INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: March 30, 2012

RE: New Energy Corporation / 141-30242-00033

FROM: Matthew Stuckey, Branch 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 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, 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 4-21.5-3-7 and IC 13-15-7-3 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 Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) 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.

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impractible to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency
401 M Street
Washington, D.C. 20406

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
FNTV-PMOD.doc 3/27/08

IDEM

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March 30, 2012

Mr. Tim Stickler
New Energy Corp.
3201 West Calvert Street
South Bend, IN 46613

Re: 141-30242-00033
Significant Permit Modification to:
Part 70 Permit No.: T141-6956-00033

Dear Mr. Stickler:

New Energy Corp. was issued Part 70 Operating Permit T141-6956-00033 on March 17, 2008 for a fuel-grade ethanol production plant. A letter requesting changes to this permit was received on February 15, 2011. Pursuant to the provisions of 326 IAC 2-7-12, a significant permit modification to this permit is hereby approved as described in the attached Technical Support Document.

The modification consists of the addition of a thermal oxidizer for VOC control and the modification of the VOC emission limits for the DDGS cooler system, identified as EU-18, per a Best Available Control Technology (BACT) analysis for a facility subject to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) and 326 IAC 2-2 (PSD). The capacity of the DDGS cooler system is also being clarified, and the requirement to monitor visible emission notations is being removed.

For your convenience, the entire Part 70 Operating Permit as modified will be provided at issuance.

This decision is subject to the Indiana Administrative Orders and Procedures Act – IC 4-21.5-3-5. If you have any questions on this matter, please contact John Haney, OAQ, 100 North Senate Avenue, MC 61-53 1003 IGCN, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for John Haney or extension 4-5328, or dial (317) 234-5328.

Sincerely,

Matthew Stuckey, Chief
Permits Branch
Office of Air Quality

Attachments
MS/jeh
cc: File – St. Joseph County
U.S. EPA, Region V
Northern Regional Office
St. Joseph County Health Department
Compliance and Enforcement Branch

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
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Part 70 Operating Permit
OFFICE OF AIR QUALITY

New Energy Corp.
3201 West Calvert Street
South Bend, Indiana 46613

(herein known as the Permittee) is hereby authorized to construct and 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 provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. 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 2-7 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. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-2 and 326 IAC 2-7-10.5, applicable to those conditions.

Operation Permit No.: T 141-6956-00033	
Issued by/Original Issued by: Matthew Stuckey, Deputy Branch Chief Permits Branch Office of Air Quality	Issuance Date: March 17, 2008 Expiration Date: March 17, 2013

First Significant Permit Modification No.: 141-26231-00033, issued on July 22, 2008.
Second Significant Permit Modification No.: 141-27774-00033, issued on July 30, 2009.

Third Significant Permit Modification No.: 141-30242-00033	
Issued by: Matthew Stuckey, Branch Chief Permits Branch Office of Air Quality	Issuance Date: March 30, 2012 Expiration Date: March 17, 2013

TABLE OF CONTENTS

SECTION A SOURCE SUMMARY 8
A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]
A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]
A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]
A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

SECTION B GENERAL CONDITIONS 14
B.1 Definitions [326 IAC 2-7-1]
B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5] [326 IAC 2-7-4(a)(1)(D)] [IC 13-15-3-6(a)]
B.3 Term of Conditions [326 IAC 2-1.1-9.5]
B.4 Enforceability [326 IAC 2-7-7]
B.5 Severability [326 IAC 2-7-5(5)]
B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]
B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]
B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]
B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]
B.11 Emergency Provisions [326 IAC 2-7-16]
B.12 Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]
B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5] [326 IAC 2-7-10.5]
B.14 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]
B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]
B.17 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]
B.18 Permit Amendment or Modification [326 IAC 2-7-11] [326 IAC 2-7-12] [40 CFR 72]
B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]
B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]
B.21 Source Modification Requirement [326 IAC 2-7-10.5] [326 IAC 2-2-2] [326 IAC 2-3-2]
B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1] [IC 13-17-3-2]
B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]
B.25 Advanced Source Modification Approval [326 IAC 2-7-5(16)] [326 IAC 2-7-10.5]
B.26 Credible Evidence [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [62 FR 8314] [326 IAC 1-1-6]

SECTION C SOURCE OPERATION CONDITIONS 25

Emission Limitations and Standards [326 IAC 2-7-5(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]
C.2 Opacity [326 IAC 5-1]
C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
C.5 Fugitive Dust Emissions [326 IAC 6-4]
C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]
C.7 Stack Height [326 IAC 1-7]
C.8 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

Testing Requirements [326 IAC 2-7-6(1)]
C.9 Performance Testing [326 IAC 3-6]

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

Compliance Monitoring Requirements [326 IAC 2-7-5(1)] [326 IAC 2-7-6(1)]
C.11 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]
C.12 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
C.13 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]
C.14 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]
C.15 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]
C.16 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
C.17 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]
C.18 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]
C.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]
C.21 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2] [326 IAC 2-3]
C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2] [326 IAC 2-3]

Stratospheric Ozone Protection
C.23 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1 FACILITY OPERATION CONDITIONS: PSD Emission Units..... 36

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.1.1 PSD Limitations [326 IAC 2-2]
D.1.2 PSD Minor Limit [326 IAC 2-2]

Compliance Determination Requirements
D.1.3 Emission Determination [326 IAC 2-2]
D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
D.1.5 SO_2 Emissions Control
D.1.6 Emissions Determination [326 IAC 2-2]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.1.7 Record Keeping Requirements
D.1.8 Reporting Requirements

D.2 FACILITY OPERATION CONDITIONS: Corn Receiving, Handling and Milling Operations 45

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.2.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]
D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements
D.2.3 Particulate Control [326 IAC 2-7-6(6)]
D.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.2.5 Visible Emissions Notations
D.2 6 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.2.7 Broken or Failed Bag Detection

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.2.8 Record Keeping Requirements

D.3 FACILITY OPERATION CONDITION: Yeast Propagation and Fermentation 48

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.3.1 Volatile Organic Compounds (VOC) [326 IAC 2-2]
D.3.2 LAER Requirements CO_2 Scrubber [326 IAC 2-3] [326 IAC 2-2] [326 IAC 2-1] [326 IAC 2-7] [326 IAC 8-1-6]
D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements
D.3.4 VOC
D.3.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.3.6 Scrubber Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.3.7 Scrubber Flow Rate [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.3.8 Scrubber Failure Detection

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.3.9 Record Keeping Requirements

D.4 FACILITY OPERATION CONDITIONS: Degasser, Evaporation & DDGS Dryer Operations ... 52

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.4.1 LAER Requirements Regenerative Thermal Oxidizers (RTOs) [326 IAC 2-1.1] [326 IAC 2-2] [326 IAC 2-3] [326 IAC 2-7] [326 IAC 8-1-6]
D.4.2 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]
D.4.3 Operations Controlled by the RTOs
D.4.4 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-1] [326 IAC 7-2-1] [326 IAC 2-2]
D.4.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements
D.4.6 Volatile Organic Compounds (VOC) [326 IAC 2-3]
D.4.7 Particulate Control [326 IAC 2-7-6(6)]
D.4.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
D.4.9 Thermal Oxidizer Temperature
D.4.10 Thermal Oxidizer Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.4.11 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.4.12 Scrubber Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.4.13 Scrubber Flow Rate [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.4.14 Scrubber Failure Detection

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.4.15 Record Keeping Requirements

D.5 FACILITY CONDITIONS: DDGS Handling and Alcohol Load Out Handling 58
Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.5.1 BACT Requirements (VOC) [326 IAC 8-1-6]
D.5.2 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]
D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements
D.5.4 Particulate Control [326 IAC 2-7-6(6)]
D.5.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.5.6 Visible Emissions Notations
D.5.7 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.5.8 Broken or Failed Bag Detection

Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.5.9 Record Keeping Requirements

D.6 FACILITY OPERATION CONDITIONS: Riley-Stoker and Package Boilers..... 61

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.6.1 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-1] [326 IAC 7-2-1]
D.6.2 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-1] [326 IAC 7-2-1]
D.6.3 Particulate Matter (PM) [326 IAC 6.5-1-2]
D.6.4 Particulate Matter (PM) and Particulate Matter Less than 10 Microns (PM10) [326 IAC 2-2]
D.6.5 PM and PM10 [326 IAC 2-7-10.5(d)(4)(C)]
D.6.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements
D.6.7 Particulate Control [326 IAC 2-7-6(6)]
D.6.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]
D.6.9 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(3)(A)] [326 IAC 2-7-6]
D.6.10 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]
D.6.11 Continuous Emissions Monitoring [326 IAC 3-5] [326 IAC 12] [326 IAC 2-2]
D.6.12 Continuous Opacity Monitoring (COM) [326 IAC 3-5] [326 IAC 2-2]
D.6.13 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.6.14 Baghouse Parametric Monitoring
D.6.15 Visible Emissions Notations
D.6.16 Parametric Monitoring
D.6.17 Broken or Failed Bag Detection

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.6.18 Record Keeping Requirements
D.6.19 Reporting Requirements

D.7 FACILITY OPERATION CONDITIONS: DDGS Cooler System 70

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.7.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]
D.7.2 PM PSD Minor Limit [326 IAC 2-2]
D.7.3 PM_{10} PSD Minor Limit [326 IAC 2-2]
D.7.4 BACT Requirements (VOC) [326 IAC 8-1-6] [326 IAC 2-2-3]
D.7.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance Determination Requirements
D.7.6 Particulate Control [326 IAC 2-7-6(6)]
D.7.7 Volatile Organic Compounds (VOC) Control
D.7.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.7.9 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.7.10 Broken or Failed Bag Detection
D.7.11 Thermal Oxidizer Temperature
D.7.12 Thermal Oxidizer Parametric Monitoring

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.7.13 Record Keeping Requirements
D.7.14 Reporting Requirements

D.8 FACILITY OPERATION CONDITIONS: DDGS Grinding Operation 73

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.8.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]
D.8.2 PSD Minor Limit for PM/PM10 [326 IAC 2-2]
D.8.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

