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, the Northern Mariana Islands, or offshore platforms.

*Peak load* means 100 percent of the manufacturer's design capacity of the combustion turbine at ISO conditions.

*Regenerative cycle combustion turbine* means any stationary combustion turbine which recovers heat from the combustion turbine exhaust gases to preheat the inlet combustion air to the combustion turbine.

*Simple cycle combustion turbine* means any stationary combustion turbine which does not recover heat from the combustion turbine exhaust gases to preheat the inlet combustion air to the combustion turbine, or which does not recover heat from the combustion turbine exhaust gases for purposes other than enhancing the performance of the combustion turbine itself.

*Stationary combustion turbine* means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), heat recovery system, and any ancillary components and sub-components comprising any simple cycle stationary combustion turbine, any regenerative/recuperative cycle stationary combustion turbine, any combined cycle combustion turbine, and any combined heat and power combustion turbine based system. Stationary means that the combustion turbine is not self propelled or intended to be propelled while performing its function. It may, however, be mounted on a vehicle for portability.

*Unit operating day* means a 24-hour period between 12 midnight and the following midnight during which any fuel is combusted at any time in the unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

*Unit operating hour* means a clock hour during which any fuel is combusted in the affected unit. If the unit combusts fuel for the entire clock hour, it is considered to be a full unit operating hour. If the unit combusts fuel for only part of the clock hour, it is considered to be a partial unit operating hour.

*Useful thermal output* means the thermal energy made available for use in any industrial or commercial process, or used in any heating or cooling application, i.e., total thermal energy made available for processes and applications other than electrical or mechanical generation. Thermal output for this subpart means the energy in recovered thermal output measured against the energy in the thermal output at 15 degrees Celsius and 101.325 kilopascals of pressure.

Table 1_to Subpart KKKK of Part 60_Nitrogen Oxide Emission Limits for New Stationary Combustion Turbines

| Combustion turbine type | Combustion turbine heat input at peak load (HHV) | NOX emission standard |
|---|---|---|
| New turbine firing natural gas.. | > 50 MMBtu/h and [le] 850 MMBtu/h. | 25 ppm at 15 percent O2 or 150 ng/J of useful output (1.2 lb/MWh). |

E.2.3 One Time Deadlines Relating to the Standard of Performance for Stationary Combustion Turbines [40 CFR 60, Subpart KKKK]

| Requirement | Rule Cite | Affected Facility | Deadline |
|---|---|---|---|
| Notification of the Date of Construction | 40 CFR 60.7(a)(1) | Combustion Turbine (CT) | Within 30 days after construction was commenced. |
| Notification of the Date of Initial Startup | 40 CFR 60.7(a)(3) | Combustion Turbine (CT) | Within 15 days after initial startup. |
| Initial Performance Test | 40 CFR 60.8(a)<br>40 CFR 60.4400 | Combustion Turbine (CT) | Within 60 days after achieving the maximum production rate, but not later than 180 days after initial startup. |

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR QUALITY
# COMPLIANCE DATA SECTION

## FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: Iroquois Bio-Energy Company, LLC
Source Address: 751 W. State Road 114, Rensselaer Indiana 47978-7265
Mailing Address: P. O. Box 218, Rensselaer, Indiana 47978-0218
Permit No.: 073-16720-00037

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

Annual Compliance Certification Letter

Test Result (specify)

Report (specify)

Notification (specify)

Affidavit (specify)

Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

| |
|---|
| Signature: |
| Printed Name: |
| Title/Position: |
| Date: |

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**
**OFFICE OF AIR QUALITY**
**COMPLIANCE BRANCH**
**100 North Senate Avenue**
**Indianapolis, Indiana 46204-2251**
**Phone: 317-233-0178**
**Fax: 317-233-6865**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)**
**EMERGENCY OCCURRENCE REPORT**

Source Name: Iroquois Bio-Energy Company, LLC
Source Address: 751 W. State Road 114, Rensselaer Indiana 47978-7265
Mailing Address: P. O. Box 218, Rensselaer, Indiana 47978-0218
Permit No.: 073-16720-00037

**This form consists of 2 pages** **Page 1 of 2**

**9** This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16

If any of the following are not applicable, mark N/A

| |
|---|
| Facility/Equipment/Operation: |
| Control Equipment: |
| Permit Condition or Operation Limitation in Permit: |
| Description of the Emergency: |
| Describe the cause of the Emergency: |

If any of the following are not applicable, mark N/A **Page 2 of 2**

| |
|---|
| Date/Time Emergency started: |
| Date/Time Emergency was corrected: |
| Was the facility being properly operated at the time of the emergency? Y N<br>Describe:<br><br>Type of Pollutants Emitted: TSP, PM-10, $SO_2$, VOC, $NO_X$, CO, Pb, other: |
| Estimated amount of pollutant(s) emitted during emergency: |
| Describe the steps taken to mitigate the problem: |
| Describe the corrective actions/response steps taken: |
| Describe the measures taken to minimize emissions: |
| If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value: |

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

Attach a signed certification to complete this report.

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR QUALITY
# COMPLIANCE DATA SECTION

## FESOP Quarterly Report

Source Name: Iroquois Bio-Energy Company, LLC
Source Address: 751 W. State Road 114, Rensselaer Indiana 47978-7265
Mailing Address: P. O. Box 218, Rensselaer, Indiana 47978-0218
Permit No.: 073-16720-00037
Facility: Entire Source
Parameter: DDGS Production Rate
Limit: Less than 162,218 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR:

| Month | Column 1 | Column 2 | Column 1 + Column 2 |
|---|---|---|---|
| | This Month | Previous 11 Months | 12 Month Total |
| Month 1 | | | |
| Month 2 | | | |
| Month 3 | | | |

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR QUALITY
# COMPLIANCE DATA SECTION

## FESOP Quarterly Report

Source Name: Iroquois Bio-Energy Company, LLC
Source Address: 751 W. State Road 114, Rensselaer Indiana 47978-7265
Mailing Address: P. O. Box 218, Rensselaer, Indiana 47978-0218
Permit No.: 073-16720-00037
Facility: Entire Source
Parameter: Total Ethanol Production Rate
Limit: Less than 50 million gallons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR:

| Month | Column 1 | Column 2 | Column 1 + Column 2 |
|---|---|---|---|
| | This Month | Previous 11 Months | 12 Month Total |
| Month 1 | | | |
| Month 2 | | | |
| Month 3 | | | |

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR QUALITY
# COMPLIANCE DATA SECTION

## FESOP Quarterly Report

Source Name: Iroquois Bio-Energy Company, LLC
Source Address: 751 W. State Road 114, Rensselaer Indiana 47978-7265
Mailing Address: P. O. Box 218, Rensselaer, Indiana 47978-0218
Permit No.: 073-16720-00037
Facility: TO/HRSG System (C10), DDGS Dryers, and Combustion Turbine (CT)
Parameter: CO Emissions
Limit: Less than 98.2 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

CO Emissions (tons/month) = (22.5 X + 10.5 Y + 7.1 Z) / 2000

Where X = the operating hours of TO/HRSG system C10 when at least one of the DDGS dryers is in operation (hours/month)
Y = the operating hours of TO/HRSG system C10 when both of the DDGS dryers are not in operation (hours/month)
Z = the operating hours for combustion turbine CT (hours/month)

YEAR:

| Month | Column 1 | | | | Column 2 | Column 1 + Column 2 |
|---|---|---|---|---|---|---|
| | This Month | | | | Previous 11 Months CO Emissions | 12 Month Total CO Emissions |
| | X | Y | Z | CO Emissions | | |
| Month 1 | | | | | | |
| Month 2 | | | | | | |
| Month 3 | | | | | | |

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR QUALITY
# COMPLIANCE DATA SECTION

## FESOP Quarterly Report

Source Name: Iroquois Bio-Energy Company, LLC
Source Address: 751 W. State Road 114, Rensselaer Indiana 47978-7265
Mailing Address: P. O. Box 218, Rensselaer, Indiana 47978-0218
Permit No.: 073-16720-00037
Facility: TO/HRSG System (C10), DDGS Dryers, and Combustion Turbine (CT)
Parameter: NOx Emissions
Limit: Less than 97.4 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

NOx Emissions (tons/month) = (20.9 X + 12.5 Y + 5.84 Z) / 2000

Where X = the operating hours of TO/HRSG system C10 when at least one of the DDGS dryers is in operation (hours/month)
Y = the operating hours of TO/HRSG system C10 when both of the DDGS dryers are not in operation (hours/month)
Z = the operating hours for combustion turbine CT (hours/month)

YEAR:

| Month | Column 1 | | | | Column 2 | Column 1 + Column 2 |
|---|---|---|---|---|---|---|
| | This Month | | | | Previous 11 Months NOx Emissions | 12 Month Total NOx Emissions |
| | X | Y | Z | NOx Emissions | | |
| Month 1 | | | | | | |
| Month 2 | | | | | | |
| Month 3 | | | | | | |

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR QUALITY
# COMPLIANCE DATA SECTION

**FESOP Quarterly Report**

Source Name: Iroquois Bio-Energy Company, LLC
Source Address: 751 W. State Road 114, Rensselaer Indiana 47978-7265
Mailing Address: P. O. Box 218, Rensselaer, Indiana 47978-0218
Permit No.: 073-16720-00037
Facility: Biomethanator Flare EP-15
Parameter: Operating Hours
Limit: Less than 500 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR:

| Month | Column 1 | Column 2 | Column 1 + Column 2 |
|---|---|---|---|
| | This Month | Previous 11 Months | 12 Month Total |
| Month 1 | | | |
| Month 2 | | | |
| Month 3 | | | |

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**
**OFFICE OF AIR QUALITY**
**COMPLIANCE DATA SECTION**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)**
**SEMIANNUAL DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Iroquois Bio-Energy Company, LLC
Source Address: 751 W. State Road 114, Rensselaer Indiana 47978-7265
Mailing Address: P. O. Box 218, Rensselaer, Indiana 47978-0218
Permit No.: 073-16720-00037

**Months:** _____ **to** _____ **Year:** _____

Page 1 of 2

| |
|---|
| This report is an affirmation that the source has met all the requirements stated in this permit. This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". |
| NO DEVIATIONS OCCURRED THIS REPORTING PERIOD. |
| THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD |

| | |
|---|---|
| **Permit Requirement** (specify permit condition #) | |
| **Date of Deviation:** | **Duration of Deviation:** |
| **Number of Deviations:** | |
| **Probable Cause of Deviation:** | |
| **Response Steps Taken:** | |

| | |
|---|---|
| **Permit Requirement** (specify permit condition #) | |
| **Date of Deviation:** | **Duration of Deviation:** |
| **Number of Deviations:** | |
| **Probable Cause of Deviation:** | |
| **Response Steps Taken:** | |

| | |
|---|---|
| **Permit Requirement** (specify permit condition #) | |
| **Date of Deviation:** | **Duration of Deviation:** |
| **Number of Deviations:** | |
| **Probable Cause of Deviation:** | |
| **Response Steps Taken:** | |

| | |
|---|---|
| **Permit Requirement** (specify permit condition #) | |
| **Date of Deviation:** | **Duration of Deviation:** |
| **Number of Deviations:** | |
| **Probable Cause of Deviation:** | |
| **Response Steps Taken:** | |

| | |
|---|---|
| **Permit Requirement** (specify permit condition #) | |
| **Date of Deviation:** | **Duration of Deviation:** |
| **Number of Deviations:** | |
| **Probable Cause of Deviation:** | |
| **Response Steps Taken:** | |

Form Completed by:_____

Title / Position:_____

Date:_____

Phone: _____

Attach a signed certification to complete this report.

# Indiana Department of Environmental Management
# Office of Air Quality

## Technical Support Document (TSD) for a Significant Permit Revision to a Federally Enforceable State Operating Permit

### Source Background and Description

| | |
|---|---|
| Source Name: | Iroquois Bio-Energy Company, LLC |
| Source Location: | 751 W. State Road 114 , Rensselaer, Indiana 47978-7265 |
| County: | Jasper |
| SIC Code: | 2869 |
| Operation Permit No.: | 073-16720-00037 |
| Operation Permit Issuance Date: | January 8, 2004 |
| Significant Permit Revision No.: | F073-23591-00037 |
| Permit Reviewer: | ERG/YC |

The Office of Air Quality (OAQ) has reviewed a revision application from Iroquois Bio-Energy Company, LLC relating to the operation of an ethanol production plant.

### History

Iroquois Bio-Energy is an ethanol production plant and was permitted to construct and operate in FESOP #073-16720-00037, issued on January 8, 2004. The maximum capacity of this plant is 50 million gallons of denatured ethanol per year. The Permittee has not completed the construction of this plant. On August 30, 2006, Iroquois Bio-Energy submitted a letter to IDEM, OAQ requesting the following changes to their FESOP:

1. The Permittee proposed to add a natural gas-fired combustion turbine that will be used only during the first four (4) months of the plant's operation to provide electric power. The proposed new unit is described below:

   (j) One (1) natural gas-fired combustion turbine, identified as CT, to be constructed in 2006, with a maximum heat input capacity of 59.8 MMBtu/hr and a maximum power output of 5.2 Megawatts, and exhausting through stack S-T.

   The Permittee stated that the use of the turbine will be discontinued once permanent power supply is available to the facility.

2. With the existing FESOP limits in SPR #073-20945-00037, issued on July 22, 2005, the potential to emit of the existing source plus the potential to emit from the proposed turbine will exceed 100 tons per year for CO and NOx. The potential to emit of total HAPs from the proposed turbine is 0.27 tons per year. Combined with the HAP emission limits for the existing permitted emission units, the HAP emissions from the entire source will still be less than 10 tons per year for a single HAP and less than 25 tons per year for total HAPs after the installation of the proposed turbine.

   In order to retain the FESOP status, the Permittee proposed to modify the existing FESOP limits for the DDGS dryers and the TO/HRSG system (C10). All of these units vent through a single stack (S10). The proposed FESOP limits are listed below:

   (a) The hourly CO and NOx emissions from the DDGS dryers, the TO/HRSG system (C10), and the combustion turbine (CT) shall not exceed the following:

| Emission Units | CO Emission Limit (lbs/hr) | NOx Emission Limit (lbs/hr) |
|---|---|---|
| Stack C10 when the DDGS dryers are in operation | 22.2 | 20.9 |
| Stack C10 when the DDGS dryers are not in operation | 10.5 | 12.5 |
| Combustion Turbine CT | 7.10 | 5.84 |

(b) Total CO emissions from the DDGS dryers, the TO/HRSG system (C10), and the combustion turbine (CT) shall not exceed 98.2 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The CO emissions shall be calculated using the hourly CO emission limits in paragraph (a) and the actual operating hours for the DDGS dryers, the TO/HRSG system (C10), and the combustion turbine (CT).

(c) Total NOx emissions from the DDGS dryers, the TO/HRSG system (C10), and the combustion turbine (CT) shall not exceed 97.4 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The NOx emissions shall be calculated using the hourly NOx emission limits in paragraph (a) and the actual operating hours for the DDGS dryers, the TO/HRSG system (C10), and the combustion turbine (CT).

Combined with the emissions from other permitted units, the potential to emit PM and criteria pollutants from the entire source is limited to less than 100 tons per year. Therefore, this source will retain its FESOP status after this revision.

Upon further review, IDEM has made the following changes:

1. Acetaldehyde is the major HAP emitted from ethanol production plants and the total acetaldehyde emissions are greater than 80% of the total HAP emissions from this source. Since it is not possible to test the total HAPs from an emission unit, the HAP emission limits in Condition D.2.1 and D.3.2 have been revised to be acetaldehyde emissions limits (see the changes in the Proposed Changes section).

   In order to ensure that acetaldehyde emissions from this source are limited to less than 10 tons per year, the Permittee shall perform stack testing for acetaldehyde emissions from the major emissions units. Therefore, the testing requirements in Conditions D.2.5 and D.3.14 (now D.3.13) have been revised to require acetaldehyde testing for scrubber C40, which will be used to control the fermentation process, and the TO/HRSG system C10, which will be used to control the distillation and dehydration process and DDGS dryers (see the changes in the Proposed Changes section).

2. All references to IDEM, OAQ's mailing address and contact numbers have been revised as follows:

   Indiana Department of Environmental Management
   Office of Air Quality
   100 North Senate Avenue
   Indianapolis, Indiana 46204**-2251**

   Phone: 317-233-~~5674~~ **0178**
   Fax: 317-233-~~5967~~ **6865**

3. IDEM has determined that the Permittee is not required to keep records of all preventive maintenance. However, where the Permittee seeks to demonstrate that an emergency has occurred, the Permittee must provide, upon request records of preventive maintenance in order to establish that the lack of proper maintenance did not cause or contribute to the deviation. Therefore, IDEM has deleted paragraph (b) of Condition B.12

(now B.13) – Preventive Maintenance and has amended Condition B.13 (now B.14) – Emergency Provisions.

4. For clarification purposes, Condition B.18 (now B.21) - Operational Flexibility has been revised.

5. In order to avoid duplication of requirements which may be included in D sections, Condition C.6 – Operation of Equipment has been removed from the permit.

6. IDEM realizes that the specifications of Condition C.13 - Pressure Gauge and Other Instrument Specifications, can only be practically applied to analog units, and has therefore clarified the condition to state that the condition only applies to analog units. Upon further review, IDEM has also determined that the accuracy of the instruments is not nearly as important as whether the instrument has a range that is appropriate for the normal expected reading of the parameter. Therefore, the language in Condition C.13 has been revised (see the changes in the Proposed Changes section).

7. IDEM has reconsidered the requirement to develop and follow a Compliance Response Plan. The Permittee will still be required to take reasonable response steps when a compliance monitoring parameter is determined to be out of range or abnormal. Replacing the requirement to develop and follow a Compliance Response Plan with a requirement to take reasonable response steps will ensure that the control equipment is returned to proper operation as soon as practicable, while still allowing the Permittee the flexibility to respond to situations that were not anticipated. Therefore, the condition for "Compliance Response Plan" has been replaced by the condition for "Response to Excursions or Exceedances". The Section D conditions that refer to this condition have been revised to reflect the new condition title (see the changes in the Proposed Changes section).

8. For multi-compartment baghouses, the permit will not specify what actions the Permittee needs to take in response to a broken bag. Therefore, a requirement has been added to Condition D.1.5 requiring the Permittee to notify IDEM if a broken bag is detected and the control device will not be repaired for more than ten (10) days. This notification allows IDEM to take any appropriate actions if the emission unit will continue to operate for a long period of time while the control device is not operating in optimum condition.

9. IDEM has determined that it is the Permittee's responsibility to include routine control device inspection requirements in the applicable preventive maintenance plan. Since the Permittee is in the best position to determine the appropriate frequency of control device inspections and the details regarding which components of the control device should be inspected, the conditions requiring control device inspections have been removed from the permit. In addition, the requirement to keep records of the inspections has been removed.

10. Condition D.1.10 (now D.1.9) - Broken or Failed Bag Detection, has been revised for those processes that operate in batch mode. The condition required an emission unit to be shut down immediately in case of baghouse failure. However, IDEM is aware there can be safety issues with shutting down a process in the middle of a batch. IDEM also realizes that in some situations, shutting down an emissions unit mid-process can cause equipment damage. Therefore, since it is not always possible to shut down a process with material remaining in the equipment, IDEM has revised the condition to state that in the case of baghouse failure, the feed to the process must be shut off immediately, and the process shall be shut down as soon as practicable.

11. The emission units listed in Section D.7 have no specific requirements. Therefore, IDEM, OAQ has removed Section D.7 from the permit.

## Existing Approvals

The source was issued FESOP No. 073-16720-00037 on January 8, 2004. The source has since received First Significant Permit Revision #073-20945-00037, issued on July 22, 2005.

## Enforcement Issue

There are no pending enforcement actions related to this permit revision.

## Recommendation

The staff recommends to the Commissioner that the Significant Permit Revision be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on August 30, 2006 and October 5, 2006.

## Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 and 2).

## Potential To Emit of the Revision

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA."

This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

| Pollutant | Potential To Emit (tons/year) |
|---|---|
| PM | 1.73 |
| PM10 | 1.73 |
| $SO_2$ | 0.89 |
| VOC | 0.55 |
| CO | 31.1 |
| $NO_x$ | 25.6 |

Note: For the purpose of determining Title V applicability for particulates, PM-10, not PM, is the regulated pollutant in consideration.

| HAP's | Potential To Emit (tons/year) |
|---|---|
| Formaldehyde | 0.19 |
| Toluene | 0.03 |
| Xylene | 0.02 |
| Acetaldehyde | 0.01 |
| Other HAPs | 0.02 |
| TOTAL | 0.27 |

## Justification for Revision

This revision is being performed as a Significant Permit Revision because (1) the potential to emit of NOx from this modification is greater than 25 tons per year, pursuant to 326 IAC 2-8-11.1(f)(1)(E); and (2) this modification requires adjustments to the emission cap limitations, pursuant to 326 IAC 2-8-11.1(g)(2).

## Potential to Emit of the Source after Revision

The table below summarizes the total potential to emit, reflecting all limits, of the significant emission units after control.

| | Potential to Emit (tons/year) | | | | | | |
|---|---|---|---|---|---|---|---|
| Process/facility | PM | PM-10 | $SO_2$ | VOC | CO | $NO_X$ | HAPs |
| Grain Receiving and Storage, Hammermills, DDGS Cooling System, and DDGS Loadout Operation* | Less than 10.9 | Less than 10.9 | - | Less than 8.11 | - | - | Less than 0.46 for total HAPs |
| Fermentation Process* | - | - | - | Less than 45.0 | - | - | Less than 6.13 for a single HAP and less than 6.77 for total HAPs |
| 2 DDGS Dryers, Distillation and Dehydration Process, and Thermal Oxidizer/Heat Recovery Steam Generator* | Less than 16.2 | Less than 16.2 | Less than 37.3 | Less than 24.3 | Less than ~~97.3~~ **98.2** | Less than ~~91.5~~ **97.4** | Less than 1.70 for total HAPs |
| New NG Fired Turbine (CT) | 1.73 | 1.73 | 0.89 | 0.55 | | | 0.27 |
| Ethanol Loading Terminal* | Negligible | Negligible | Negligible | Less than 9.20 | Less than 0.16 | Less than 0.10 | Less than 0.01 for total HAPs |
| Storage Tanks* (Insignificant) | - | - | - | 2.59 | - | - | 0.1 for total HAPs |
| Paved Road* (Insignificant) | Less than 7.19 | Less than 1.40 | - | - | - | - | - |
| Cooling Tower* (Insignificant) | 5.48 | 5.48 | - | - | - | - | - |
| Emergency Water Pump* (Insignificant) | 0.10 | 0.10 | 0.10 | 0.12 | 0.32 | 1.47 | Negligible |
| Biomethanator Flare* (Insignificant) | Negligible | Negligible | Negligible | Less than 0.04 | Less than 0.30 | Less than 0.05 | Negligible |
| Fugitive Leaks* | - | - | - | 4.43 | - | - | 0.77 |
| Fugitive Emissions from Grain and DDGS Handling* | 5.91 | 2.17 | - | - | - | - | - |
| Total PTE of the Entire Source after Revision | Less than 47.5 | Less than 38.0 | Less than 38.3 | Less than 94.4 | Less than 99.0 | Less than 99.0 | Less than 10 for a single HAP and 25 for total HAPs |
| Title V Major Source Thresholds | NA | 100 | 100 | 100 | 100 | 100 | 10 for a single HAP and 25 for total HAPs |

* PTE of the existing permitted units is from the TSD for SPR #073-20945-00037, issued on July 22, 2005.

## County Attainment Status

The source is located in Jasper County.

| Pollutant | Status |
|---|---|
| PM10 | Attainment |
| PM2.5 | Attainment or Unclassifiable |
| $SO_2$ | Attainment |
| $NO_2$ | Attainment |
| 8-hour Ozone | Attainment |
| CO | Attainment |
| Lead | Attainment |

Note: On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 redesignating Delaware, Greene, Jackson, Vanderburgh, Vigo and Warrick Counties to attainment for the eight-hour ozone standard, redesignating Lake County to attainment for the sulfur dioxide standard, and revoking the one-hour ozone standard in Indiana.

(a) Jasper County has been classified as attainment or unclassifiable for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.

(b) Volatile organic compounds (VOC) emissions and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Jasper County has been designated as attainment for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Jasper County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(d) Fugitive Emissions
This type of operation is in one of the twenty-eight (28) listed source categories under 326 IAC 2-2. Therefore, the fugitive particulate matter (PM) and volatile organic compound (VOC) emissions are counted toward determination of PSD applicability.

## Federal Rule Applicability

(a) The proposed natural gas-fired combustion turbine will be constructed after February 18, 2005 and has a maximum heat input capacity greater than 10 MMBtu/hr. Therefore, the proposed combustion turbine (CT) is subject to the New Source Performance Standard for Stationary Gas Turbines (40 CFR 60.4300-60.4420, Subpart KKKK).

The proposed combustion turbine does not have any control device. The proposed natural gas-fired combustion turbine is subject to the following portions of Subpart KKKK. Nonapplicable portions of the NSPS will not be included in the permit.

1. 40 CFR 60.4300
2. 40 CFR 60.4305
3. 40 CFR 60.4315
4. 40 CFR 60.4320(a)
5. 40 CFR 60.4330(a)(2)
6. 40 CFR 60.4333(a)
7. 40 CFR 60.4340(a)

8. 40 CFR 60.4365(a)
9. 40 CFR 60.4370(b)
10. 40 CFR 60.4375(b)
11. 40 CFR 60.4395
12. 40 CFR 60.4400(a), (b)(4),(b)(6)
13. 40 CFR 60.4410
14. 40 CFR 60.4415(a)(1)(ii)
15. 40 CFR 60.4420
16. Table 1 to Subpart KKKK of Part 60

(b) Since the proposed combustion turbine (CT) is subject to NSPS, Subpart KKKK, it is exempt from the requirements of the NSPS, Subpart GG (NSPS for Stationary Gas Turbines, 40 CFR 60.330-60.335), pursuant to 40 CFR 60.4305 (b). Therefore, the requirements of 40 CFR 60, Subpart GG are not included in this revision.