Compliance determination Requirements
D.8.4 Particulate Control
D.8.5 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]
D.8.6 Visible Emissions Notations
D.8.7 Baghouses Parametric Monitoring
D.8.8 Broken or Failed Bag Detection

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.8.9 Record Keeping Requirements

D.9 FACILITY OPERATION CONDITIONS: Storage Tanks 76

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.9.1 Petroleum Liquid Storage Facility [326 IAC 8-4-3]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.9.2 Record Keeping Requirements [326 IAC 8-4-3]

D.10 FACILITY OPERATION CONDITIONS: Insignificant Activities 77

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.10.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

E.1 NITROGEN OXIDES BUDGET TRADING PROGRAM - NO_X Budget Permit 78

E.1.1 Automatic Incorporation of Definitions [326 IAC 10-4-7(e)]
E.1.2 Standard Permit Requirements [326 IAC 10-4-4(a)]
E.1.3 Monitoring Requirements [326 IAC 10-4-4(b)]
E.1.4 Nitrogen Oxides Requirements [326 IAC 10-4-4(c)]
E.1.5 Excess Emissions Requirements [326 IAC 10-4-4(d)]
E.1.6 Record Keeping Requirements [326 IAC 10-4-4(e)] [326 IAC 2-7-5(3)]
E.1.7 Reporting Requirements [326 IAC 10-4-4(e)]
E.1.8 Liability [326 IAC 10-4-4(f)]
E.1.9 Effect on Other Authorities [326 IAC 10-4-4(g)]

F.1 FACILITY OPERATION CONDITIONS: NSPS Subpart D for Coal-Fired Boiler (EU-14) 82

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]
F.1.1 General Provisions Relating to NSPS D [326 IAC 12-1] [40 CFR Part 60, Subpart A]
F.1.2 New Source Performance Standards for Storage Vessels for for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971 Requirements [40 CFR Part 60, Subpart D] [326 IAC 12-1]

F.2 FACILITY OPERATION CONDITIONS: NSPS Subpart Ka for Gasoline Storage Tank (T-601) 89

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]
F.2.1 General Provisions Relating to NSPS Ka [326 IAC 12-1] [40 CFR Part 60, Subpart A]
F.2.2 New Source Performance Standards for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 Requirements [40 CFR Part 60, Subpart Ka] [326 IAC 12-1]

F.3 FACILITY OPERATION CONDITIONS: NSPS Subpart Kb for Ethanol Storage Tank (T-611) ... 94

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]
F.3.1 General Provisions Relating to NSPS Kb [326 IAC 12-1] [40 CFR Part 60, Subpart A]
F.3.2 New Source Performance Standards for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 Requirements [40 CFR Part 60, Subpart Kb] [326 IAC 12-1]

F.4 FACILITY OPERATION CONDITIONS: NSPS Subpart VV for Fermentation Operation (EU-05), APV Column (EU-06), Beerwell (EU-07) and Alcohol Load-Out (EU-13) 102

New Source Performance Standards (NSPS) Requirements [326 IAC 2-7-5(1)]
F.4.1 General Provisions Relating to NSPS VV [326 IAC 12-1] [40 CFR Part 60, Subpart A]
F.4.2 New Source Performance Standards for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry Requirements [40 CFR Part 60, Subpart VV] [326 IAC 12-1]

G.1 FACILITY OPERATION CONDITIONS: NESHAP Subpart FFFF for Yeast Propagation Operation (EU-04), Fermentation Operation (EU-05), APV Column (EU-06), Beerwell (EU-07), Degasser and Recovery Column (EU-08), Evaporation Process (EU-09), DDGS Dryer Operation (EU-10) and Alcohol Load-out Operation (EU-13) 127

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

G.1.1 General Provisions Relating to NESHAP FFFF [326 IAC 20-1-1] [40 CFR Part 63, Subpart A]

G.1.2 National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Manufacturing Requirements [40 CFR 63, Subpart FFFF] [326 IAC 20-84]

Certification 174

Emergency Occurrence Report 175-176

Semi-Annual Natural Gas-Fired Boiler Certification 177

Part 70 Quarterly Reports 178-181

Quarterly Deviation and Compliance Monitoring Report 182-183

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, A.3 and A.4 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 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a fuel-grade ethanol production plant.

Source Address:	3201 West Calvert Street, South Bend, Indiana 46613
Mailing Address:	P.O. Box 2289, South Bend, Indiana 46680
General Source Phone Number:	574 - 233 - 3116
SIC Code:	2869
County Location:	St. Joseph
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Major Source, under Section 112 of the Clean Air Act Ethanol plant is not 1 of 28 listed source categories; source subject to pre-August 7, 1980 NSPS; boilers are considered 1 of 28 listed source categories

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

This fuel-grade ethanol production source consists of two (2) plants:

(a) New Energy Corp. (NEC) located at 3201 West Calvert Street, South Bend, Indiana, and

(b) Linde LLC located at 3809 West Calvert Street, South Bend, Indiana.

Although the two (2) plants do not share common ownership or management, IDEM, OAQ has determined that since the two (2) plants are located on contiguous property that is owned by NEC and if it were not for the existence of NEC, the Linde LLC plant would not be there, the two (2) plants are considered one (1) source. Linde LLC is totally dependent on NEC for its feedstock of CO_2 gas. Therefore, the term "source" in the Part 70 documents refers to both New Energy Corp and Linde LLC as one (1) major source.

Separate Part 70 Operating Permits have been issued to New Energy Corp. with Permit No.: T 141-6956-00033 and Linde LLC with Permit No.: T 141-17344-00548 solely for administrative purposes.

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

(a) One (1) corn receiving operation, identified as EU-01, equipped with a baghouse, identified as D-0001, exhausting through Stack DC-0001, installed in 1982, consisting of one (1) rail hopper, identified as RH-0001, two (2) truck dumpers, identified as TD-0001 & TD-0002, and two (2) truck hoppers, identified as TH-0001 and TH-0002, two (2) belt conveyors, identified as CV-0001 and CV-0002, five (5) drag conveyors, identified as CV-0003, CV-0004, CV-0005, CV-0006, and CV-0008, one (1) elevator, identified as EL-0001, and one (1) elevator, identified as EL-0002, installed in December 2003, capacity: 840 tons of yellow dent corn per hour.

(b) One (1) corn handling operation, identified as EU-02, equipped with a baghouse, identified as D-0001, exhausting through Stack DC-0002, installed in 1982, consisting of one (1) pneumatic pump, identified as P-0001, seven (7) drag conveyors, identified as CV-0007, CV-0009, CV-0010 and CV-0013 through CV-0016, one (1) distributor, identified as DD-0001, two (2) bucket elevators, identified as EL-0001 and EL-0003, two (2) corn storage bins, identified as S-0005 & S-0006, capacity: 320,000 bushels of corn total, four (4) corn storage silos, identified as S-0007 through S-0010, capacity: 98,000 bushels of corn each, and two (2) sweep augers, identified as SD-0009 and SD-0010, capacity: 140 tons of yellow dent corn per hour.

(c) One (1) corn milling operation, identified as EU-03, installed in October 1982, equipped with a baghouse, identified as D-0112, exhausted through Stacks DC-0112 and BV-0112, consisting of one (1) belt conveyor, identified as CV-0018, one (1) pneumatic pump, identified as P-0111, one (1) scalper, identified as CS-0011, two (2) surge bins, identified as B-0011 and B-0112, one (1) drag conveyor, identified as CV-0011, five (5) rotary feeders, identified as RF-0111 through RF-0115, five (5) hammermills, identified as M-0050 through M-0054, three (3) screw conveyors, identified as CV-0111, CV-0101 and CV-0117, one (1) weigh hopper, identified as WH-0111, one (1) bag dump hopper, identified as B-0111, three (3) bucket elevators, identified as EL-0111, EL-0112 and EL-0113, one (1) weigh-feeder, identified as W-0121, one (1) airlock, identified as DA-0112, capacity: 140 tons of yellow corn per hour.

(d) One (1) yeast propagation operation, identified as EU-04, installed in October 1982, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) yeast mixing tank, identified as T-320, one (1) yeast mixing tank agitator, identified as A-320, four (4) yeast preparation tanks, identified as T-321 through T-324, four (4) agitators, identified as A-321 through A-324, one (1) cooler, identified as E-321 and three (3) pumps, identified as P-320 through P-322, capacity: 16,000 gallons per tank and 2,100 tank turnovers per year. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(e) One (1) fermentation operation, identified as EU-05, installed in October 1982, exhausted through Stacks VT-005 through VT-019, VT-019a and BL-230, consisting of sixteen (16) fermenter agitators, identified as A-202 through A-215, A-220 and A-221, eight (8) fermenter coolers, identified as E-210 through E-217, sixteen (16) pumps, identified as P-202 through P-215, P-220, P-221 and P-231, sixteen (16) fermenters identified as T-202 through T-215, T-220 and T-221, one (1) blower, identified as BL-230, one (1) foam trap, identified as FT-230, one (1) CO_2 scrubber, identified as V-230 installed in 1984, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, one (1) scrubber pump, identified as P-230, one foam trap bleed pump, identified as P-231, capacity: 319,000 gallons per tank and 2,100 tank turnovers per year. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this operation are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(f) One (1) APV column, identified as EU-06, installed in May 1989, exhausted through Stack VT-020, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) stripper column, identified as V-2402, two (2) reflux pumps, identified as P-2404 A and P-2404 B, two (2) feed preheaters, identified as E-2410 and E-2412, one (1) stripper column reboiler, identified as E-2414, one (1) stripper column overhead condenser, identified as E-2416, one (1) stripper column reflux drum, identified as V-2404, and one (1) stripper column vent condenser,

identified as E-2418, maximum capacity: 150 gallons of scrubber water per minute. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(g) One (1) beerwell, identified as EU-07, installed in December 1986, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) beerwell, identified as T-222, two (2) beerwell pumps, identified as P-222A and P-222B and two (2) beerwell agitators, identified as A-222A and A-222B, capacity: 1,750 gallons of beer per minute. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(h) One (1) degasser and recovery column, identified as EU-08, installed in October 1982, exhausted through Stacks VT-022, VT-023 and BL-601. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

Stack VT-022 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs) installed in 2003, with fuel-oil back-up approved for construction in 2007, rated at 8.0 million British thermal units per hour each, to control VOC emissions from the one (1) recovery column vent condenser, identified as E-409. The associated equipment consists of:

One (1) recovery column, identified as V-402, one (1) recovery column reflux tank, identified as V-404, three (3) beer preheaters, identified as E-400 A, E-400 B and E-400 C, one (1) recovery column condenser, identified as E-404, one (1) recovery column reboiler #2, identified as E-MS-408, one (1) recovery column vent condenser, identified as E-409, equipped with a scrubber installed in April 1997, one (1) preheater #2, identified as E-412, one (1) recovery column reboiler #1, identified as E-413, one (1) preheater #3, identified as E-418, one (1) auxiliary product cooler, identified as E-419, one (1) duplex strainer, identified as F-401, two (2) recovery column feed pumps, identified as P-401 A & P-401 B, two (2) recovery column bottoms pumps, identified as P-402 A and P-402 B, two (2) recovery column reflux pumps, identified as P-404 A and P-404 B, one (1) fusel oil transfer pump, identified as P-405, three (3) recovery column recirculation pumps #2, identified as P-407 A, P-407 B and P-408, and one (1) wet scrubber, identified as V-424.