(c) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14 and 20, and 40 CFR Part 61 and 63) included in this revision.

(d) This source has accepted FESOP limits to limit the HAP emissions from the entire source to less than 10 tons per year for a single HAP and less than 25 tons per year for total HAPs. Therefore, this source is a HAP minor source. The new combustion turbine is not subject to the NESHAP for Stationary Combustion Turbines (40 CFR 63, Subpart YYYY).

**State Rule Applicability – Natural Gas Fired Combustion Turbine (CT)**

326 IAC 2-8-4 (FESOP) and 326 IAC 2-2 (PSD)

This source is in one of the 28 source categories. The potential to emit PM and all criteria pollutants from all the existing permitted units is limited to less than 100 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-7 (Part 70 Program) are not applicable. With the potential to emit CO and NOx from the new combustion turbine, the potential to emit NOx and CO from the entire source will exceed 100 tons per year. In order to retain their FESOP status, the Permittee has proposed to adjust the existing FESOP limits for the DDGS dryers and the TO/HRSG system (C10). The Permittee has agreed to comply with the following emission limits for the DDGS dryers, the TO/HRSG system (C10), and the combustion turbine (CT):

(a) The hourly CO and NOx emissions from the DDGS dryers and the TO/HRSG system (C10), which vent through a single stack (S10) shall not exceed the following:

| Emission Units | CO Emission Limit (lbs/hr) | NOx Emission Limit (lbs/hr) |
|---|---|---|
| Stack C10 when the DDGS dryers are in operation | 22.2 | 20.9 |
| Stack C10 when the DDGS dryers are not in operation | 10.5 | 12.5 |

(b) The hourly CO and NOx emissions from the combustion turbine (CT) shall not exceed the following:

| Emission Units | CO Emission Limit (lbs/hr) | NOx Emission Limit (lbs/hr) |
|---|---|---|
| Combustion Turbine CT | 7.10 | 5.84 |

(c) Total CO emissions from the DDGS dryers, the TO/HRSG system (C10), and the combustion turbine (CT) shall not exceed 98.2 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly CO emissions shall be calculated using the following equation:

CO Emissions (tons/month) = (22.5 X + 10.5 Y + 7.1 Z) / 2000

Where X = the operating hours of TO/HRSG system C10 when at least one of the DDGS dryers in operation (hours/month)
Y = the operating hours of TO/HRSG system C10 when the DDGS dryers are not in operation (hours/month)
Z = the operating hours for combustion turbine CT (hours/month)

(d) Total NOx emissions from the DDGS dryers, the TO/HRSG system (C10), and the combustion turbine (CT) shall not exceed 97.4 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly NOx emissions shall be calculated using the following equation:

NOx Emissions (tons/month) = (20.9 X + 12.5 Y + 5.84 Z) / 2000

Where X = the operating hours of TO/HRSG system C10 when at least one of the DDGS dryers in operation (hours/month)
Y = the operating hours of TO/HRSG system C10 when the DDGS dryers are not in operation (hours/month)
Z = the operating hours for combustion turbine CT (hours/month)

Combined with the emissions from other permitted units, the potential to emit PM and criteria pollutants from the entire source is still limited to less than 100 tons per year (see the table in the "Potential to Emit of the Source after Revision" section). Therefore, this source will retain their FESOP status after this revision and the requirements of 326 IAC 2-2 (PSD) is not applicable.

326 IAC 2-4.1 (New Sources of Hazardous Air Pollutants)
The source has accepted FESOP limits on the HAP emissions from the entire source, such that the emissions from the source are limited to less than 10 tons/yr for a single HAP and less than 25 tons/yr for any combination of HAPs. With the HAP emissions from the new combustion turbine (CT), the HAP emissions from the entire source are still limited to less than the HAP major source thresholds. Therefore, the requirements of 326 IAC 2-4.1 are not applicable to this revision.

326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity for sources shall meet the following, unless otherwise stated in this permit:

(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-2 (Particulate Emissions Limitations for Sources of Indirect Heating)
The proposed combustion turbine (CT) is not subject to the requirements of 326 IAC 6-2 because it is not a source of indirect heating.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
A combustion turbine is not considered a manufacturing process as defined in 326 IAC 6-3-1.5(2). Therefore, the requirements of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) are not applicable to the proposed new turbine.

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)
The potential to emit $SO_2$ from the proposed combustion turbine is less than 25 tons/yr. Therefore, the requirements in 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) are not applicable.

326 IAC 9-1-2 (Carbon Monoxide Emission Requirements)

This source is not among the listed source categories in 326 IAC 9-1-2. Therefore, the requirements of 326 IAC 9-1-2 are not applicable.

326 IAC 10-1 (Nitrogen Oxide Emission Requirements)

This source is not located in Clark or Floyd County. Therefore, the requirements of 326 IAC 10-1 are not applicable.

## Testing Requirements

The Permittee proposed new NOx and CO emission limits for the Stack S10. In order to demonstrate compliance with the proposed limits, the Permittee shall perform CO and NOx testing for TO/HRSG system C10 within 60 days after achieving the maximum capacity, but not later than 180 days after initial startup, utilizing methods as approved by the Commissioner. The CO and NOx emissions from stack S10 shall be tested for two (2) scenarios. One is when at least one of the DDGS dryers is in operation and one is when the DDGS dryers are not in operation. These test shall be repeated every five (5) years.

Since the NOx and CO emission factors for the proposed combustion turbine were provided by the vendor and in order to demonstrate compliance with the 326 IAC 2-2 (PSD) and 326 IAC 2-8-4 (FESOP), within 60 days after achieving the maximum production rate but not later than 180 days after initial startup, the Permittee shall perform NOx and CO tests for the proposed combustion turbine. Repeated testing for the combustion turbine is not required because this unit is a temporary operation and will not be operated after the source has permanent power supply.

## Compliance Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with applicable state and federal rules on a more or less continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a more or less continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, compliance requirements are divided into two sections: Compliance Determination Requirements and Compliance Monitoring Requirements.

Compliance Determination Requirements in Section D of the permit are those conditions that are found more or less directly within state and federal rules and the violation of which serves as grounds for enforcement action. If these conditions are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The compliance monitoring requirements applicable to this source are as follows:

1. There is no specific compliance monitoring requirement applicable to the proposed natural gas fired combustion turbine. The Permittee will peform annual performance testing and fuel quality testing to demonstrate compliance with the requirements in NSPS, Subpart KKKK.

**Proposed Changes**

The following changes have been made to the permit based on the changes requested by the Permittee and the additional changes made by IDEM, OAQ. Language with a line through it has been deleted, and bold language has been added. The Table of Contents has been updated as necessary.

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

. . .

**(j) One (1) natural gas-fired combustion turbine, identified as CT, to be constructed in 2006, with a maximum heat input capacity of 59.8 MMBtu/hr and a maximum power output of 5.2 Megawatts, and exhausting through stack S-T.**

~~(j)~~**(k)** One (1) ethanol loading terminal for both trucks and railcars, identified as P50, constructed in 2005, with a maximum loading rate of 36,000 gallons per hour for truck loading and a maximum loading rate of 72,000 gallons per hour for railcar loading. The truck loading process is controlled by an open flare C50, which is fueled by natural gas and has a maximum heat input capacity of 6.4 MMBtu/hr, and exhausting through stack S50.

~~**SECTION B GENERAL CONDITIONS**~~

~~B.1 Permit No Defense [IC 13]~~

~~Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a FESOP under 326 IAC 2-8.~~

~~B.2 Definitions [326 IAC 2-8-1]~~

~~Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2, and 326 IAC 2-7) shall prevail.~~

~~B.3 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5]~~

~~This permit is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date.~~

~~B.4 Enforceability [326 IAC 2-8-6]~~

~~Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.~~

~~B.5 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]~~

~~The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.~~

~~B.6 Severability [326 IAC 2-8-4(4)]~~

~~The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.~~

~~B.7 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]~~

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

~~B.8 Duty to Provide Information [326 IAC 2-8-4(5)(E)]~~

~~(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that~~

~~IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.~~

~~(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.~~

~~B.9 Compliance Order Issuance [326 IAC 2-8-5(b)]~~

~~IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.~~

~~B.10 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an authorized individual of truth, accuracy, and completeness. This certification, shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.~~

~~(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification.~~

~~(c) An authorized individual is defined at 326 IAC 2-1.1-1(1).~~

~~B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]~~

~~(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted in letter form no later than July 1 of each year to:~~

~~Indiana Department of Environmental Management~~
~~Compliance Branch, Office of Air Quality~~
~~100 North Senate Avenue~~
~~Indianapolis, Indiana 46204~~

~~(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.~~

~~(c) The annual compliance certification report shall include the following:~~

~~(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;~~

~~(2) The compliance status;~~

~~(3) Whether compliance was continuous or intermittent;~~

~~(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and~~

~~(5) Such other facts, as specified in Sections D of this permit, that IDEM, OAQ may require to determine the compliance status of the source.~~

~~The notification which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~B.12 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)] [326 IAC 2-8-5(a)(1)]~~

~~(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than thirty (30) days prior to commencement of operation of the facility, including the following information on each facility:~~

~~(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;~~

~~(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and~~

~~(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.~~

~~The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(b) The Permittee shall implement the PMPs, including any required record keeping, as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.~~

~~(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ, may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMP does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation, Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.~~

~~B.13 Emergency Provisions [326 IAC 2-8-12]~~

~~(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation, except as provided in 326 IAC 2-8-12.~~

~~(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describes the following:~~

~~(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;~~

~~(2) The permitted facility was at the time being properly operated;~~

~~(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;~~

~~(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;~~
~~Telephone No.: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section) or,~~
~~Telephone No.: 317-233-5674 (ask for Compliance Section)~~
~~Facsimile No.: 317-233-5967~~

~~(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:~~

~~Indiana Department of Environmental Management~~
~~Compliance Branch, Office of Air Quality~~
~~100 North Senate Avenue~~
~~Indianapolis, Indiana 46204~~

~~within two (2) working days of the time when emission limitations were exceeded due to the emergency.~~

~~The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:~~

~~(A) A description of the emergency;~~

~~(B) Any steps taken to mitigate the emissions; and~~

~~(C) Corrective actions taken.~~

~~The notification which shall be submitted by the Permittee does not require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(6) The Permittee immediately took all reasonable steps to correct the emergency.~~

~~(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.~~

~~(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.~~

~~(e) IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.~~

~~(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.~~

~~(g) Operations may continue during an emergency only if the following conditions are met:~~

~~(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the~~

~~emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.~~

~~(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:~~

~~(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and~~

~~(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.~~

~~Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.~~

~~(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.~~

~~B.14 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]~~

~~(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provision), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:~~

~~Indiana Department of Environmental Management~~
~~Compliance Data Section, Office of Air Quality~~
~~100 North Senate Avenue~~
~~Indianapolis, Indiana 46204~~

~~using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does need to be included in this report.~~

~~The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.~~

~~B.15 Permit Modification, Reopening, Revocation and Reissuance, or Termination 326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]~~

~~(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a FESOP modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:~~

~~(1) That this permit contains a material mistake.~~

~~(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.~~

~~(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]~~

~~(c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]~~

~~(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]~~

~~B.16 Permit Renewal [326 IAC 2-8-3(h)]~~

~~(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~Request for renewal shall be submitted to:~~

~~Indiana Department of Environmental Management~~
~~Permits Branch, Office of Air Quality~~
~~100 North Senate Avenue~~
~~Indianapolis, Indiana 46204~~

~~(b) Timely Submittal of Permit Renewal [326 IAC 2-8-3]~~

~~(1) A timely renewal application is one that is:~~

~~(A) Submitted at least nine (9) months prior to the date of the expiration of this permit; and~~

~~(B) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.~~

~~(2) If IDEM, OAQ upon receiving a timely and complete permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect until the renewal permit has been issued or denied.~~

~~(c) Right to Operate After Application for Renewal [326 IAC 2-8-9]~~
~~If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as needed to process the application.~~

~~B.17 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]~~

~~(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this permit.~~

~~(b) Any application requesting an amendment or modification of this permit shall be submitted to:~~

~~Indiana Department of Environmental Management~~
~~Permits Branch, Office of Air Quality~~
~~100 North Senate Avenue~~
~~Indianapolis, Indiana 46204~~

~~Any such application shall be certified by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(c) The Permittee may implement the administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]~~

~~(d) No permit amendment or modification is required for the addition, operation or removal of a nonroad engine, as defined in 40 CFR 89.2.~~

~~B.18 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]~~

~~(a) The Permittee may make any change or changes at this source that are described in 326 IAC 2-8-15(b) through (d), without prior permit revision, if each of the following conditions is met:~~

~~(1) The changes are not modifications under any provision of Title I of the Clean Air Act;~~

~~(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;~~

~~(3) The changes do not result in emissions which exceed the emissions allowable under this permit (whether expressed herein as a rate of emissions or in terms of total emissions);~~