Stack VT-023 associated equipment consists of:

One (1) aqueous alcohol return pump, identified as P-403, one (1) fusel oil decanter tank, identified as P-414, one (1) fusel oil decanter tank, identified as V-403, one (1) fusel oil accumulator tank, identified as V-422. V-403 and V-422 vent to VT-023.

Stack BL-601 routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, associated equipment consists of:

One (1) degasser condenser, identified as E-403, one (1) degasser vent condenser, identified as E-410, one (1) preheater #4, identified as E-414, two (2) beer preheaters, identified as E-415 A and E-415 B, one (1) duplex strainer, identified as F-400, and one (1) degasser, identified as V-401, capacity: 1,750 gallons of beer per minute.

(i) One (1) stillage concentration and evaporation process, identified as EU-09, installed in October 1982, consisting of five (5) centrifuges, identified as S-501 through S-505, three (3) stillage tanks, identified as T-502, T-515 and T-516, consisting of: one (1) stillage preheater, identified as E-503, four (4) 1st through 4th stage heaters, identified as E-501, E-502, E-504, and E-505, five (5) vapor bodies, identified as T-504 and T-507 through T-510, one (1) 5th and 6th stage heater, identified as E-506, one (1) evaporation condensate tank, identified as T-506, exhausted through Stack VT-024 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs) installed in 2003, with fuel-oil back-up approved for construction in 2007, exhausted through Stack 5002, one (1) lube oil console, identified as C-501C, one (1) gland seal condenser, identified as C-501E, one (1) evaporator concentrates tank, identified as T-505, one (1) compressor, identified as C-501A, one (1) turbine, identified as C-501B, one (1) lube oil head tank, identified as C-501D, one (1) gland seal ejector, identified as C501F, one (1) evaporator concentrates tank agitator, identified as A 505, four (4) stage 1 thru stage 4 circulation pumps, identified as P-504, P-505, P-507 and P 508, one (1) scrubber pump, identified as P-511, two (2) stage 5 and 6 circulation pumps, identified as P-509 and P-510, two (2) evaporator condensate pumps, identified as P-506 and P-521 (spare), and two (2) evaporator concentrates pump, identified as P-516 and P-516A, capacity: 910 gallon per minute evaporator feed rate. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(j) One (1) distillers dried grain and solubles (DDGS) dryer operation, identified as EU-10, installed in October 1982, exhausted through Stacks BL-511 through BL-515, routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs) installed in 2003, with fuel-oil back-up approved for construction in 2007, exhausted through Stack 5002, consisting of five (5) DDGS dryers, identified as D-511 through D-515, each equipped with a scrubber, identified as SF-511 through SF-515, and a DDGS dryer steam trap, identified as TR-511, TR-521, TR-531, TR-541 and TR-551, five (5) dryer feed screw conveyors, identified as CV-511 through CV-515, one (1) wet conveyor, identified as CV-501, one (1) inclined wet conveyor, identified as CV-502, one (1) dryer feed conveyor, identified as CV-516, one (1) recycle conveyor, identified as CV-517, one (1) product conveyor, identified as CV-518, one (1) cooler cross-over conveyor, identified as CV-519, one (1) pug mill, identified as M-511, and five (5) scrubber pumps, identified as P-523 through P-527, capacity: 38.98 tons of DDGS product per hour. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(k) One (1) DDGS handling operation, identified as EU-11, installed in October 1982, consisting of two (2) bucket elevators, identified as EL-0601 and EL-0602, two (2) dust suppression nozzles, identified as DN-0601 and DN-0602, and four (4) drag conveyors, identified as CV-0600 through CV-0603, capacity: 38.98 tons of DDGS product per hour.

(l) One (1) DDGS load-out operation, identified as EU-12, installed in October 1982, equipped with a baghouse, identified as D-0601, exhausted through Stack DC-0601, consisting of five (5) drag conveyors, identified as CV-0604 through CV-0608, one (1) bucket elevator, identified as EL-0603, one (1) surge bin, identified as S-0601, one (1) belt conveyor with tripper, identified as CV-0609, one (1) dust filter, identified as D-0601, one (1) dust fan, identified as DC-0601, one (1) airlock, identified as DA-0601, one (1) winch drive, identified as H-0601, three (3) dust suspension nozzles, identified as DN-0603 through DN-0605, and

one (1) shuttle belt conveyor, identified as CV-0610, maximum capacity: 83.96 tons of DDGS product per hour.

(m) One (1) alcohol load-out operation, identified as EU-13, installed in October 1982, exhausted through Stack G-602, equipped with a load-out natural gas-fired flare, identified as G-602, rated at 0.100 million British thermal units per hour, two (2) bottom transfer loading arms, identified as G-604 and G-607, two (2) bottom transfer vapor recovery arms, identified as G-605 and G-608, two (2) truck/rail vapor recovery loading arms, identified as G-603 and G-606, two (2) product filters, identified as F-660 and F-661, and two (2) fuel grade alcohol load-out pumps, identified as P-610 and P-611, capacity: 72,000 gallons of ethanol per hour. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(n) One (1) Riley-Stoker coal-fired boiler, equipped with an 8 module baghouse (D-4000), rated at 414 million British thermal units per hour, installed in 1982, identified as EU-14, modified with low NO_X burners in October 2003, exhausted through Stack 001. Under NSPS, 40 CFR Part 60.40, Subpart D, the boiler is considered an affected facility.

(o) A spray dryer absorber SO_2 removal system for control of SO_2 emissions from the Riley-Stoker coal-fired boiler including the following:

(1) One (1) lime storage silo (Q-4106), with one (1) baghouse (D-4107) for particulate matter control exhausting through stack ST-4102;

(2) One (1) ash silo (Q-4105), with one (1) baghouse (D-4105) for control of particulate matter emissions from the conveying of ash to the silo and one (1) baghouse (D-4106) for control of particulate matter emissions from ash transfer and unloading.

(p) Two (2) natural gas-fired package boilers with No. 2 fuel oil backup, identified as EU-15, rated at 220 million British thermal units per hour each, installed in October 1982, exhausted through Stack 001.

(q) One (1) distillers dried grains and solubles (DDGS) cooler system, identified as EU-18, equipped with a baghouse, identified as DC-503, installed in March 2000, exhausting through Stack DC-0503, consisting of one (1) fan, identified as BL-502, one (1) cooling coil, identified as CC-500, one (1) cooler inlet rotary valve, identified as RV-502, one (1) cooler, identified as RC-502, and four (4) conveyors, identified as CV-522, CV-530, CV-531 and CV-532, DDGS capacity: 42.3 tons of DDGS per hour based on monthly DDGS production. Baghouse DC-503 exhausts through a regenerative thermal oxidizer system, approved in 2012 for construction, consisting of knockout pot KO-503, fan BL-503, oxidizer RTO-503, and outlet stack ST-503.

(r) Five (5) storage tanks, consisting of:

(1) One (1) floating roof gasoline storage tank, identified as T-601, installed in 1983, capacity: 75,000 gallons. Under NSPS, 40 CFR Part 60.110a, Subpart Ka, this tank is considered an existing volatile organic liquid storage tank.

(2) One (1) floating roof fuel ethanol storage tank, identified as T-610, installed in 1983, capacity: 750,000 gallons.

(3) One (1) ethanol internal floating roof storage tank, identified as T-611, installed in 2001, capacity: 1,250,000 gallons. Under NSPS, 40 CFR Part 60.110b,

Subpart Kb, this tank is considered an existing volatile organic liquid storage tank.

(4) One (1) floating roof in-process ethanol storage tank, identified as T-612, installed in 1983, capacity: 75,000 gallons.

(5) One (1) fuel oil storage tank, identified as T-4120, installed in 1983, capacity: 250,000 gallons.

(s) Two (2) natural gas-fired regenerative thermal oxidizers (RTOs), installed in 2003 and fuel-oil back-up approved for construction in 2007, and rated at 8.0 million British thermal units per hour each.

(t) One (1) distillers dried grains and solubles (DDGS) grinding operation identified as EU-19, approved for construction in 2008, consisting of two (2) hammermills, identified as M-0611 and M-0612, with each having a maximum capacity of 50 tons per hour, using baghouses D-0611 and D-0612 as control, and exhausting to stacks ST-0611 and ST-0612, respectively.

A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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

(b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 British thermal units per hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 British thermal units per hour, rated at a total of 2.431 million British thermal units per hour, consisting of:

(1) One (1) emergency diesel-fired generator, rated at 1.8 million British thermal units per hour heat input and 500 kilowatts, limited to five hundred (500) hours of operation per year, and

(2) One (1) back-up diesel-fired fire pump, rated at 0.631 million British thermal units per hour and 250 horsepower.

(r) Paved and unpaved roads and parking lots with public access, identified as EU-17 [326 IAC 6-4].

(t) Coal bunker and coal scale exhausts and associated dust collector vents [326 IAC 6.5-1-2(a)].

(dd) Bag Dump-Process [326 IAC 6.5-1-2(a)].

(gg) DDGS finishing [326 IAC 6.5-1-2(a)].

(jj) Ash handling [326 IAC 6.5-1-2(a)].

(kk) Ash loadout [326 IAC 6.5-1-2(a)].

(ll) Coal receiving/handling and storage [326 IAC 6.5-1-2(a)].

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 Permit by 326 IAC 2-7-2 (Applicability) because:

(a) It is a major source, as defined in 326 IAC 2-7-1(22);

(b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 - Applicability).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

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 Permit Term [326 IAC 2-7-5(2)][326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]

(a) This permit, T141-6956-00033, 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, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

B.3 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.4 Enforceability [326 IAC 2-7-7] [IC 13-17-12]

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 Severability [326 IAC 2-7-5(5)]

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.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(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 "responsible official" as defined by 326 IAC 2-7-1(34). 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.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]

(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 the "responsible official" 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) A "responsible official" is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

(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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

(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 2-7-5(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 submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][326 IAC 1-6-3]

(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 or ninety (90) days after initial start-up, whichever is later, 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The PMP extension notification does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 the "responsible official" as defined by 326 IAC 2-7-1(34).

(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.11 Emergency Provisions [326 IAC 2-7-16]

(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.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a 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, and Northern Regional Office 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 and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877**.**

(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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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 2-7-5(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 "responsible official" as defined by 326 IAC 2-7-1(34).

(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 2-7-4(c)(9) 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 2-7 and any other applicable rules.

(g) 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.

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

B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced 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 Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

This permit shield does not extend to applicable requirements which are promulgated after the date of issuance of this permit unless this permit has been modified to reflect such new requirements.

(b) If, after issuance of this permit, it is determined that the permit is in nonconformance with an applicable requirement that applied to the source on the date of permit issuance, IDEM, OAQ, shall immediately take steps to reopen and revise this permit and issue a compliance order to the Permittee to ensure expeditious compliance with the applicable requirement until the permit is reissued. The permit shield shall continue in effect so long as the Permittee is in compliance with the compliance order.

(c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.

(d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:

(1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;

(2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;

(3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and

(4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.

(e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).

(f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]

(g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]

(a) All terms and conditions of permits established prior to T141-6956-00033 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this combined permit, all previous registrations and permits are superseded by this combined new source review and part 70 operating permit, except for permits issued pursuant to Title IV of the Clean Air Act and 326 IAC 21 (Acid Deposition Control)

B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]

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 2-7-3 and 326 IAC 2-7-4(a).

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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 the "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

(a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 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 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 2-7-9(a)(3)]

(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 2-7-9(b)]

(d) The reopening and revision of this permit, under 326 IAC 2-7-9(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 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]

(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 2-7-4. 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 "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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 2-7 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.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12] [40 CFR 72]

(a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.

(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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

(d) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]

(a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.

(b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) 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 preconstruction approval required by 326 IAC 2-7-10.5 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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 2-7-20(b),(c), or (e). 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 2-7-20(b)(1), (c)(1), and (e)(2).

(b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:

(1) A brief description of the change within the source;

(2) The date on which the change will occur;

(3) Any change in emissions; and

(4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the “responsible official” as defined by 326 IAC 2-7-1(34).

(c) Emission Trades [326 IAC 2-7-20(c)]
The Permittee may trade emissions increases and decreases at 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 2-7-20(c).

(d) Alternative Operating Scenarios [326 IAC 2-7-20(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 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.

(e) 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.

(f) This condition does not apply to emission trades of SO_2 or NO_X under 326 IAC 21 or 326 IAC 10-4.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

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

B.22 Inspection and Entry [326 IAC 2-7-6][IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]

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 Part 70 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 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 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 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.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

(a) The Permittee must comply with the requirements of 326 IAC 2-7-11 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][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) Except as provided in 326 IAC 2-7-19(e), 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.25 Advanced Source Modification Approval [326 IAC 2-7-5(16)] [326 IAC 2-7-10.5]

(a) The requirements to obtain a source modification approval under 326 IAC 2-7-10.5 or a permit modification under 326 IAC 2-7-12 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.

(b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

B.26 Credible Evidence [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [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 2-7-5(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 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]

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.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). 326 IAC 6-4-2(4) is not federally enforceable.

C.6 Fugitive Particulate Matter Emission Limitations [326 IAC 6-5]

Pursuant to 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations), fugitive particulate matter emissions shall be controlled according to the attached plan as in Attachment A. The provisions of 326 IAC 6-5 are not federally enforceable.

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 by using ambient air quality modeling pursuant to 326 IAC 1-7-4. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

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
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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 the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 Licensed 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 Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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 the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 "responsible official" as defined by 326 IAC 2-7-1(34).

(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 2-7-5(1)][326 IAC 2-7-6(1)]

C.11 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(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 or ninety (90) days of initial start-up, whichever is later. 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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 the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.12 Maintenance of Continuous Opacity Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous opacity monitoring systems (COMS) and related equipment. For a boiler, the COMS shall be in operation at all times that the induced draft fan is in operation.

(b) All COMS shall meet the performance specifications of 40 CFR 60, Appendix B, Performance Specification No. 1, and are subject to monitor system certification requirements pursuant to 326 IAC 3-5.

(c) In the event that a breakdown of a COMS occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(d) Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS, the Permittee shall record:

(1) The pressure drop across the baghouse used in conjunction with the Riley-Stoker coal-fired boiler (EU-14), at least twice per day, with at least four (4) hours between each set of readings, until a COM is online when the boiler is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 8.0 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.

(2) Visible emission notations of the Riley-Stoker coal-fired boiler Stack 001 exhaust shall be performed at least twice per day during normal daylight operations with at least four (4) hours between each set of readings, until a COM is online when the boiler is in operation. A trained employee shall record whether emissions are normal or abnormal.

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.

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.

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.

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.

(e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous opacity monitoring system pursuant to 326 IAC 3-5, and 40 CFR 60 Appendix B and 40 CFR 60 Appendix F, Procedure 1).

C.13 Maintenance of Continuous Emission Monitoring Equipment [326 IAC 2-7-5(3)(A)(iii)]

(a) The Permittee shall install, calibrate, maintain, and operate all necessary continuous emission monitoring systems (CEMS) and related equipment.

(b) In the event that a breakdown of a continuous emission monitoring system occurs, a record shall be made of the times and reasons of the breakdown and efforts made to correct the problem.

(c) Whenever a continuous emission monitor other than an opacity monitor is malfunctioning or will be down for calibration, maintenance, or repairs for a period of four (4) hours or more, the Permittee shall comply with the relevant requirements of 40 CFR 75 Subpart D - Missing Data Substitution Procedures.

(d) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 40 CFR 63.1209 and 40 CFR 63.8.

C.14 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.15 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(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 instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]

C.16 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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(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.17 Risk Management Plan [326 IAC 2-7-5(12)] [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.18 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

(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; and/or

(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.19 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

(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 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 "responsible official" as defined by 326 IAC 2-7-1(34).

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

C.20 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

(a) Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

(1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) (“Regulated pollutant, which is used only for purposes of Section 19 of this rule”) from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management
Technical Support and Modeling Section, Office of Air Quality
100 North Senate Avenue
MC 61-50 IGCN 1003
Indianapolis, Indiana 46204-2251

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The emission statement 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.21 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2][326 IAC 2-3]

(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 or ninety (90) days of initial start-up, whichever is later.

(c) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:

(A) A description of the project.

(B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.

(C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:

(i) Baseline actual emissions;

(ii) Projected actual emissions;

(iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1 (mm)(2)(A)(iii); and

(iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.

(d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:

(1) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and

(2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.22 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2][326 IAC 2-3

(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 the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
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 the "responsible official" as defined by 326 IAC 2-7-1(34).

(e) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, 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.

(f) If the Permittee is required to comply with the recordkeeping provisions of (d) in Section C - General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1 (qq) and/or 326 IAC 2-3-1 (ll)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:

(1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1 (xx) and/or 326 IAC 2-3-1 (qq), for that regulated NSR pollutant, and

(2) The emissions differ from the preconstruction projection as documented and maintained under Section C - General Record Keeping Requirements (c)(1)(C)(ii).

(g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:

(1) The name, address, and telephone number of the major stationary source.

(2) The annual emissions calculated in accordance with (d)(1) and (2) in Section C - General Record Keeping Requirements.

(3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).

(4) Any other information that the Permittee deems fit to include in this report.

Reports required in this part shall be submitted to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

(h) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C- General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

C.23 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

Emissions Unit Description: PSD Emission Units

(a) One (1) corn receiving operation, identified as EU-01, equipped with a baghouse, identified as D-0001, exhausting through Stack DC-0001, installed in 1982, consisting of one (1) rail hopper, identified as RH-0001, two (2) truck dumpers, identified as TD-0001 & TD-0002, and two (2) truck hoppers, identified as TH-0001 and TH-0002, two (2) belt conveyors, identified as CV-0001 and CV-0002, five (5) drag conveyors, identified as CV-0003, CV-0004, CV-0005, CV-0006, and CV-0008, one (1) elevator, identified as EL-0001, and one (1) elevator, identified as EL-0002, installed in December 2003, capacity: 840 tons of yellow dent corn per hour.

(b) One (1) corn handling operation, identified as EU-02, equipped with a baghouse, identified as D-0001, exhausting through Stack DC-0002, installed in 1982, consisting of one (1) pneumatic pump, identified as P-0001, seven (7) drag conveyors, identified as CV-0007, CV-0009, CV-0010 and CV-0013 through CV-0016, one (1) distributor, identified as DD-0001, two (2) bucket elevators, identified as EL-0001 and EL-0003, two (2) corn storage bins, identified as S-0005 & S-0006, capacity: 320,000 bushels of corn total, four (4) corn storage silos, identified as S-0007 through S-0010, capacity: 98,000 bushels of corn each, and two (2) sweep augers, identified as SD-0009 and SD-0010, capacity: 140 tons of yellow dent corn per hour.