~~(4) The Permittee notifies the:~~

~~Indiana Department of Environmental Management~~
~~Permits Branch, Office of Air Quality~~
~~100 North Senate Avenue~~
~~Indianapolis, Indiana 46204~~

~~and~~
~~United States Environmental Protection Agency, Region V~~
~~Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)~~
~~77 West Jackson Boulevard~~
~~Chicago, Illinois 60604-3590~~

~~in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and~~

~~(5) The Permittee maintains records on-site which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-8-15(b) through (d) and makes such records available, upon reasonable request, to public review.~~

~~Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).~~

~~(b) Emission Trades [326 IAC 2-8-15(c)]~~

~~The Permittee may trade increases and decreases in emissions in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).~~

~~(c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]~~
~~The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.~~

~~B.19 Permit Revision Requirement [326 IAC 2-8-11.1]~~

~~A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.~~

~~B.20 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2][IC13-30-3-1]~~

~~Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:~~

~~(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;~~

~~(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;~~

~~(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect at reasonable times, any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;~~

~~(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and~~

~~(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.~~

~~B.21 Transfer of Ownership or Operational Control [326 IAC 2-8-10]~~

~~(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.~~

~~(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:~~
~~Indiana Department of Environmental Management~~
~~Permits Branch, Office of Air Quality~~
~~100 North Senate Avenue~~
~~Indianapolis, Indiana 46204~~

~~The application which shall be submitted by the Permittee does require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]~~

~~B.22 Annual Fee Payment [326 IAC 2-7-19][326 IAC 2-8-4(6)][326 IAC 2-8-16][326 IAC 2-1.1-7]~~

~~(a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.~~

~~(b) Failure to pay may result in administrative enforcement action, or revocation of this permit.~~

~~(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing and Training Section), to determine the appropriate permit fee.~~

~~B.23 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314][326 IAC 1-1-6]~~

~~For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.~~

## ~~SECTION C SOURCE OPERATION CONDITIONS~~

~~Entire Source~~

**~~Emissions Limitations and Standards [326 IAC 2-8-4(1)]~~**

~~C.1 Overall Source Limit [326 IAC 2-8]~~

~~The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.~~

~~(a) Pursuant to 326 IAC 2-8:~~

~~(1) The potential to emit any regulated pollutant from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period.~~

~~(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and~~

~~(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.~~

~~(b) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.~~

~~(c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.~~

~~C.2 Opacity [326 IAC 5-1]~~

~~Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:~~

~~(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.~~

~~(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.~~

~~C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]~~

~~The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.~~

~~C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2(3)]~~

~~The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and in 326 IAC 9-1-2.~~

~~C.5 Fugitive Dust Emissions [326 IAC 6-4]~~

~~The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).~~

~~C.6 Operation of Equipment [326 IAC 2-8-5(a)(4)]~~

~~Except as otherwise provided by statute, rule or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that an emission unit vented to the control equipment is in operation.~~

~~C.7 Stack Height [326 IAC 1-7]~~

~~The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.~~

~~C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]~~

~~All demolition projects require notification, whether or not asbestos is present.~~

~~(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory.~~

~~(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:~~

~~(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or~~

~~(2) If there is a change in the following:~~

~~(A) Asbestos removal or demolition start date;~~

~~(B) Removal or demolition contractor; or~~

~~(C) Waste disposal site.~~

~~(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).~~

~~(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).~~

~~All required notifications shall be submitted to:~~

~~Indiana Department of Environmental Management~~
~~Asbestos Section, Office of Air Quality~~
~~100 North Senate Avenue~~
~~Indianapolis, Indiana 46204~~

~~The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(e) Procedures for Asbestos Emission Control~~
~~The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-4 emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.~~

~~(f) Demolition and Renovation~~
~~The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).~~

~~(g) Indiana Accredited Asbestos Inspector~~
~~The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation or demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana accredited asbestos inspector is not federally enforceable.~~

**~~Testing Requirements [326 IAC 2-8-4(3)]~~**

~~C.9 Performance Testing [326 IAC 3-6]~~

~~(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.~~

~~A test protocol, except as provided elsewhere in this permit, shall be submitted to:~~

~~Indiana Department of Environmental Management~~
~~Compliance Data Section, Office of Air Quality~~
~~100 North Senate Avenue~~
~~Indianapolis, Indiana 46204~~

~~no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the source submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.~~

**~~Compliance Requirements [326 IAC 2-1.1-11]~~**

~~C.10 Compliance Requirements [326 IAC 2-1.1-11]~~

~~The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U.S. EPA.~~

**~~Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]~~**

~~C.11 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]~~

~~Unless otherwise specified in this permit, all monitoring and record keeping requirements shall be implemented when operation begins. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment.~~

~~Compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins, unless otherwise specified in the approval for the new emissions unit.~~

~~C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]~~

~~Any monitoring or testing performed required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63 or other approved methods as specified in this permit.~~

~~C.13 Pressure Gauge and Other Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]~~

~~(a) Whenever a condition in this permit requires the measurement of pressure drop across any part of the unit or its control device, the gauge employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ("2%) of full scale reading.~~

~~(b) Whenever a condition in this permit requires the measurement of a temperature and flow rate, the instrument employed shall have a scale such that the expected normal reading shall be no less than twenty percent (20%) of full scale and be accurate within plus or minus two percent ("2%) of full scale reading.~~

~~(c) The Permittee may request the IDEM, OAQ approve the use of a pressure gauge or other instrument that does not meet the above specifications provided the Permittee can demonstrate an alternative pressure gauge or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of pressure drop or other parameters.~~

**~~Corrective Actions and Response Steps [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]~~**

~~C.14 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68.215]~~

~~If a regulated substance as defined in is present at a source in more than a threshold quantity, the source must comply with the applicable requirements of 40 CFR 68.~~

~~C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4]~~

~~26 IAC 2-8-5](a)When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.~~

~~(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.~~

~~(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.~~

~~The response action documents submitted pursuant to this condition do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

**~~Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]~~**

~~C.16 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]~~

~~(a) Records of all required data, reports and support information shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be kept at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.~~

~~(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.~~

~~C.17 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]~~

~~(a) The source shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "authorized individual" as defined by 326 IAC2-1.1-1(1).~~

~~(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:~~

~~Indiana Department of Environmental Management~~
~~Compliance Branch, Office of Air Quality~~
~~100 North Senate Avenue~~
~~Indianapolis, Indiana 46204~~

~~(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.~~

~~(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "authorized individual" as defined by 326 IAC 2-1.1-1(1).~~

~~(e) The first report covered the period commencing on the date of issuance of the original FESOP and ended on the last day of the reporting period. All subsequent reporting periods shall be based on calendar years.~~

**~~Stratospheric Ozone Protection~~**

~~C.18 Compliance with 40 CFR 82 and 326 IAC 22-1~~

~~Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:~~

~~(a) Persons opening appliances for maintenance, service, repair or disposal must comply with the required practices pursuant to 40 CFR 82.156~~

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

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

## SECTION B GENERAL CONDITIONS

**B.1 Definitions [326 IAC 2-8-1]**

**Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.**

**B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]**

**Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.**

**B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4][326 IAC 2-8]**

**This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 and 326 IAC 2-8 when prior to the start of operation, the following requirements are met:**

**(a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.**

**(b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.**

**(c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.**

**B.4 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]**

**(a) This permit, 073-16720-00037, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit or of permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control).**

**(b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.**

**B.5 Term of Conditions [326 IAC 2-1.1-9.5]**

**Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:**

**(a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or**

**(b) the emission unit to which the condition pertains permanently ceases operation.**

**B.6 Enforceability [326 IAC 2-8-6]**

**Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM , the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.**

**B.7 Severability [326 IAC 2-8-4(4)]**

**The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.**

**B.8 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]**

**This permit does not convey any property rights of any sort or any exclusive privilege.**

**B.9 Duty to Provide Information [326 IAC 2-8-4(5)(E)]**

**(a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.**

**(b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U. S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.**

**B.10 Compliance Order Issuance [326 IAC 2-8-5(b)]**

**IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.**

**B.11 Certification [326 IAC 2-8-3(d)][326 IAC 2-8-4(3)(C)(i)][326 IAC 2-8-5(1)]**

**(a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.**

**(b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.**

**(c) An "authorized individual" is defined at 326 IAC 2-1.1-1(1)**

**B.12 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]**

**(a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:**

**Indiana Department of Environmental Management**
**Compliance Branch, Office of Air Quality**
**100 North Senate Avenue**
**Indianapolis, Indiana 46204-2251**

**(b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.**

**(c) The annual compliance certification report shall include the following:**

**(1) The appropriate identification of each term or condition of this permit that is the basis of the certification;**

**(2) The compliance status;**

**(3) Whether compliance was continuous or intermittent;**

**(4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-8-4(3); and**

**(5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.**

**The notification which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**B.13 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)][326 IAC 2-8-5(a)(1)]**

**(a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) within ninety (90) days after issuance of this permit, including the following information on each facility:**

**(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;**

**(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and**

**(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.**

**If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:**

**Indiana Department of Environmental Management**
**Compliance Branch, Office of Air Quality**
**100 North Senate Avenue**
**Indianapolis, Indiana 46204-2251**

**The PMP extension notification does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**(b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**(c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.**

**B.14 Emergency Provisions [326 IAC 2-8-12]**

**(a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation except as provided in 326 IAC 2-8-12.**

**(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:**

**(1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;**

**(2) The permitted facility was at the time being properly operated;**

**(3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;**

**(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;**

**Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance Section), or**
**Telephone Number: 317-233-0178 (ask for Compliance Section)**
**Facsimile Number: 317-233-6865**

**(5) For each emergency lasting one (1) hour or more, the Permittee submitted the attached Emergency Occurrence Report Form or its equivalent, either by mail or facsimile to:**

**Indiana Department of Environmental Management**
**Compliance Branch, Office of Air Quality**
**100 North Senate Avenue**
**Indianapolis, Indiana 46204-2251**

**within two (2) working days of the time when emission limitations were exceeded due to the emergency.**

**The notice fulfills the requirement of 326 IAC 2-8-4(3)(C)(ii) and must contain the following:**

**(A) A description of the emergency;**

**(B) Any steps taken to mitigate the emissions; and**

**(C) Corrective actions taken.**

**The notification which shall be submitted by the Permittee does not require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**(6) The Permittee immediately took all reasonable steps to correct the emergency.**

**(c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.**

**(d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.**

**(e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-8-3(c)(6) be revised in response to an emergency.**

**(f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-8 and any other applicable rules.**

**(g) Operations may continue during an emergency only if the following conditions are met:**

**(1) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.**

**(2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:**

**(A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and**

**(B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.**

**Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.**

**(h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.**

## B.15 Prior Permits Superseded [326 IAC 2-1.1-9.5]

**(a) All terms and conditions of permits established prior to 073-16720-00037 and issued pursuant to permitting programs approved into the state implementation plan have been either:**

**(1) incorporated as originally stated,**

**(2) revised, or**

**(3) deleted**

**(b) All previous registrations and permits are superseded by this permit.**

## B.16 Termination of Right to Operate [326 IAC 2-8-9][326 IAC 2-8-3(h)]

**The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-8-3(h) and 326 IAC 2-8-9.**

## B.17 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

**(a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:**

**Indiana Department of Environmental Management
Compliance Data Section, Office of Air Quality
100 North Senate Avenue
Indianapolis, Indiana 46204-2251**

**using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.**

**The Quarterly Deviation and Compliance Monitoring Report does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**(b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.**

**B.18 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)][326 IAC 2-8-7(a)][326 IAC 2-8-8]**

**(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-8-4(5)(C)] The notification by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**(b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ, determines any of the following:**

**(1) That this permit contains a material mistake.**

**(2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.**

**(3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-8-8(a)]**

**(c) Proceedings by IDEM, OAQ, to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-8-8(b)]**

**(d) The reopening and revision of this permit, under 326 IAC 2-8-8(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ, at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, may provide a shorter time period in the case of an emergency. [326 IAC 2-8-8(c)]**

**B.19 Permit Renewal [326 IAC 2-8-3(h)]**

**(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ, and shall include the information specified in 326 IAC 2-8-3. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40) The renewal application does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**Request for renewal shall be submitted to:**

**Indiana Department of Environmental Management**
**Permits Branch, Office of Air Quality**
**100 North Senate Avenue**
**Indianapolis, Indiana 46204-2251**

**(b) A timely renewal application is one that is:**

**(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and**

**(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.**

**(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.**

**B.20 Permit Amendment or Revision [326 IAC 2-8-10][326 IAC 2-8-11.1] [40 CFR 72]**

**(a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 whenever the Permittee seeks to amend or modify this .**

**(b) Pursuant to 326 IAC 2-7-11(b) and 326 IAC 2-7-12(a), administrative Part 70 operating permit amendments and permit modifications for purposes of the acid rain portion of a Part 70 permit shall be governed by regulations promulgated under Title IV of the Clean Air Act. [40 CFR 72]**

**(c) Any application requesting an amendment or modification of this permit shall be submitted to:**

**Indiana Department of Environmental Management**
**Permits Branch, Office of Air Quality**
**100 North Senate Avenue**
**Indianapolis, Indiana 46204-2251**

**Any such application shall be certified by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**(d) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]**

**B.21 Operational Flexibility [326 IAC 2-8-15][326 IAC 2-8-11.1]**

**(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) through (d) without a prior permit revision, if each of the following conditions is met:**

**(1) The changes are not modifications under any provision of Title I of the Clean Air Act;**

**(2) Any approval required by 326 IAC 2-8-11.1 has been obtained;**

**(3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);**

**(4) The Permittee notifies the:**

**Indiana Department of Environmental Management**
**Permits Branch, Office of Air Quality**
**100 North Senate Avenue**
**Indianapolis, Indiana 46204-2251**

**and**

**United States Environmental Protection Agency, Region V**
**Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)**
**77 West Jackson Boulevard**
**Chicago, Illinois 60604-3590**

**in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and**

**(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b) through (d). The Permittee shall make such records available, upon reasonable request, for public review.**

**Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-8-15(b)(2), (c)(1), and (d).**

**(b) Emission Trades [326 IAC 2-8-15(c)]**
**The Permittee may trade emissions increases and decreases at in the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).**

**(c) Alternative Operating Scenarios Federally Enforceable State Operating Permit**
**The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(7). No prior notification of IDEM, OAQ, or U.S. EPA is required.**

**(d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.**

**B.22 Source Modification Requirement [326 IAC 2-8-11.1]**

**A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2326 IAC 2-8-11.1.**

**B.23 Inspection and Entry [326 IAC 2-8-5(a)(2)][IC 13-14-2-2][IC 13-17-3-2][IC13-30-3-1]**

**Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:**

**(a) Enter upon the Permittee's premises where a FESOP source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;**

**(b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;**

**(c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect, at reasonable times, any facilities, equipment (including monitoring and air**

**pollution control equipment), practices, or operations regulated or required under this permit;**

**(d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor, at reasonable times, substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and**

**(e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.**

**B.24 Transfer of Ownership or Operational Control [326 IAC 2-8-10]**

**(a) The Permittee must comply with the requirements of 326 IAC 2-8-10 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.**

**(b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:**

**Indiana Department of Environmental Management**
**Permits Branch, Office of Air Quality**
**100 North Senate Avenue**
**Indianapolis, Indiana 46204-2251**

**The application which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]**

**B.25 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16][326 IAC 2-1.1-7]**

**(a) The Permittee shall pay annual fees to IDEM, OAQ, within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ, the applicable fee is due April 1 of each year.**

**(b) Failure to pay may result in administrative enforcement action or revocation of this permit.**

**(c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.**

**B.26 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]**

**For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.**

**SECTION C SOURCE OPERATION CONDITIONS**

**Entire Source**

**Emission Limitations and Standards [326 IAC 2-8-4(1)]**

**C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]**

**Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.**

**C.2 Overall Source Limit [326 IAC 2-8]**

**The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.**

**(a) Pursuant to 326 IAC 2-8:**

**(1) The potential to emit any regulated pollutant, except particulate matter (PM), from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall also make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable;**

**(2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and**

**(3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.**

**(b) The potential to emit particulate matter (PM) from the entire source shall be limited to less than one-hundred (100) tons per twelve (12) consecutive month period. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) not applicable.**

**(c) Section D of this permit contains independently enforceable provisions to satisfy this requirement.**

**C.3 Opacity [326 IAC 5-1]**

**Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:**

**(a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.**

**(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.**

**C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]**

**The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.**

**C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]**

**The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.**

**C.6 Fugitive Dust Emissions [326 IAC 6-4]**

**The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).**

**C.7 Stack Height [326 IAC 1-7]**

**The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.**

**C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]**

**(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.**

**(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:**

**(1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or**

**(2) If there is a change in the following:**

**(A) Asbestos removal or demolition start date;**

**(B) Removal or demolition contractor; or**

**(C) Waste disposal site.**

**(c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).**

**(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).**

**All required notifications shall be submitted to:**

**Indiana Department of Environmental Management**
**Asbestos Section, Office of Air Quality**
**100 North Senate Avenue**
**Indianapolis, Indiana 46204-2251**

**The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**(e) Procedures for Asbestos Emission Control**
**The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.**

**(f) Demolition and Renovation**
**The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).**

**(g) Indiana Accredited Asbestos Inspector**
**The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.**

**Testing Requirements [326 IAC 2-8-4(3)]**

**C.9 Performance Testing [326 IAC 3-6]**

**(a) Compliance testing on new emissions units shall be conducted within 60 days after achieving maximum production rate, but no later than180 days after initial start-up, if specified in Section D of this approval. All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.**

**A test protocol, except as provided elsewhere in this permit, shall be submitted to:**

**Indiana Department of Environmental Management**
**Compliance Data Section, Office of Air Quality**
**100 North Senate Avenue**
**Indianapolis, Indiana 46204-2251**

**no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**(b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**(c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.**

**Compliance Requirements [326 IAC 2-1.1-11]**

**C.10 Compliance Requirements [326 IAC 2-1.1-11]**

**The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.**

**Compliance Monitoring Requirements [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]**

**C.11 Compliance Monitoring [326 IAC 2-8-4(3)][326 IAC 2-8-5(a)(1)]**

**Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:**

**Indiana Department of Environmental Management**
**Compliance Branch, Office of Air Quality**
**100 North Senate Avenue**
**Indianapolis, Indiana 46204-2251**

**in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.**

**The notification which shall be submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.**

**C.12 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]**

**Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60 Appendix B, 40 CFR 63, or other approved methods as specified in this permit.**

**C.13 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)][326 IAC 2-8-5(1)]**

**(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.**

**(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative or other instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.**

**Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]**

**C.14 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]**

**Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):**

**(a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.**

**(b) These ERPs shall be submitted for approval to:**

**Indiana Department of Environmental Management**
**Compliance Branch, Office of Air Quality**
**100 North Senate Avenue**
**Indianapolis, Indiana 46204-2251**

**within 180 days from the date on which this source commences operation).**

**The ERP does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**(c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.**

**(d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.**

**(e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.**

**(f) Upon direct notification by IDEM, OAQ, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]**

## C.15 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]

**If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.**

## C.16 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

**(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.**

**(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:**

**(1) initial inspection and evaluation**

**(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or**

**(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.**

**(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:**

**(1) monitoring results;**

**(2) review of operation and maintenance procedures and records;**

**(3) inspection of the control device, associated capture system, and the process.**

**(d) Failure to take reasonable response steps shall be considered a deviation from the permit.**

**(e) The Permittee shall maintain the following records:**

**(1) monitoring data;**

**(2) monitor performance data, if applicable; and**

**(3) corrective actions taken.**

**C.17 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4][326 IAC 2-8-5]**

**(a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.**

**(b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.**

**(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.**

**The response action documents submitted pursuant to this condition do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]**

**C.18 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]**

**(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.**

**(b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.**

**C.19 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]**

**(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**(b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:**

**Indiana Department of Environmental Management**
**Compliance Data Section, Office of Air Quality**
**100 North Senate Avenue**
**Indianapolis, Indiana 46204-2251**

**(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.**

**(d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).**

**(e) The first report shall cover the period commencing on the date of issuance of this permit and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.**

**Stratospheric Ozone Protection**

**C.20 Compliance with 40 CFR 82 and 326 IAC 22-1**

**Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with the standards for recycling and emissions reduction:**

**(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.**

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

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

D.1.5 PM and PM10 Control

**(a)** In order to comply with Conditions D.1.1, D.1.2(a), and D.1.3, each of the following emission units shall be controlled by the associated baghouse, as listed in the table below, when these units are in operation:

| Unit ID | Process Description | Baghouse ID |
|---|---|---|
| P20 | Grain Receiving and Storage Operation | C20 |
| P30 | Each of the Hammermills | C30 |
| P70 | DDGS Cooling System | C70 |
| P90 | DDGS Loadout Operation | C90 |

**(b) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.**

D.1.7 Visible Emissions Notations

. . .

(e) ~~The Compliance Response Plan for these units shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.~~ **If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.**

D.1.8 Parametric Monitoring

The Permittee shall record the ~~total static~~ pressure drop across the baghouses used in conjunction with the grain receiving and storage operation (P20), the hammermills (P30), the DDGS cooling system (P70), and the DDGS loadout operation (P90) at least once per day when these units are in operation. When for any one reading the pressure drop across the baghouse is outside the normal range of 3.0 to 10.0 inches of water or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C- ~~Compliance Response Plan - Preparation, Implementation, Records and Reports~~ **Response to Excursions or Exceedances**. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records and Reports~~ **Response to Excursions or Exceedances** shall be considered a deviation from this permit.

The instrument used for determining the pressure shall comply with Section C - ~~Pressure Gauge and Other~~ Instrument Specifications of this permit, shall be subject to approval by IDEM, OAQ and shall be calibrated at least once every six (6) months.

~~D.1.9 Baghouse Inspections~~

~~An inspection shall be performed each calendar quarter of all baghouses controlling the grain receiving and storage operation (P20), the hammermills (P30), the DDGS cooling system (P70),~~

~~and the DDGS loadout operation (P90). Inspections required by this condition shall not be performed in consecutive months. All defective bags shall be replaced.~~

~~D.1.10~~ **D.1.9** Broken or Failed Bag Detection

~~(a) For multi-compartment units, the affected compartments will be shut down immediately until the failed units have been repaired or replaced. Within eight (8) business hours of the determination of failure, response steps according to the timetable described in the Compliance Response Plan shall be initiated. For any failure with corresponding response steps and timetables not described in the Compliance Response Plan, response steps shall be devised within eight (8) business hours of discovery of the failure and shall include a timetable for completion. Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit. If operations continue after bag failure is observed and it will be 10 days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.~~

~~(b) For single compartment baghouses, if failure is indicated by a significant drop in the baghouse's pressure readings with abnormal visible emissions or the failure is indicated by an opacity violation, or if bag failure is determined by other means, such as gas temperatures, flow rates, air infiltration, leaks, dust traces or triboflows, then failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).~~

**(a) For a single compartment baghouse controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).**

**(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).**

**Bag failure can be indicated by a significant drop in the baghouse's pressure reading with abnormal visible emissions, by an opacity violation, or by other means such as gas temperature, flow rate, air infiltration, leaks, dust traces or triboflows.**

~~D.1.11 Cyclone Failure Detection~~

~~In the event that cyclone failure has been observed:~~

~~Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions). Failure to take response steps in accordance with Section C - Compliance Response Plan -Preparation, Implementation, Records, and Reports, shall be considered a deviation from this permit.~~

~~D.1.12~~ **D.1.10** Record Keeping Requirements

. . .

(c) To document compliance with Condition D.1.8, the Permittee shall maintain daily records of the ~~total static~~ pressure drop during normal operation.

~~(d) To document compliance with Condition D.1.9, the Permittee shall maintain records of the results of the inspections required under Condition D.1.9.~~

~~(e) To document compliance with Condition D.1.4, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.~~

~~(f)~~**(d)** All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

~~D.1.13~~ **D.1.11** Reporting Requirements

D.2.1 VOC and HAP Emissions [326 IAC 2-2] [326 IAC 2-8-4]

Pursuant to 326 IAC 2-8-4 (FESOP), the Permittee shall comply with the following for the fermentation process:

(a) The ethanol production rate shall not exceed 50 million gallons (MMgal) per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) VOC emissions shall not exceed 1.8 pounds per 1,000 gallons of ethanol produced.

(c) ~~Single HAP~~ **Acetaldehyde** emissions shall not exceed 0.245 pounds per 1,000 gallons of ethanol produced.

(d) Total HAP emissions shall not exceed 0.271 pounds per 1,000 gallons of ethanol produced.

Combined with the VOC emissions from other emission units, the VOC emissions from the entire source are limited to less than 100 tons/yr, and the ~~total~~ HAP emissions from the entire source are limited to less than 10 tons/yr **for a single HAP and less than 25 tons/yr for total HAPs**. Therefore, the requirements of 326 IAC 2-7 (Part 70 Program) and 326 IAC 2-2 (PSD) are not applicable.

D.2.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

Within 60 days after achieving the maximum production rate at which this facility will be operated, but not later than 180 days after commencing operation, the Permittee shall conduct a performance test to perform VOC (including emission rate and overall control efficiency) and ~~HAP~~ **acetaldehyde** testing for scrubber C40 utilizing methods as approved by the Commissioner. These tests shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.2.6 Parametric Monitoring

The Permittee shall monitor and record the flow rate of scrubber C40 at least once per day when the fermentation process is in operation. When for any one reading the flow rate of the scrubber is less than the minimum of 35 gallons per minute, or a minimum flow established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - ~~Compliance Response Plan - Preparation, Implementation, Records and Reports~~ **Response to Excursions or Exceedances**. A flow rate that is below the above mentioned minimum is not a deviation from this permit. Failure to take response steps in accordance with Section C -

~~Compliance Response Plan - Preparation, Implementation, Records and Reports~~ **Response to Excursions or Exceedances** shall be considered a deviation from this permit.

The instruments used for determining the flow rate shall comply with Section C - ~~Pressure Gauge and Other~~ Instrument Specifications of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

~~D.2.7 Scrubber Inspections~~

~~An external inspection shall be performed each calendar quarter of the scrubber controlling the fermentation process. Inspections required by this condition shall not be performed in consecutive months.~~

~~D.2.8~~ **D.2.7** Record Keeping Requirements

. . .