(c) One (1) corn milling operation, identified as EU-03, installed in October 1982, equipped with a baghouse, identified as D-0112, exhausted through Stacks DC-0112 and BV-0112, consisting of one (1) belt conveyor, identified as CV-0018, one (1) pneumatic pump, identified as P-0111, one (1) scalper, identified as CS-0011, two (2) surge bins, identified as B-0011 and B-0112, one (1) drag conveyor, identified as CV-0011, five (5) rotary feeders, identified as RF-0111 through RF-0115, five (5) hammermills, identified as M-0050 through M-0054, three (3) screw conveyors, identified as CV-0111, CV-0101 and CV-0117, one (1) weigh hopper, identified as WH-0111, one (1) bag dump hopper, identified as B-0111, three (3) bucket elevators, identified as EL-0111, EL-0112 and EL-0113, one (1) weigh-feeder, identified as W-0121, one (1) airlock, identified as DA-0112, capacity: 140 tons of yellow corn per hour.

(d) One (1) yeast propagation operation, identified as EU-04, installed in October 1982, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) yeast mixing tank, identified as T-320, one (1) yeast mixing tank agitator, identified as A-320, four (4) yeast preparation tanks, identified as T-321 through T-324, four (4) agitators, identified as A-321 through A-324, one (1) cooler, identified as E-321 and three (3) pumps, identified as P-320 through P-322, capacity: 16,000 gallons per tank and 2,100 tank turnovers per year. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(e) One (1) fermentation operation, identified as EU-05, installed in October 1982, exhausted through Stacks VT-005 through VT-019, VT-019a and BL-230, consisting of sixteen (16) fermenter agitators, identified as A-202 through A-215, A-220 and A-221, eight (8) fermenter coolers, identified as E-210 through E-217, sixteen (16) pumps, identified as P-202 through P-215, P-220, P-221 and P-231, sixteen (16) fermenters identified as T-202 through T-215, T-220 and T-221, one (1) blower, identified as BL-230, one (1) foam trap, identified as FT-230, one (1) CO_2 scrubber, identified as V-230 installed in 1984, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, one (1) scrubber pump, identified as P-230, one foam trap bleed pump, identified as P-231, capacity: 319,000 gallons per tank and 2,100 tank turnovers per year. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this operation are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical

Emissions Unit Description: PSD Emission Units - (Continued)

manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

bottoms receivers, and control devices or systems. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(h) One (1) degasser and recovery column, identified as EU-08, installed in October 1982, exhausted through Stacks VT-022, VT-023 and BL-601. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

Stack VT-022 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs) installed in 2003, with fuel-oil back-up approved for construction in 2007, rated at 8.0 million British thermal units per hour each, to control VOC emissions from the one (1) recovery column vent condenser, identified as E-409. The associated equipment consists of:

One (1) recovery column, identified as V-402, one (1) recovery column reflux tank, identified as V-404, three (3) beer preheaters, identified as E-400 A, E-400 B and E-400 C, one (1) recovery column condenser, identified as E-404, one (1) recovery column reboiler #2, identified as E-MS-408, one (1) recovery column vent condenser, identified as E-409, equipped with a scrubber installed in April 1997, one (1) preheater #2, identified as E-412, one (1) recovery column reboiler #1, identified as E-413, one (1) preheater #3, identified as E-418, one (1) auxiliary product cooler, identified as E-419, one (1) duplex strainer, identified as F-401, two (2) recovery column feed pumps, identified as P-401 A & P-401 B, two (2) recovery column bottoms pumps, identified as P-402 A and P-402 B, two (2) recovery column reflux pumps, identified as P-404 A and P-404 B, one (1) fusel oil transfer pump, identified as P-405, three (3) recovery column recirculation pumps #2, identified as P-407 A, P-407 B and P-408, and one (1) wet scrubber, identified as V-424.

Stack VT-023 associated equipment consists of:

One (1) aqueous alcohol return pump, identified as P-403, one (1) fusel oil decanter tank, identified as P-414, one (1) fusel oil decanter tank, identified as V-403, one (1) fusel oil accumulator tank, identified as V-422. V-403 and V-422 vent to VT-023.

Stack BL-601 routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, associated equipment consists of:

One (1) degasser condenser, identified as E-403, one (1) degasser vent condenser, identified as E-410, one (1) preheater #4, identified as E-414, two (2) beer preheaters, identified as E-415 A and E-415 B, one (1) duplex strainer, identified as F-400, and one (1) degasser, identified as V-401, capacity: 1,750 gallons of beer per minute.

(i) One (1) stillage concentration and evaporation process, identified as EU-09, installed in October 1982, consisting of five (5) centrifuges, identified as S-501 through S-505, three (3) stillage tanks, identified as T-502, T-515 and T-516, consisting of: one (1) stillage preheater, identified as E-503, four (4) 1st through 4th stage heaters, identified as E-501, E-502, E-504, and E-505, five (5) vapor bodies, identified as T-504 and T-507 through T-510, one (1) 5th and 6th stage heater, identified as E-506, one (1) evaporation condensate tank, identified as T-506, exhausted through Stack VT-024 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs) installed in 2003, with fuel-oil back-up approved for construction in 2007, exhausted through Stack 5002, one (1) lube oil console, identified as C-501C, one (1) gland seal condenser, identified as C-501E, one (1)

Emissions Unit Description: PSD Emission Units - (Continued)

evaporator concentrates tank, identified as T-505, one (1) compressor, identified as C-501A, one (1) turbine, identified as C-501B, one (1) lube oil head tank, identified as C-501D, one (1) gland seal ejector, identified as C501F, one (1) evaporator concentrates tank agitator, identified as A 505, four (4) stage 1 thru stage 4 circulation pumps, identified as P-504, P-505, P-507 and P 508, one (1) scrubber pump, identified as P-511, two (2) stage 5 and 6 circulation pumps, identified as P-509 and P-510, two (2) evaporator condensate pumps, identified as P-506 and P-521 (spare), and two (2) evaporator concentrates pump, identified as P-516 and P-516A, capacity: 910 gallon per minute evaporator feed rate. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(j) One (1) distillers dried grain and solubles (DDGS) dryer operation, identified as EU-10, installed in October 1982, exhausted through Stacks BL-511 through BL-515, routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs) installed in 2003, with fuel-oil back-up approved for construction in 2007, exhausted through Stack 5002, consisting of five (5) DDGS dryers, identified as D-511 through D-515, each equipped with a scrubber, identified as SF-511 through SF-515, and a DDGS dryer steam trap, identified as TR-511, TR-521, TR-531, TR-541 and TR-551, five (5) dryer feed screw conveyors, identified as CV-511 through CV-515, one (1) wet conveyor, identified as CV-501, one (1) inclined wet conveyor, identified as CV-502, one (1) dryer feed conveyor, identified as CV-516, one (1) recycle conveyor, identified as CV-517, one (1) product conveyor, identified as CV-518, one (1) cooler cross-over conveyor, identified as CV-519, one (1) pug mill, identified as M-511, and five (5) scrubber pumps, identified as P-523 through P-527, capacity: 38.98 tons of DDGS product per hour. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(k) One (1) DDGS handling operation, identified as EU-11, installed in October 1982, consisting of two (2) bucket elevators, identified as EL-0601 and EL-0602, two (2) dust suppression nozzles, identified as DN-0601 and DN-0602, and four (4) drag conveyors, identified as CV-0600 through CV-0603, capacity: 38.98 tons of DDGS product per hour.

(l) One (1) DDGS load-out operation, identified as EU-12, installed in October 1982, equipped with a baghouse, identified as D-0601, exhausted through Stack DC-0601, consisting of five (5) drag conveyors, identified as CV-0604 through CV-0608, one (1) bucket elevator, identified as EL-0603, one (1) surge bin, identified as S-0601, one (1) belt conveyor with tripper, identified as CV-0609, one (1) dust filter, identified as D-0601, one (1) dust fan, identified as DC-0601, one (1) airlock, identified as DA-0601, one (1) winch drive, identified as H-0601, three (3) dust suspension nozzles, identified as DN-0603 through DN-0605, and one (1) shuttle belt conveyor, identified as CV-0610, maximum capacity: 83.96 tons of DDGS product per hour.

(m) One (1) alcohol load-out operation, identified as EU-13, installed in October 1982, exhausted through Stack G-602, equipped with a load-out natural gas-fired flare, identified as G-602, rated at 0.100 million British thermal units per hour, two (2) bottom transfer loading arms, identified as G-604 and G-607, two (2) bottom transfer vapor recovery arms, identified as G-605 and G-608, two (2) truck/rail vapor recovery loading arms, identified as G-603 and G-606, two (2) product filters, identified as F-660 and F-661, and two (2) fuel grade alcohol load-out pumps, identified as P-610 and P-611, capacity: 72,000 gallons of ethanol per hour. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 61.240, Subpart V, these facilities are at an existing source with pumps, compressors, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, surge control vessels, bottoms receivers, and control devices or systems. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities

Emissions Unit Description: PSD Emission Units - (Continued)

are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(n) One (1) Riley-Stoker coal-fired boiler, equipped with an 8 module baghouse (D-4000), rated at 414 million British thermal units per hour, installed in 1982, identified as EU-14, modified with low NO_X burners in October 2003, exhausted through Stack 001. Under NSPS, 40 CFR Part 60.40, Subpart D, the boiler is considered an affected facility.

(o) A spray dryer absorber SO_2 removal system for control of SO_2 emissions from the Riley-Stoker coal-fired boiler including the following:

(1) One (1) lime storage silo (Q-4106), with one (1) baghouse (D-4107) for particulate matter control exhausting through stack ST-4102;

(2) One (1) ash silo (Q-4105), with one (1) baghouse (D-4105) for control of particulate matter emissions from the conveying of ash to the silo and one (1) baghouse (D-4106) for control of particulate matter emissions from ash transfer and unloading.

(p) Two (2) natural gas-fired package boilers with No. 2 fuel oil backup, identified as EU-15, rated at 220 million British thermal units per hour each, installed in October 1982, exhausted through Stack 001.

(q) One (1) distillers dried grains and solubles (DDGS) cooler system, identified as EU-18, equipped with a baghouse, identified as DC-503, installed in March 2000, exhausting through Stack DC-0503, consisting of one (1) fan, identified as BL-502, one (1) cooling coil, identified as CC-500, one (1) cooler inlet rotary valve, identified as RV-502, one (1) cooler, identified as RC-502, and four (4) conveyors, identified as CV-522, CV-530, CV-531 and CV-532, DDGS capacity: 42.3 tons of DDGS per hour based on monthly DDGS production. Baghouse DC-503 exhausts through a regenerative thermal oxidizer system, approved in 2012 for construction, consisting of knockout pot KO-503, fan BL-503, oxidizer RTO-503, and outlet stack ST-503.

Insignificant Activities:

(b) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 British thermal units per hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 British thermal units per hour, rated at a total of 2.431 million British thermal units per hour, consisting of:

(1) One (1) emergency diesel-fired generator, rated at 1.8 million British thermal units per hour heat input and 500 kilowatts, limited to five hundred (500) hours of operation per year, and

(2) One (1) back-up diesel-fired fire pump, rated at 0.631 million British thermal units per hour and 250 horsepower.

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

Emission Limitations and Standards [326 IAC 2-7-5(1)]

D.1.1 PSD Limitations [326 IAC 2-2]

Pursuant to St. Joseph County Health Department construction permit/PSD approval, issued on February 12, 1982, and in order to satisfy the requirements of PSD BACT:

The following emission limitations apply to the emission units listed in Section D.1 as the corn receiving operation, identified as EU-01, the corn handling operation, identified as EU-02, the corn milling operation, identified as EU-03, the yeast propagation operation, identified as EU-04, the fermentation operation, identified as EU-05, the degasser and recovery column, identified as EU-08, the evaporation process, identified as EU-09, the distillers dried grain and solubles (DDGS) dryer operation, identified as EU-10, the DDGS handling operation, identified as EU-11, the DDGS load-out operation, identified as EU-12, the alcohol load-out operation, identified as EU-13, the Riley-Stoker coal-fired boiler, identified as EU-14, and the two (2) natural gas-fired package boilers with No. 2 fuel oil backup, identified as EU-15:

(a) SO_2 emissions shall be limited to:

(1) 1.2 pounds per million British thermal units,

(2) 412 pounds per hour, and

(3) 1,630 tons per year*.

(b) NO_X emissions shall be limited to:

(1) 0.7 pounds per million British thermal units,

(2) 240 pounds per hour, and

(3) 960 tons per year*.

(c) Particulate (PM) emissions shall be limited to:

(1) 20 pounds per hour, and

(2) 70 tons per year*.

* year = twelve (12) consecutive month period with compliance determined at the end of each month.

D.1.2 PSD Minor Limit [326 IAC 2-2]

Total emissions of CO from the Riley-Stoker coal-fired boiler, identified as EU-14, and the two (2) natural gas-fired package boilers with No. 2 fuel oil backup, identified as EU-15, shall not exceed 93.55 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with the above limit when combined with potential CO emissions from the flare for the alcohol load-out operation, identified as EU-13, the 1.8 MMBtu per hour emergency diesel-fired generator, the 0.631 MMBtu/hr back-up diesel-fired fire pump, the four (4) 0.550 MMBtu/hr space heaters, and the twelve (12) 1.25 MMBtu/hr coal thaw burners shall limit CO emissions from the units installed in 1982, receiving construction approval under St. Joseph County Health Department construction permit/PSD approval, issued on February 12, 1982, to less than 100 tons per year so that the requirements of 326 IAC 2-2 (PSD) do not apply for CO emissions.

Compliance Determination Requirements

D.1.3 Emissions Determination [326 IAC 2-2]

Compliance with Condition D.1.1(a), (b) and (c) shall be determined by calculating the SO_2, NO_X and PM emissions associated with the specified emission units, using the following equations:

(a) PSD SO_2 emissions = CEM + CEMD + (TTNG x 0.6 pounds of SO_2/mmcf x 1 ton/2,000 pounds) + (HEGO x 1.80 mmBtu/hr x 0.29 pounds of SO_2/mmBtu x 1 ton/2,000 pounds) + (HFPO x 0.631 mmBtu/hr x 0.29 pounds of SO_2/mmBtu x 1 ton/2,000 pounds).

(b) PSD NO_X emissions = CEM + CEMD + (TTNG x 100.0 pounds of NO_X/mmcf x 1 ton/2,000 pounds) + (HEGO x 1.80 mmBtu/hr x 4.41 pounds of NO_X/mmBtu x 1 ton/2,000 pounds) + (HFPO x 0.631 mmBtu/hr x 4.41 pounds of NO_X/mmBtu x 1 ton/2,000 pounds).

(c) PSD PM emissions = [(TC x 88.9 pounds of PM/ton of coal x (1 - CE)) + (TNG x 1.9 pounds of PM/mmcf of natural gas) + (TO x 2.0 pounds of PM/kilogallon of No. 2 fuel oil)] x 1 ton/2,000 pounds +

[TCR x 0.079 pounds of PM/ton of corn x (1 - CE)] x 1 ton/2,000 pounds +

[TCH x 0.061 pounds of PM/ton of corn x (1 - CE)] x 1 ton/2,000 pounds +

[TCM x 0.012 pounds of PM/ton of corn (emission factor is after control)] x 1 ton/2,000 pounds +

∑ [FR x OGL x MO x 1 lb/ 7,000 grains] x 1 ton/ 2,000 pounds +

[TDGS11 x 0.061 pounds of PM/ton of DDGS handled] x 1 ton/2,000 pounds +

[TDGS12 x 0.0057 pounds of PM/ton of DDGS loaded out x (1 - CE)] x 1 ton/2,000 pounds + K +

(TTNG x 1.9 pounds of PM/mmcf x 1 ton/2,000 pounds) + (HEGO x 1.80 mmBtu/hr x 0.31 pounds of PM/mmBtu x 1 ton/2,000 pounds) + (HFPO x 0.631 mmBtu/hr x 0.31 pounds of PM/mmBtu x 1 ton/2,000 pounds) + INSIG.

where:

CEM = Continuous emissions monitoring (CEMs) Emissions for SO_2 or NO_X (tons) for EU-14 and EU-15

CEMD = Emissions during continuous emissions monitoring (CEMs) down-times for SO_2 or NO_X, (tons) for the Riley-Stoker coal-fired boiler (EU-14) and two (2) package boilers (EU-15)

TTNG = Total throughput of natural gas (mmcf) to the space heaters and coal thaw burners

HEGO = Number of hours the emergency generator operated

HFPO = Number of hours the backup emergency fire pump operated

TC	=	Throughput of coal to the Riley-Stoker coal-fired boiler (EU-14) (tons/month)
TNG	=	Throughput of natural gas (mmcf) to the two (2) package boilers (EU-15)
TO	=	Throughput of No. 2 fuel oil (kilogallons) to the two (2) package boilers (EU-15)
CE	=	Overall control efficiency (fraction) of the control device
TCR	=	Throughput of corn received (tons/month) to corn receiving operation (EU-01)
TCH	=	Throughput of corn handled (tons/month) to the corn handling operation (EU-02)
TCM	=	Throughput of corn milled (tons/month) to the corn milling operation (EU-03)
FR	=	Flow rate of each DDGS dryer (cubic feet per minute)
OGL	=	Outlet grain loading of 0.0007 grains/cubic foot or that established by the most recent IDEM, OAQ approved stack test emission rate for each DDGS dryer.
MO	=	Number of minutes per month in operation of each DDGS dryer
∑	=	The sum for five (5) DDGS dryers (EU-10)
TDGS11	=	Throughput of DDGS (tons/month) to DDGS handling operation (EU-11)
TDGS12	=	Throughput of DDGS (tons/month) to DDGS load-out operation (EU-12)
K	=	0.0001 tons/month for alcohol load-out operation (EU-13)
INSIG	=	PM emissions from other insignificant activities

The Permittee shall use the emission rates measured during the most recent compliant stack test in place of the emission rates given in the above equation.

D.1.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) Within one hundred eighty (180) days after issuance of this Part 70 Operating Permit, in order to demonstrate compliance with the emission rate of 0.50 pounds of CO per ton of coal in Condition D.1.6, the Permittee shall perform CO testing for the Riley-Stoker coal-fired boiler (EU-14) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half (2.5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(b) Within one hundred eighty (180) days after issuance of this Part 70 Operating Permit, in order to demonstrate compliance with the emission rate of 5.0 pounds of CO per kilogallon of No. 2 fuel oil in Condition D.1.6, the Permittee shall perform CO testing for the two (2) package boilers when burning No. 2 fuel oil (EU-15). If No. 2 fuel oil is not combusted within one hundred eighty (180) days of issuance of this Part 70 Operating Permit, testing must be completed within thirty (30) days upon initial combustion of No. 2 fuel oil, utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half (2.5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.1.5 SO_2 Emissions Control

In order to comply with condition D.1.1(a), the spray dryer absorber SO_2 removal system for SO_2 emissions control shall be in operation and control emissions from the Riley-Stoker boiler at all times that the Riley-Stoker boiler is in operation and combusting coal with a sulfur content of greater than 0.75%.