~~(c) To document compliance with Condition D.2.7, the Permittee shall maintain records of the results of the inspections required under Condition D.2.7.~~

~~(d) To document compliance with Condition D.2.3, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.~~

~~(e)~~**(c)** All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

~~D.2.9~~ **D.2.8** Reporting Requirements

**SECTION D.3 FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-8-4(10)]**
**(continued)**
. . .

**(j) One (1) natural gas-fired combustion turbine, identified as CT, to be constructed in 2006, with a maximum heat input capacity of 59.8 MMBtu/hr and a maximum power output of 5.2 Megawatts, and exhausting through stack S-T.**

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.3.2 FESOP Limits [326 IAC 2-8-4] [326 IAC 2-2]

. . .

(b) PM10 emissions **from stack S10** shall not exceed 3.70 lbs/hr or 0.2 pounds per ton of DDGS produced.

(c) VOC emissions **from stack S10** shall not exceed 5.55 lbs/hr or 0.3 pounds per ton of DDGS produced.

(d) $SO_2$ emissions **from stack S10** shall not exceed 8.52 lbs/hr or 0.46 pounds per ton of DDGS produced.

~~(e) CO emissions shall not exceed 22.2 lbs/hr or 1.2 pounds per ton of DDGS produced.~~

~~(f) NOx emissions shall not exceed 20.9 lbs/hr.~~

~~(g)~~**(e)** ~~Total HAP~~ **Acetaldehyde** emissions **from stack S10** shall not exceed 0.39 lbs/hr or 0.021 pounds per ton of DDGS produced.

**(f) The hourly CO and NOx emissions from the DDGS dryers and the TO/HRSG system (C10), which vent through a single stack (S10) shall not exceed the following:**

| Emission Units | CO Emission Limit (lbs/hr) | NOx Emission Limit (lbs/hr) |
|---|---|---|
| Stack C10 when either one or both of the DDGS dryers are in operation | 22.2 | 20.9 |
| Stack C10 when both of the DDGS dryers are not in operation | 10.5 | 12.5 |

**(g) The hourly CO and NOx emissions from the combustion turbine (CT) shall not exceed the following:**

| Emission Units | CO Emission Limit (lbs/hr) | NOx Emission Limit (lbs/hr) |
|---|---|---|
| Combustion Turbine CT | 7.10 | 5.84 |

**(h) Total CO emissions from the DDGS dryers, the TO/HRSG system (C10), and the combustion turbine (CT) shall not exceed 98.2 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly CO emissions shall be calculated using the following equation:**

**CO Emissions (tons/month) = (22.5 X + 10.5 Y + 7.1 Z) / 2000**

**Where**

**X = the operating hours of TO/HRSG system C10 when at least one of the DDGS dryers is in operation (hours/month)**
**Y = the operating hours of TO/HRSG system C10 when both of the DDGS dryers are not in operation (hours/month)**
**Z = the operating hours for combustion turbine CT (hours/month)**

**(i) Total NOx emissions from the DDGS dryers, the TO/HRSG system (C10), and the combustion turbine (CT) shall not exceed 97.4 tons per twelve (12) consecutive month period with compliance determined at the end of each month. The monthly NOx emissions shall be calculated using the following equation:**

**NOx Emissions (tons/month) = (20.9 X + 12.5 Y + 5.84 Z) / 2000**

**Where**

**X = the operating hours of TO/HRSG system C10 when at least one of the DDGS dryers is in operation (hours/month)**
**Y = the operating hours of TO/HRSG system C10 when both of the DDGS dryers are not in operation (hours/month)**
**Z = the operating hours for combustion turbine CT (hours/month)**

. . .

**D.3.10 Standard of Performance for Stationary Combustion Turbines [40 CFR Part 60, Subpart KKKK]**

**Pursuant to 40 CFR Part 60, Subpart KKKK, the Permittee shall comply with the requirements of Section E.2 for the natural gas fired combustion turbine (CT).**

~~D.3.10~~ **D.3.11** Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for ~~this facility~~ **these facilities** and ~~its~~ **their** control devices.

~~D.3.11~~ **D.3.12** VOC and HAP Control

~~D.3.12~~ **D.3.13** Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11] [40 CFR 60 Subpart Db] 326 IAC 2-2]

(a) Pursuant to 40 CFR 60.46(b)(c) and in order to demonstrate compliance with Conditions D.3.2(f) and D.3.5(a), the Permittee shall perform NOx testing for thermal oxidizer/heat recovery steam generator C10 **when the DDGS dryers are in operation** within 60 days after achieving the maximum capacity, but not later than 180 days after initial startup, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(b) In order to demonstrate compliance with Conditions D.3.1, D.3.2, D.3.3, D.3.8, and D.3.9, and the Permittee shall perform PM, PM10, VOC (including emission rate and overall control efficiency), $SO_2$, CO, and ~~HAP~~ **acetaldehyde** testing for recuperative thermal oxidizer/heat recovery steam generator C10 **when the DDGS dryers are in operation** within 60 days after achieving the maximum capacity, but not later than 180 days after initial startup, utilizing methods as approved by the Commissioner. PM-10 includes filterable and condensible PM-10. These tests shall be repeated at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

**(c) In order to demonstrate compliance with Condition D.3.2(f), the Permittee shall perform CO and NOx testing for TO/HRSG system C10 when the DDGS dryers are not in operation, within 60 days after achieving the maximum capacity, but not later than 180 days after initial startup, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.**

**(d) In order to demonstrate compliance with Condition D.3.2(g), the Permittee shall perform CO and NOx testing for combustion turbine CT within 60 days after achieving the maximum capacity, but not later than 180 days after initial startup, utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with Section C - Performance Testing.**

~~D.3.13~~ **D.3.14** Visible Emissions Notations

. . .

(e) ~~The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when an abnormal emission is observed. Failure to take response steps in accordance with Section C - Compliance Response Plan - Preparation, Implementation, Records and Reports shall be considered a deviation from this permit.~~ **If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C- Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.**

~~D.3.14~~ **D.3.15** Thermal Oxidizer Temperature

~~D.3.15~~ **D.3.16** Parametric Monitoring

~~D.3.16~~ **D.3.17** Record Keeping Requirements

(a) To document compliance with Condition D.3.2(a), the Permittee shall maintain monthly records of the weight of DDGS produced.

**(b) To document compliance with Conditions D.3.2(h) and (i), the Permittee shall maintain monthly records of the following:**

**(1) The operating hours of the TO/HRSG system (C10).**

**(2) The operating hours when one or both of the DDGS dryers are in operation.**

**(3) The operating hours of the combustion turbine (CT).**

**(4) The calculated monthly CO and NOx emissions from the TO/HRSG system (C10), the DDGS dryers, and the combustion turbine (CT).**

**(5) The CO and NOx emissions for each compliance period.**

~~(b)~~**(c)** To document compliance with Condition D.3.5, the Permittee shall maintain records of the operating parameters as specified in a plan submitted pursuant to 40 CFR 60.49b(c) for the recuperative thermal oxidizer/heat recovery steam generator (C10). These records shall be sufficient to estimate the NOx emissions from the recuperative thermal oxidizer/heat recovery steam generator (C10).

~~(c)~~**(d)** To document compliance with Condition ~~D.3.13~~ **D.3.14**, the Permittee shall maintain records of daily visible emission notations of the stack S10.

~~(d)~~**(e)** To document compliance with Condition ~~D.3.14~~ **D.3.15**, the Permittee shall maintain continuous temperature records for the thermal oxidizer and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

~~(e)~~**(f)** To document compliance with Condition ~~D.3.15~~ **D.3.16**, the Permittee shall maintain daily records of the duct pressure or fan amperage for the thermal oxidizer/heat recovery steam generator.

~~(f) To document compliance with Condition D.3.10, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.~~

(g) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

~~D.3.17~~ **D.3.18** Reporting Requirements

A quarterly summary of the information to document compliance with Condition**s** D.3.2(a)**, (h), and (i)** shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an “authorized individual” as defined by 326 IAC 2-1.1-1(1).

~~D.3.18~~ **D.3.19** Recordkeeping Requirements [40 CFR 60, Subpart Db] [326 IAC 12]

~~D.3.19~~ **D.3.20** Reporting Requirements [40 CFR 60, Subpart Db] [326 IAC 12]

**SECTION D.4 FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-8-4(10)]:**

~~(j)~~**(k)** One (1) ethanol loading terminal for both trucks and railcars, identified as P50, to be constructed in 2005, with a maximum loading rate of 36,000 gallons per hour for truck loading and a maximum loading rate of 72,000 gallons per hour for railcar loading. The truck loading process is controlled by an open flare C50, which is fueled by natural gas and has a maximum heat input capacity of 6.4 MMBtu/hr, and exhausting through stack S50.

(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

D.4.8 Record Keeping Requirements

. . .

~~(d) To document compliance with Condition D.4.5, the Permittee shall maintain of records of any additional inspections prescribed by the Preventive Maintenance Plan.~~

~~(e)~~**(d)** All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

~~**SECTION D.7 FACILITY OPERATION CONDITIONS**~~

~~**Facility Description [326 IAC 2-8-4(10)]: Insignificant Activities**~~

~~(a) Combustion source flame safety purging on startup.~~

~~(b) A gasoline fuel transfer dispensing operation handling less than or equal to 1,300 gallons per day and filling storage tanks having a capacity equal to or less than 10,500 gallons.~~

~~(c) A petroleum fuel other than gasoline dispensing facility, having a storage tank capacity less than or equal to 10,500 gallons, and dispensing 3,500 gallons per day or less.~~

~~(d) Cleaners and solvents characterized as:~~

~~(1) having a vapor pressure equal to or less than two (2.0) kilo Pascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pound per square inch) measured at thirty-eight (38) degrees Centigrade (one hundred (100) degrees Fahrenheit); or~~

~~(2) having a vapor pressure equal to or less than seven tenths (0.7) kilo Pascal (five (5) millimeters of mercury or one-tenth (0.1) pound per square inch) measured at twenty (20) degrees Centigrade (sixty-eight (68) degrees Fahrenheit);~~

~~the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) months.~~

~~(e) One (1) process cooling tower, identified as P80, with a maximum water circulation rate of 1,200,00 gallons per hour, consisting of four (4) cells.~~

~~(f) Blowdown for any of the following:~~

~~(1) Sight glass.~~

~~(2) Boilers.~~

~~(3) Cooling tower.~~

~~(4) Compressors.~~

~~(5) Pumps.~~

~~(g) Replacement or repair of bags in baghouses, and filters in other air filtration equipment.~~

~~(h) Heat exchanger cleaning and repair.~~

~~(j) Diesel fired emergency generators not exceeding 1,600 horsepower, including one (1) emergency diesel fired water pump, identified as EP-16, with a maximum power output of 190 hp.~~

~~(k) Filter or coalescer media changeout.~~

~~(l) Other emission units, not regulated by a NESHAP, with PM10, $NO_x$, and $SO_2$ emissions less than five (5) pounds per hour or twenty-five (25) pounds per day, CO emissions less than twenty-five (25) pounds per day, VOC emissions less than three (3) pounds per hour or fifteen (15) pounds per day, lead emissions less than six-tenths (0.6) tons per year or three and twenty-nine hundredths (3.29) pounds per day, and emitting greater than one (1) pound per day but less than five (5) pounds per day or one (1) ton per year of a single HAP, or emitting greater than one (1) pound per day but less than twelve and five tenths (12.5) pounds per day or two and five tenths (2.5) ton per year of any combination of HAPs:~~

~~(6) One (1) syrup tank, constructed in 2005, with a maximum capacity of 51,000 gallons.~~

~~(7) One (1) cook water tank, constructed in 2005, with a maximum capacity of 146,000 gallons.~~

~~(8) Two (2) liquefaction tanks, constructed in 2005, each with a maximum capacity of 51,000 gallons.~~

~~(9) One (1) whole stillage tank, constructed in 2005, with a maximum capacity of 51,000 gallons.~~

~~(11) Heat exchangers, identified as mash coolers, which are part of the mashing, cooking and liquefaction operations.~~

~~(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)~~

**~~Emission Limitations and Standards [326 IAC 2-8-4(1)]~~**

~~There are no specific state or federal rules applicable to these emission units.~~

**SECTION E.2 Subpart KKKK—Standards of Performance for Stationary Combustion Turbines**

**Facility Description [326 IAC 2-8-4(10)]:**

**(j) One (1) natural gas-fired combustion turbine, identified as CT, to be constructed in 2006, with a maximum heat input capacity of 59.8 MMBtu/hr and a maximum power output of 5.2 Megawatts, and exhausting through stack S-T.**

**(The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)**

**New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]**

**E.2.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1] [40 CFR Part 60, Subpart A]**

**(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions for the natural gas fired combustion turbine (CT), except as otherwise specified in 40 CFR Part 60, Subpart KKKK.**

**(b) Pursuant to 40 CFR 60.19, the Permittee shall submit all required notifications and reports to:**

**Indiana Department of Environmental Management**
**Compliance Branch, Office of Air Quality**
**100 North Senate Avenue,**
**Indianapolis, Indiana 46204-2251**