D.1.6 Emissions Determination [326 IAC 2-2]

Compliance with Condition D.1.2 shall be determined by calculating the CO emissions associated with the specified emission units, using the following equation:

CO emissions (tons/yr) = [(TC x 0.50 pounds of CO/ton of coal) + (TNG x 84.0 pounds of CO/mmcf of natural gas) + (TO x 5.0 pounds of CO/ kilogallon of No. 2 fuel oil)] + [(TTNG x 84.0 pounds of CO/mmcf) + (HEGO x 1.80 mmBtu/hr x 0.95 pounds of CO/mmBtu) + (HFPO x 0.631 mmBtu/hr x 0.95 pounds of CO/mmBtu)] x 1 ton/2,000 pounds.

where:

TC = Throughput of coal to the Riley-Stoker coal-fired boiler (EU-14) per twelve (12) consecutive month period (tons)

TNG = Throughput of natural gas (mmcf) to the two (2) package boilers (EU-15) per twelve (12) consecutive month period (tons)

TO = Throughput of No. 2 fuel oil (kilogallons) to the two (2) package boilers (EU-15) per twelve (12) consecutive month period (tons)

TTNG = Total throughput of natural gas (mmcf) to the space heaters and coal thaw burners

HEGO = Number of hours the emergency generator operated

HFPO = Number of hours the backup emergency fire pump operated

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.7 Record Keeping Requirements

(a) To document compliance with Conditions D.1.1, D.1.2, D.1.3 and D.1.6 the Permittee shall maintain records of the following:

(1) Records of SO_2 and NO_X CEMS emissions data,

(2) Throughput of natural gas to space heaters and coal thaw burners,

(3) Number of hours that the emergency generator and backup emergency fire pump operated,

(4) Throughput of coal to EU-14,

(5) Throughput of natural gas to EU-15,

(6) Throughput of No. 2 fuel oil to EU-15,

(7) Throughput of corn processed (received (EU-01), handled (EU-02) and milled (EU-03)),

(8) Throughput of DDGS,

(9) Operational times of each of the five (5) DDGS dryers on a monthly basis, and

(10) Actual PM emission from other insignificant activities and information used to determine such actual emissions.

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

D.1.8 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 using the equations in condition D.1.3(a), (b) and (c), and Condition D.1.2 using the equation in condition D.1.6, including supporting calculations and data used for determining compliance with the emission limits in conditions D.1.1 and D.1.2, 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 the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Corn Receiving, Handling and Milling Operations

(a) One (1) corn receiving operation, identified as EU-01, equipped with a baghouse, identified as D-0001, exhausting through Stack DC-0001, installed in 1982, consisting of one (1) rail hopper, identified as RH-0001, two (2) truck dumpers, identified as TD-0001 & TD-0002, and two (2) truck hoppers, identified as TH-0001 and TH-0002, two (2) belt conveyors, identified as CV-0001 and CV-0002, five (5) drag conveyors, identified as CV-0003, CV-0004, CV-0005, CV-0006, and CV-0008, one (1) elevator, identified as EL-0001, and one (1) elevator, identified as EL-0002, installed in December 2003, capacity: 840 tons of yellow dent corn per hour.

(b) One (1) corn handling operation, identified as EU-02, equipped with a baghouse, identified as D-0001, exhausting through Stack DC-0002, installed in 1982, consisting of one (1) pneumatic pump, identified as P-0001, seven (7) drag conveyors, identified as CV-0007, CV-0009, CV-0010 and CV-0013 through CV-0016, one (1) distributor, identified as DD-0001, two (2) bucket elevators, identified as EL-0001 and EL-0003, two (2) corn storage bins, identified as S-0005 & S-0006, capacity: 320,000 bushels of corn total, four (4) corn storage silos, identified as S-0007 through S-0010, capacity: 98,000 bushels of corn each, and two (2) sweep augers, identified as SD-0009 and SD-0010, capacity: 140 tons of yellow dent corn per hour.

(c) One (1) corn milling operation, identified as EU-03, installed in October 1982, equipped with a baghouse, identified as D-0112, exhausted through Stacks DC-0112 and BV-0112, consisting of one (1) belt conveyor, identified as CV-0018, one (1) pneumatic pump, identified as P-0111, one (1) scalper, identified as CS-0011, two (2) surge bins, identified as B-0011 and B-0112, one (1) drag conveyor, identified as CV-0011, five (5) rotary feeders, identified as RF-0111 through RF-0115, five (5) hammermills, identified as M-0050 through M-0054, three (3) screw conveyors, identified as CV-0111, CV-0101 and CV-0117, one (1) weigh hopper, identified as WH-0111, one (1) bag dump hopper, identified as B-0111, three (3) bucket elevators, identified as EL-0111, EL-0112 and EL-0113, one (1) weigh-feeder, identified as W-0121, one (1) airlock, identified as DA-0112, capacity: 140 tons of yellow corn per hour.

(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 2-7-5(1)]

D.2.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a), particulate matter (PM) emissions from the corn receiving, handling and milling facilities (EU-01, EU-02 and EU-03) Stacks DC-0001, DC-0002, DC-0112, and BV-0112 exhausts shall each be limited to 0.03 grains per dry standard cubic foot of exhaust air.

D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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.2.3 Particulate Control [326 IAC 2-7-6(6)]

(a) Pursuant to St. Joseph County Health Department construction permit/PSD approval, issued on February 12, 1982, and in order to comply with Conditions D.1.1(a)(4)(B) and D.2.1, the baghouses (D-0001 and D-0112) for particulate control shall be in operation and control emissions from the corn receiving, handling and milling operations (EU-01, EU-02 and EU-03) at all times that these facilities are in operation.

(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.2.4 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within 180 days after issuance of this Part 70 Operating Permit, in order to demonstrate compliance with Condition D.2.1, the Permittee shall perform PM testing for the two (2) baghouses (D-0001 and D-0112) controlling PM emissions from the corn receiving, handling and milling operations (EU-01, EU-02 and EU-03), 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.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.2.5 Visible Emissions Notations

(a) Visible emission notations of the corn receiving, handling and milling facilities (EU-01, EU-02 and EU-03) Stack DC-0001, DC-0002, DC-0112 and BV-0112 exhausts shall be performed once per day during normal daylight operations. 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.2.6 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

The Permittee shall record the pressure drop across the baghouses (D-0001 and D-0112) used in conjunction with the corn receiving, handling and milling operations (EU-01, EU-02 and EU-03), at least once per day when the corn receiving, handling and milling operations (EU-01, EU-02 and EU-03) are in operation. When for any one reading, the pressure drop across the baghouses are outside the normal range of 3.0 and 8.0 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.2.7 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 emission unit. 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, or dust traces.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.2.8 Record Keeping Requirements

(a) To document compliance with Condition D.2.5, the Permittee shall maintain a daily record of visible emission notations of the corn receiving, handling and milling stack exhausts DC-0001, DC-0002, DC-0112 and BV-0112. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the corn receiving, handling and milling operations did not operate that day).

(b) To document compliance with Condition D.2.6, the Permittee shall maintain a daily record of the pressure drop across the baghouses (D-0001 and D-0112) controlling the corn receiving, handling and milling operations. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the corn receiving, handling and milling operations did not operate that day).

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

SECTION D.3 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Yeast Propagation and Fermentation

(d) One (1) yeast propagation operation, identified as EU-04, installed in October 1982, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) yeast mixing tank, identified as T-320, one (1) yeast mixing tank agitator, identified as A-320, four (4) yeast preparation tanks, identified as T-321 through T-324, four (4) agitators, identified as A-321 through A-324, one (1) cooler, identified as E-321 and three (3) pumps, identified as P-320 through P-322, capacity: 16,000 gallons per tank and 2,100 tank turnovers per year. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(e) One (1) fermentation operation, identified as EU-05, installed in October 1982, exhausted through Stacks VT-005 through VT-019, VT-019a and BL-230, consisting of sixteen (16) fermenter agitators, identified as A-202 through A-215, A-220 and A-221, eight (8) fermenter coolers, identified as E-210 through E-217, sixteen (16) pumps, identified as P-202 through P-215, P-220, P-221 and P-231, sixteen (16) fermenters identified as T-202 through T-215, T-220 and T-221, one (1) blower, identified as BL-230, one (1) foam trap, identified as FT-230, one (1) CO_2 scrubber, identified as V-230 installed in 1984, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, one (1) scrubber pump, identified as P-230, one foam trap bleed pump, identified as P-231, capacity: 319,000 gallons per tank and 2,100 tank turnovers per year. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this operation are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(f) One (1) APV column, identified as EU-06, installed in May 1989, exhausted through Stack VT-020, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) stripper column, identified as V-2402, two (2) reflux pumps, identified as P-2404 A and P-2404 B, two (2) feed preheaters, identified as E-2410 and E-2412, one (1) stripper column reboiler, identified as E-2414, one (1) stripper column overhead condenser, identified as E-2416, one (1) stripper column reflux drum, identified as V-2404, and one (1) stripper column vent condenser, identified as E-2418, maximum capacity: 150 gallons of scrubber water per minute. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(g) One (1) beerwell, identified as EU-07, installed in December 1986, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) beerwell, identified as T-222, two (2) beerwell pumps, identified as P-222A and P-222B and two (2) beerwell agitators, identified as A-222A and A-222B, capacity: 1,750 gallons of beer per minute. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(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 2-7-5(1)]

D.3.1 Volatile Organic Compounds (VOC) [326 IAC 2-2]

Pursuant to the St. Joseph County Health Department, construction permit/PSD approval, issued on February 12, 1982 and revised through the Part 70 Operating Permit, all of the off-gases will be processed by scrubbing.

D.3.2 LAER Requirements CO_2 Scrubber (VOC) [326 IAC 2-3] [326 IAC 2-2] [326 IAC 2-1.1] [326 IAC 2-7] [326 IAC 8-1-6]

(a) Pursuant to 326 IAC 2-3, the Permittee shall vent the additional exhaust streams from the yeast propagator tanks (EU-04) and the beerwell (EU-07) to the CO_2 scrubber (V-230).

(b) The CO_2 scrubber (V-230) shall achieve an overall VOC control efficiency equal to or greater than ninety-five percent (95%), including the existing exhaust stream from the fermentation operation (EU-05).

(c) In accordance with 326 IAC 2-3, operation of the CO_2 scrubber consistent with the requirements of this condition shall constitute compliance with the LAER requirements for the VOC emissions from the yeast propagator tanks (EU-04) and the beerwell (EU-07) to be vented to the CO_2 scrubber (V-230).