**E.2.2 Standard of Performance for Stationary Combustion Turbines Requirements [40 CFR Part 60, Subpart KKKK]**

**Pursuant to 40 CFR Part 60, Subpart KKKK, the Permittee shall comply with the provisions of Standard of Performance for Stationary Combustion Turbines for the natural gas fired combustion turbine (CT) as specified as follows:**

**Subpart KKKK—Standards of Performance for Stationary Combustion Turbines**

**Source: 71 FR 38497, July 6, 2006, unless otherwise noted.**

**Introduction**

**§ 60.4300 What is the purpose of this subpart?**

**This subpart establishes emission standards and compliance schedules for the control of emissions from stationary combustion turbines that commenced construction, modification or reconstruction after February 18, 2005.**

**Applicability**

**§ 60.4305 Does this subpart apply to my stationary combustion turbine?**

**(a) If you are the owner or operator of a stationary combustion turbine with a heat input at peak load equal to or greater than 10.7 gigajoules (10 MMBtu) per hour, based on the higher heating value of the fuel, which commenced construction, modification, or reconstruction after February 18, 2005, your turbine is subject to this subpart. Only heat input to the combustion turbine should be included when determining whether or not this subpart is applicable to your turbine. Any additional heat input to associated heat recovery steam generators (HRSG) or duct burners should not be included when determining your peak heat input. However, this subpart does apply to emissions from any associated HRSG and duct burners.**

**(b) Stationary combustion turbines regulated under this subpart are exempt from the requirements of subpart GG of this part. Heat recovery steam generators and duct burners regulated under this subpart are exempted from the requirements of subparts Da, Db, and Dc of this part.**

**Emission Limits**

**§ 60.4315 What pollutants are regulated by this subpart?**

**The pollutants regulated by this subpart are nitrogen oxide ($NO_X$) and sulfur dioxide ($SO_2$).**

**§ 60.4320 What emission limits must I meet for nitrogen oxides (NOX)?**

**(a) You must meet the emission limits for $NO_X$ specified in Table 1 to this subpart.**

**§ 60.4330 What emission limits must I meet for sulfur dioxide (SO2)?**

**(a) If your turbine is located in a continental area, you must comply with either paragraph (a)(1) or (a)(2) of this section. If your turbine is located in Alaska, you do not have to comply with the requirements in paragraph (a) of this section until January 1, 2008.**

**(2) You must not burn in the subject stationary combustion turbine any fuel which contains total potential sulfur emissions in excess of 26 ng $SO_2$/J (0.060 lb $SO_2$/MMBtu) heat input. If your turbine simultaneously fires multiple fuels, each fuel must meet this requirement.**

**General Compliance Requirements**

**§ 60.4333 What are my general requirements for complying with this subpart?**

**(a) You must operate and maintain your stationary combustion turbine, air pollution control equipment, and monitoring equipment in a manner consistent with good air pollution control practices for minimizing emissions at all times including during startup, shutdown, and malfunction.**

**Monitoring**

**§ 60.4340 How do I demonstrate continuous compliance for NOx if I do not use water or steam injection?**

**(a) If you are not using water or steam injection to control $NO_X$ emissions, you must perform annual performance tests in accordance with §60.4400 to demonstrate continuous compliance. If the $NO_X$ emission result from the performance test is less than or equal to 75 percent of the $NO_X$ emission limit for the turbine, you may reduce the frequency of subsequent performance tests to once every 2 years (no more than 26 calendar months following the previous performance test). If the results of any subsequent performance test exceed 75 percent of the $NO_X$ emission limit for the turbine, you must resume annual performance tests.**

**§ 60.4365 How can I be exempted from monitoring the total sulfur content of the fuel?**

**You may elect not to monitor the total sulfur content of the fuel combusted in the turbine, if the fuel is demonstrated not to exceed potential sulfur emissions of 26 ng $SO_2$/J (0.060 lb $SO_2$/MMBtu) heat input for units located in continental areas and 180 ng $SO_2$/J (0.42 lb $SO_2$/MMBtu) heat input for units located in noncontinental areas or a continental area that the Administrator determines does not have access to natural gas and that the removal of sulfur compounds would cause more environmental harm than benefit. You must use one of the following sources of information to make the required demonstration:**

**(a) The fuel quality characteristics in a current, valid purchase contract, tariff sheet or transportation contract for the fuel, specifying that the maximum total sulfur content for oil use in continental areas is 0.05 weight percent (500 ppmw) or less and 0.4 weight percent (4,000 ppmw) or less for noncontinental areas, the total sulfur content for natural gas use in continental areas is 20 grains of sulfur or less per 100 standard cubic feet and 140 grains of sulfur or less per 100 standard cubic feet for noncontinental areas, has potential sulfur emissions of less than less than 26 ng $SO_2$/J (0.060 lb $SO_2$/MMBtu) heat input for continental areas and has potential sulfur emissions of less than less than 180 ng $SO_2$/J (0.42 lb $SO_2$/MMBtu) heat input for noncontinental areas; or**

**§ 60.4370 How often must I determine the sulfur content of the fuel?**

**The frequency of determining the sulfur content of the fuel must be as follows:**

**(b) Gaseous fuel. If you elect not to demonstrate sulfur content using options in §60.4365, and the fuel is supplied without intermediate bulk storage, the sulfur content value of the gaseous fuel must be determined and recorded once per unit operating day.**

**Reporting**

**§ 60.4375 What reports must I submit?**

**(b) For each affected unit that performs annual performance tests in accordance with §60.4340(a), you must submit a written report of the results of each performance test before the close of business on the 60th day following the completion of the performance test.**

**§ 60.4395 When must I submit my reports?**

**All reports required under §60.7(c) must be postmarked by the 30th day following the end of each 6-month period.**

**Performance Tests**

**§ 60.4400 How do I conduct the initial and subsequent performance tests, regarding NOX?**

**(a) You must conduct an initial performance test, as required in §60.8. Subsequent $NO_X$ performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test).**

**(1) There are two general methodologies that you may use to conduct the performance tests. For each test run:**

**(i) Measure the $NO_X$ concentration (in parts per million (ppm)), using EPA Method 7E or EPA Method 20 in appendix A of this part. For units complying with the output based standard, concurrently measure the stack gas flow rate, using EPA Methods 1 and 2 in appendix A of this part, and measure and record the electrical and thermal output from the unit. Then, use the following equation to calculate the $NO_X$ emission rate:**

$$E = \frac{1.194 \times 10^{-7} * (NO_X)_c * Q_{std}}{P} \qquad \text{(Eq. 5)}$$

**Where:**

**E = $NO_X$ emission rate, in lb/MWh**

**$1.194 \times 10^{-7}$ = conversion constant, in lb/dscf-ppm**

**$(NO_X)_c$ = average $NO_X$ concentration for the run, in ppm**

**$Q_{std}$ = stack gas volumetric flow rate, in dscf/hr**

**P = gross electrical and mechanical energy output of the combustion turbine, in MW (for simple-cycle operation), for combined-cycle operation, the sum of all electrical and mechanical output from the combustion and steam turbines, or, for combined heat and power operation, the sum of all electrical and mechanical output from the combustion and steam turbines plus all useful recovered thermal output not used for additional electric or mechanical generation, in MW, calculated according to §60.4350(f)(2); or**

**(ii) Measure the $NO_X$ and diluent gas concentrations, using either EPA Methods 7E and 3A, or EPA Method 20 in appendix A of this part. Concurrently measure the heat input to the unit, using a fuel flowmeter (or flowmeters), and measure the electrical and thermal output of the unit. Use EPA Method 19 in appendix A of this part to calculate the $NO_X$ emission rate in lb/MMBtu. Then, use Equations 1 and, if necessary, 2 and 3 in §60.4350(f) to calculate the $NO_X$ emission rate in lb/MWh.**

**(2) Sampling traverse points for $NO_X$ and (if applicable) diluent gas are to be selected following EPA Method 20 or EPA Method 1 (non-particulate procedures), and sampled for equal time intervals. The sampling must be performed with a traversing single-hole probe, or, if feasible, with a stationary multi-hole probe that samples each of the points sequentially. Alternatively, a multi-hole probe designed and documented to sample equal volumes from each hole may be used to sample simultaneously at the required points.**

**(3) Notwithstanding paragraph (a)(2) of this section, you may test at fewer points than are specified in EPA Method 1 or EPA Method 20 in appendix A of this part if the following conditions are met:**

**(i) You may perform a stratification test for $NO_X$ and diluent pursuant to**

**(A) [Reserved], or**

**(B) The procedures specified in section 6.5.6.1(a) through (e) of appendix A of part 75 of this chapter.**

**(ii) Once the stratification sampling is completed, you may use the following alternative sample point selection criteria for the performance test:**

**(A) If each of the individual traverse point $NO_X$ concentrations is within ±10 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±5ppm or ±0.5 percent $CO_2$ (or $O_2$) from the mean for all traverse points, then you may use three points (located either 16.7, 50.0 and 83.3 percent of the way across the stack or duct, or, for circular stacks or ducts greater than 2.4 meters (7.8 feet) in diameter, at 0.4, 1.2, and 2.0 meters from the wall). The three points must be located along the measurement line that exhibited the highest average $NO_X$ concentration during the stratification test; or**

**(B) For turbines with a $NO_X$ standard greater than 15 ppm @ 15% $O_2$, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point $NO_X$ concentrations is within ±5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±3ppm or ±0.3 percent $CO_2$ (or $O_2$) from the mean for all traverse points; or**

**(C) For turbines with a $NO_X$ standard less than or equal to 15 ppm @ 15% $O_2$, you may sample at a single point, located at least 1 meter from the stack wall or at the stack centroid if each of the individual traverse point $NO_X$ concentrations is within ±2.5 percent of the mean concentration for all traverse points, or the individual traverse point diluent concentrations differs by no more than ±1ppm or ±0.15 percent $CO_2$ (or $O_2$) from the mean for all traverse points.**

**(b) The performance test must be done at any load condition within plus or minus 25 percent of 100 percent of peak load. You may perform testing at the highest achievable load point, if at least 75 percent of peak load cannot be achieved in practice. You must conduct three separate test runs for each performance test. The minimum time per run is 20 minutes.**

**(4) Compliance with the applicable emission limit in §60.4320 must be demonstrated at each tested load level. Compliance is achieved if the three-run arithmetic average $NO_X$ emission rate at each tested level meets the applicable emission limit in §60.4320.**

**(6) The ambient temperature must be greater than 0 °F during the performance test.**

**§ 60.4410 How do I establish a valid parameter range if I have chosen to continuously monitor parameters?**

**If you have chosen to monitor combustion parameters or parameters indicative of proper operation of $NO_X$ emission controls in accordance with §60.4340, the appropriate parameters must be continuously monitored and recorded during each run of the initial performance test, to establish acceptable operating ranges, for purposes of the parameter monitoring plan for the affected unit, as specified in §60.4355.**

**§ 60.4415 How do I conduct the initial and subsequent performance tests for sulfur?**

**(a) You must conduct an initial performance test, as required in §60.8. Subsequent $SO_2$ performance tests shall be conducted on an annual basis (no more than 14 calendar months following the previous performance test). There are three methodologies that you may use to conduct the performance tests.**

**(1) If you choose to periodically determine the sulfur content of the fuel combusted in the turbine, a representative fuel sample would be collected following ASTM D5287 (incorporated by reference, see §60.17) for natural gas or ASTM D4177 (incorporated by reference, see §60.17) for oil. Alternatively, for oil, you may follow the procedures for manual pipeline sampling in section 14 of ASTM D4057 (incorporated by reference, see §60.17). The fuel analyses of this section may be performed either by you, a service contractor retained by you, the fuel vendor, or any other qualified agency. Analyze the samples for the total sulfur content of the fuel using:**

**(ii) For gaseous fuels, ASTM D1072, or alternatively D3246, D4084, D4468, D4810, D6228, D6667, or Gas Processors Association Standard 2377 (all of which are incorporated by reference, see §60.17).**

**Definitions**

**§ 60.4420 What definitions apply to this subpart?**

**As used in this subpart, all terms not defined herein will have the meaning given them in the Clean Air Act and in subpart A (General Provisions) of this part.**

***Combined cycle combustion turbine* means any stationary combustion turbine which recovers heat from the combustion turbine exhaust gases to generate steam that is only used to create additional power output in a steam turbine.**

***Combined heat and power combustion turbine* means any stationary combustion turbine which recovers heat from the exhaust gases to heat water or another medium, generate steam for useful purposes other than additional electric generation, or directly uses the heat in the exhaust gases for a useful purpose.**

***Combustion turbine model* means a group of combustion turbines having the same nominal air flow, combustor inlet pressure, combustor inlet temperature, firing temperature, turbine inlet temperature and turbine inlet pressure.**

***Combustion turbine test cell/stand* means any apparatus used for testing uninstalled stationary or uninstalled mobile (motive) combustion turbines.**

***Diffusion flame stationary combustion turbine* means any stationary combustion turbine where fuel and air are injected at the combustor and are mixed only by diffusion prior to ignition.**

***Duct burner* means a device that combusts fuel and that is placed in the exhaust duct from another source, such as a stationary combustion turbine, internal combustion engine, kiln, etc., to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a heat recovery steam generating unit.**

***Efficiency* means the combustion turbine manufacturer's rated heat rate at peak load in terms of heat input per unit of power output—based on the higher heating value of the fuel.**

***Emergency combustion turbine* means any stationary combustion turbine which operates in an emergency situation. Examples include stationary combustion turbines used to produce power for critical networks or equipment, including power supplied to portions of a facility, when electric power from the local utility is interrupted, or stationary combustion turbines used to pump water in the case of fire or flood, etc. Emergency stationary combustion turbines do not include stationary combustion turbines used as peaking units at electric utilities or stationary combustion turbines at industrial facilities that typically operate at low capacity factors. Emergency combustion turbines may be operated for the purpose of maintenance checks and readiness testing, provided that the tests are required by the manufacturer, the vendor, or the insurance company associated with the turbine. Required testing of such units should be minimized, but there is no time limit on the use of emergency combustion turbines.**

***Excess emissions* means a specified averaging period over which either (1) the $NO_X$ emissions are higher than the applicable emission limit in §60.4320; (2) the total sulfur content of the fuel being combusted in the affected facility exceeds the limit specified in §60.4330; or (3) the recorded value of a particular monitored parameter is outside the acceptable range specified in the parameter monitoring plan for the affected unit.**

***Gross useful output* means the gross useful work performed by the stationary combustion turbine system. For units using the mechanical energy directly or generating only electricity, the gross useful work performed is the gross electrical or mechanical output from the turbine/generator set. For combined heat and power units, the gross useful work performed is the gross electrical or mechanical output plus the useful thermal output (i.e., thermal energy delivered to a process).**

***Heat recovery steam generating unit*** **means a unit where the hot exhaust gases from the combustion turbine are routed in order to extract heat from the gases and generate steam, for use in a steam turbine or other device that utilizes steam. Heat recovery steam generating units can be used with or without duct burners.**

***Integrated gasification combined cycle electric utility steam generating unit*** **means a coal-fired electric utility steam generating unit that burns a synthetic gas derived from coal in a combined-cycle gas turbine. No solid coal is directly burned in the unit during operation.**

***ISO conditions*** **means 288 Kelvin, 60 percent relative humidity and 101.3 kilopascals pressure.**

***Lean premix stationary combustion turbine*** **means any stationary combustion turbine where the air and fuel are thoroughly mixed to form a lean mixture before delivery to the combustor. Mixing may occur before or in the combustion chamber. A lean premixed turbine may operate in diffusion flame mode during operating conditions such as startup and shutdown, extreme ambient temperature, or low or transient load.**

***Natural gas*** **means a naturally occurring fluid mixture of hydrocarbons (e.g., methane, ethane, or propane) produced in geological formations beneath the Earth's surface that maintains a gaseous state at standard atmospheric temperature and pressure under ordinary conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 950 and 1,100 British thermal units (Btu) per standard cubic foot. Natural gas does not include the following gaseous fuels: landfill gas, digester gas, refinery gas, sour gas, blast furnace gas, coal-derived gas, producer gas, coke oven gas, or any gaseous fuel produced in a process which might result in highly variable sulfur content or heating value.**

***Noncontinental area*** **means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, the Northern Mariana Islands, or offshore platforms.**

***Peak load*** **means 100 percent of the manufacturer's design capacity of the combustion turbine at ISO conditions.**

***Regenerative cycle combustion turbine*** **means any stationary combustion turbine which recovers heat from the combustion turbine exhaust gases to preheat the inlet combustion air to the combustion turbine.**

***Simple cycle combustion turbine*** **means any stationary combustion turbine which does not recover heat from the combustion turbine exhaust gases to preheat the inlet combustion air to the combustion turbine, or which does not recover heat from the combustion turbine exhaust gases for purposes other than enhancing the performance of the combustion turbine itself.**

***Stationary combustion turbine*** **means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), heat recovery system, and any ancillary components and sub-components comprising any simple cycle stationary combustion turbine, any regenerative/recuperative cycle stationary combustion turbine, any combined cycle combustion turbine, and any combined heat and power combustion turbine based system. Stationary means that the combustion turbine is not self propelled or intended to be propelled while performing its function. It may, however, be mounted on a vehicle for portability.**

***Unit operating day*** **means a 24-hour period between 12 midnight and the following midnight during which any fuel is combusted at any time in the unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.**

***Unit operating hour*** **means a clock hour during which any fuel is combusted in the affected unit. If the unit combusts fuel for the entire clock hour, it is considered to be a full unit operating hour. If the unit combusts fuel for only part of the clock hour, it is considered to be a partial unit operating hour.**

***Useful thermal output*** **means the thermal energy made available for use in any industrial or commercial process, or used in any heating or cooling application, i.e., total thermal energy made**

**available for processes and applications other than electrical or mechanical generation. Thermal output for this subpart means the energy in recovered thermal output measured against the energy in the thermal output at 15 degrees Celsius and 101.325 kilopascals of pressure.**

```
Table 1_to Subpart KKKK of Part 60_Nitrogen Oxide Emission Limits for
                    New Stationary Combustion Turbines
-----------------------------------------------------------------------
                                  Combustion turbine
     Combustion turbine type      heat input at peak     NOX emission
                                      load (HHV)           standard
-----------------------------------------------------------------------
New turbine firing natural gas..  > 50 MMBtu/h     25 ppm at 15
                                   and [le] 850        percent O2 or 150
                                   MMBtu/h.            ng/J of useful
                                                       output (1.2 lb/
                                                       MWh).
```

### E.2.3 One Time Deadlines Relating to the Standard of Performance for Stationary Combustion Turbines [40 CFR 60, Subpart KKKK]

| Requirement | Rule Cite | Affected Facility | Deadline |
|---|---|---|---|
| Notification of the Date of Construction | 40 CFR 60.7(a)(1) | Combustion Turbine (CT) | Within 30 days after construction was commenced. |
| Notification of the Date of Initial Startup | 40 CFR 60.7(a)(3) | Combustion Turbine (CT) | Within 15 days after initial startup. |
| Initial Performance Test | 40 CFR 60.8(a)<br>40 CFR 60.4400 | Combustion Turbine (CT) | Within 60 days after achieving the maximum production rate, but not later than 180 days after initial startup. |

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR QUALITY
# COMPLIANCE DATA SECTION

## FESOP Quarterly Report

**Source Name:** Iroquois Bio-Energy Company, LLC
**Source Address:** 751 W. State Road 114, Rensselaer Indiana 47978-7265
**Mailing Address:** P. O. Box 218, Rensselaer, Indiana 47978-0218
**Permit No.:** 073-16720-00037
**Facility:** TO/HRSG System (C10), DDGS Dryers, and Combustion Turbine (CT)
**Parameter:** CO Emissions
**Limit:** Less than 98.2 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

CO Emissions (tons/month) = (22.5 X + 10.5 Y + 7.1 Z) / 2000

Where X = the operating hours of TO/HRSG system C10 when at least one of the DDGS dryers is in operation (hours/month)
Y = the operating hours of TO/HRSG system C10 when both of the DDGS dryers are not in operation (hours/month)
Z = the operating hours for combustion turbine CT (hours/month)

**YEAR:**

| Month | Column 1 | | | | Column 2 | Column 1 + Column 2 |
|---|---|---|---|---|---|---|
| | This Month | | | | Previous 11 Months CO Emissions | 12 Month Total CO Emissions |
| | X | Y | Z | CO Emissions | | |
| Month 1 | | | | | | |
| Month 2 | | | | | | |
| Month 3 | | | | | | |

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

**Attach a signed certification to complete this report.**

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR QUALITY
# COMPLIANCE DATA SECTION

## FESOP Quarterly Report

**Source Name:** Iroquois Bio-Energy Company, LLC
**Source Address:** 751 W. State Road 114, Rensselaer Indiana 47978-7265
**Mailing Address:** P. O. Box 218, Rensselaer, Indiana 47978-0218
**Permit No.:** 073-16720-00037
**Facility:** TO/HRSG System (C10), DDGS Dryers, and Combustion Turbine (CT)
**Parameter:** NOx Emissions
**Limit:** Less than 97.4 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

NOx Emissions (tons/month) = (20.9 X + 12.5 Y + 5.84 Z) / 2000

Where X = the operating hours of TO/HRSG system C10 when at least one of the DDGS dryers is in operation (hours/month)
Y = the operating hours of TO/HRSG system C10 when both of the DDGS dryers are not in operation (hours/month)
Z = the operating hours for combustion turbine CT (hours/month)

| Month | Column 1 | | | | Column 2 | Column 1 + Column 2 |
|---|---|---|---|---|---|---|
| | This Month | | | | Previous 11 Months NOx Emissions | 12 Month Total NOx Emissions |
| | X | Y | Z | NOx Emissions | | |
| Month 1 | | | | | | |
| Month 2 | | | | | | |
| Month 3 | | | | | | |

9 No deviation occurred in this quarter.

9 Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**
**OFFICE OF AIR QUALITY**
**COMPLIANCE BRANCH**
**100 North Senate Avenue**
**Indianapolis, Indiana 46204-2251**
**Phone: 317-233-~~5674~~ 0178**
**Fax: 317-233-~~5967~~ 6865**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)**
**EMERGENCY OCCURRENCE REPORT**

| | |
|---|---|
| Source Name: | Iroquois Bio-Energy Company, LLC |
| Source Address: | 751 W. State Road 114, Rensselaer Indiana 47978-7265 |
| Mailing Address: | P. O. Box 218, Rensselaer, Indiana 47978-0218 |
| Permit No.: | 073-16720-00037 |

**This form consists of 2 pages** **Page 1 of 2**

**9** This is an emergency as defined in 326 IAC 2-7-1(12)
- The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-~~5674~~ **0178**, ask for Compliance Section); and
- The Permittee must submit notice in writing or by facsimile within two (**2**) days (Facsimile Number: 317-233-~~5967~~ **6865**), and follow the other requirements of 326 IAC 2-7-16

. . .

**Conclusion**

The operation of this stationary ethanol production plant shall be subject to the conditions of the attached proposed Significant Permit Revision No. 073-23591-00037.

**Appendix A: Emission Calculations**
**Natural Gas Combustion**
**From the 59.8 MMBtu/hr NG Fired Combustion Turbine**

**Company Name: Iroquois Bio-Energy Company, LLC**
**Address: 751 W. State Rd. 114, Rensselaer, IN 47978**
**SPR: 073-23591-00037**
**Reviewer: ERG/YC**
**Date: October 6, 2006**

Heat Input Capacity
MMBtu/hr

59.8

| | Pollutant | | | | | |
|---|---|---|---|---|---|---|
| | PM* | PM10* | $SO_2$* | $NO_x$** | VOC* | CO** |
| Emission Factor | 6.60E-03 (lbs/MMBtu) | 6.60E-03 (lbs/MMBtu) | 3.40E-03 (lbs/MMBtu) | 5.84 (lbs/hr) | 2.10E-03 (lbs/MMBtu) | 7.10 (lbs/hr) |
| **PTE (tons/yr)** | **1.73** | **1.73** | **0.89** | **25.6** | **0.55** | **31.1** |

* Emission factors for PM/PM10, $SO_2$, and VOC are from AP-42, Chapter 3.1, Table 3.1-1 and 3.1-2a for NG Combustion Turbines (04/00).
** Emission factors for NOx and CO are from vendor's data and will be verified by stack testing.

**Methodology**

PTE of PM/PM10, $SO_2$, and VOC (tons/yr) = Heat Input Capacity (MMBtu/hr) x Emission Factor (lbs/MMBtu) x 8760 hr/yr x 1 ton/2000 lbs

PTE of NOx and CO (tons/yr) = Emission Factor (lbs/hr) x 8760 hr/yr x 1 ton/2000 lbs

**Appendix A: Emission Calculations**
**HAP Emissions**
**From the 59.8 MMBtu/hr NG Fired Combustion Turbine**

**Company Name: Iroquois Bio-Energy Company, LLC**
**Address: 751 W. State Rd. 114, Rensselaer, IN 47978**
**SPR: 073-23591-00037**
**Reviewer: ERG/YC**
**Date: October 6, 2006**

| Heat Input Capacity MMBtu/hr |
|---|
| 59.8 |

| | Pollutant | | | | | |
|---|---|---|---|---|---|---|
| Emission Factor in lbs/MMBtu | Formaldehyde 7.10E-04 | Toluene 1.30E-04 | Xylene 6.40E-05 | Acetaldehyde 4.00E-05 | Ethylbenzene 3.20E-05 | Total 1.03E-03 |
| **PTE (tons/yr)** | **1.86E-01** | **3.41E-02** | **1.68E-02** | **1.05E-02** | **8.38E-03** | **0.27** |

Note: Emission factors are from AP-42, Chapter 3.1, Table 3.1-3 for NG fired gas turbines (04/00).

**Methodology**

PTE (tons/yr) = Heat Input Capacity (MMBtu/hr) x Emission Factor (lbs/MMBtu) x 8760 hr/yr x 1 ton/2000 lbs