D.3.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.3.4 VOC

(a) In order to comply with Condition D.3.2, the scrubber for VOC control shall be in operation and control emissions from the yeast propagator tanks (EU-04), the fermentation operation (EU-05), and the beerwell (EU-07), at all times that these emission units are in operation.

(b) In order to comply with the LAER for VOC in Condition D.3.2(b), and HAP limit in 40 CFR Part 63, Subpart FFFF, the bisulfite solution shall be applied at a minimum feed rate of 3.2 gallons per hour into the scrubbing water of the CO_2 Scrubber (V-230) until a rate is established through the latest compliance stack test.

D.3.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Prior to October 14, 2009, which is five (5) years from the last valid compliance demonstration, in order to demonstrate compliance with Condition D.3.2(b), with the application of the bisulfite solution into the scrubbing water of the CO_2 Scrubber, the Permittee shall perform testing of the overall VOC control efficiency of the scrubber utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five (5) years from the date of the last valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.3.6 Scrubber Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

The Permittee shall record the pressure drop across the scrubber (V-230) used in conjunction with the yeast propagation operation (EU-04), the fermentation process (EU-05), the APV column (EU-06) and the beerwell (EU-07) at least once per day when these operations and processes are in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of 15 and 28 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.3.7 Scrubber Flow Rate [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) The Permittee shall record the flow rate of the scrubbing water used in conjunction with the CO_2 scrubber (V-230) at least once per day when the yeast propagation operation (EU-04), the fermentation process (EU-05), the APV column (EU-06) and the beerwell (EU-07) are in operation. When for any one reading, the liquor flow rate is below a minimum flow of 80 gallons per minute for the scrubber exhausted to Stack BL-230 or a minimum 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 reading that is less than 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.

(b) The Permittee shall record the bisulfite solution feed rate into the scrubbing water used in conjunction with the CO_2 Scrubber (V-230) at least once per day when the yeast propagation operation (EU-04), the fermentation process (EU-05), the APV column (EU-06) and the beerwell (EU-07) are in operation. For any one reading, the bisulfite solution feedrate for the scrubber is below a minimum rate established during the latest compliance stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A feed rate reading that is less than 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 instrument 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.

D.3.8 Scrubber Failure Detection

(a) For a scrubber controlling emissions from a process operated continuously, a failed unit 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 scrubber 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. 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).

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

Record Keeping and Reporting Requirement [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.3.9 Record Keeping Requirements

(a) To document compliance with Condition D.3.6, the Permittee shall maintain a daily record of the pressure drop across the scrubber (V-230) controlling the yeast propagation operation (EU-04), the fermentation process (EU-05), the APV column (EU-06) and the beerwell (EU-07). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the yeast propagation operation

and fermentation process did not operate that day).

(b) To document compliance with Condition D.3.7(a), the Permittee shall maintain a daily record of the water flow rate in the scrubber V-230 controlling the yeast propagation operation (EU-04), the fermentation process (EU-05), the APV column (EU-06) and the beerwell (EU-07). The Permittee shall include in its daily record when a water flow rate reading is not taken and the reason for the lack of a water flow rate reading (e.g., the yeast propagation operation (EU-04), the fermentation process (EU-05), the APV column (EU-06) and the beerwell (EU-07) did not operate that day).

(c) To document compliance with Condition D.3.7(b), the Permittee shall maintain a daily record of the bisulfite solution feed rate into the scrubbing water of the CO_2 scrubber V-230, controlling the fermentation process (EU-05). The Permittee shall include in its daily record when a bisulfite solution feed rate reading is not taken and the reason for the lack of a bisulfite solution feed rate reading (e.g., the process did not operate that day).

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

SECTION D.4 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Degasser, Evaporation & DDGS Dryer Operations

(h) One (1) degasser and recovery column, identified as EU-08, installed in October 1982, exhausted through Stacks VT-022, VT-023 and BL-601. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

Stack VT-022 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs) installed in 2003, with fuel-oil back-up approved for construction in 2007, rated at 8.0 million British thermal units per hour each, to control VOC emissions from the one (1) recovery column vent condenser, identified as E-409. The associated equipment consists of:

One (1) recovery column, identified as V-402, one (1) recovery column reflux tank, identified as V-404, three (3) beer preheaters, identified as E-400 A, E-400 B and E-400 C, one (1) recovery column condenser, identified as E-404, one (1) recovery column reboiler #2, identified as E-MS-408, one (1) recovery column vent condenser, identified as E-409, equipped with a scrubber installed in April 1997, one (1) preheater #2, identified as E-412, one (1) recovery column reboiler #1, identified as E-413, one (1) preheater #3, identified as E-418, one (1) auxiliary product cooler, identified as E-419, one (1) duplex strainer, identified as F-401, two (2) recovery column feed pumps, identified as P-401 A & P-401 B, two (2) recovery column bottoms pumps, identified as P-402 A and P-402 B, two (2) recovery column reflux pumps, identified as P-404 A and P-404 B, one (1) fusel oil transfer pump, identified as P-405, three (3) recovery column recirculation pumps #2, identified as P-407 A, P-407 B and P-408, and one (1) wet scrubber, identified as V-424.

Stack VT-023 associated equipment consists of:

One (1) aqueous alcohol return pump, identified as P-403, one (1) fusel oil decanter tank, identified as P-414, one (1) fusel oil decanter tank, identified as V-403, one (1) fusel oil accumulator tank, identified as V-422. V-403 and V-422 vent to VT-023.

Stack BL-601 routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, associated equipment consists of:

One (1) degasser condenser, identified as E-403, one (1) degasser vent condenser, identified as E-410, one (1) preheater #4, identified as E-414, two (2) beer preheaters, identified as E-415 A and E-415 B, one (1) duplex strainer, identified as F-400, and one (1) degasser, identified as V-401, capacity: 1,750 gallons of beer per minute.

(i) One (1) stillage concentration and evaporation process, identified as EU-09, installed in October 1982, consisting of five (5) centrifuges, identified as S-501 through S-505, three (3) stillage tanks, identified as T-502, T-515 and T-516, consisting of: one (1) stillage preheater, identified as E-503, four (4) 1st through 4th stage heaters, identified as E-501, E-502, E-504, and E-505, five (5) vapor bodies, identified as T-504 and T-507 through T-510, one (1) 5th and 6th stage heater, identified as E-506, one (1) evaporation condensate tank, identified as T-506, exhausted through Stack VT-024 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs) installed in 2003, with fuel-oil back-up approved for construction in 2007, exhausted through Stack 5002, one (1) lube oil console, identified as C-501C, one (1) gland seal condenser, identified as C-501E, one (1) evaporator concentrates tank, identified as T-505, one (1) compressor, identified as C-501A, one (1) turbine, identified as C-501B, one (1) lube oil head tank, identified as C-501D, one (1) gland seal ejector, identified as C501F, one (1) evaporator concentrates tank agitator, identified as A 505, four (4) stage 1 thru stage 4 circulation pumps, identified as P-504, P-505, P-507 and P 508, one (1) scrubber pump, identified as P-511, two (2) stage 5 and 6 circulation pumps, identified as P-509

and P-510, two (2) evaporator condensate pumps, identified as P-506 and P-521 (spare), and two (2) evaporator concentrates pump, identified as P-516 and P-516A, capacity: 910 gallon per minute evaporator feed rate. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(j) One (1) distillers dried grain and solubles (DDGS) dryer operation, identified as EU-10, installed in October 1982, exhausted through Stacks BL-511 through BL-515, routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs) installed in 2003, with fuel-oil back-up approved for construction in 2007, exhausted through Stack 5002, consisting of five (5) DDGS dryers, identified as D-511 through D-515, each equipped with a scrubber, identified as SF-511 through SF-515, and a DDGS dryer steam trap, identified as TR-511, TR-521, TR-531, TR-541 and TR-551, five (5) dryer feed screw conveyors, identified as CV-511 through CV-515, one (1) wet conveyor, identified as CV-501, one (1) inclined wet conveyor, identified as CV-502, one (1) dryer feed conveyor, identified as CV-516, one (1) recycle conveyor, identified as CV-517, one (1) product conveyor, identified as CV-518, one (1) cooler cross-over conveyor, identified as CV-519, one (1) pug mill, identified as M-511, and five (5) scrubber pumps, identified as P-523 through P-527, capacity: 38.98 tons of DDGS product per hour. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(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 2-7-5(1)]

D.4.1 LAER Requirements Regenerative Thermal Oxidizers (RTOs) (VOC) [326 IAC 2-1.1] [326 IAC 2-2] [326 IAC 2-3] [326 IAC 2-7] [326 IAC 8-1-6]

(a) Pursuant to 326 IAC 2-3, the Permittee shall operate the two (2) regenerative thermal oxidizers (RTOs) to control VOC emissions from the five (5) DDGS dryers (EU-10), the evaporation process (EU-09) and the recovery column vent condenser, identified as E-409 (part of EU-08).

(b) The Permittee shall ensure that the two (2) RTOs achieve an overall VOC control efficiency of greater than or equal to ninety-eight percent (98%).

(c) In accordance with 326 IAC 2-3, operation of the two (2) RTOs within the prescribed overall control efficiency and compliance with the limit in (b) shall constitute compliance with the lowest achievable emission reduction (LAER) requirements for the five (5) DDGS dryers (EU-10), the evaporation process (EU-09) and the recovery column vent condenser, identified as E-409 (part of EU-08).

D.4.2 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a), particulate matter (PM) emissions from the distillers dried grain and solubles (DDGS) dryer operation (EU-10), exhausted through Stack 5002 from the two (2) re-generative thermal oxidizers (RTOs) shall not exceed 0.03 grains per dry standard cubic foot of exhaust air.

D.4.3 Operations Controlled by the RTOs

(a) The Permittee shall operate no more than three (3) of the five (5) DDGS dryers, identified as EU-10, at a time, if one (1) of the two (2) RTOs is out-of-service.

(b) If the two (2) RTOs are simultaneously out-of-service, none of the five (5) DDGS dryers, identified as EU-10 shall be operated.

(c) If the two (2) RTOs are simultaneously out-of-service, the following emission units controlled by the RTOs shall not be operated:

(1) Recovery column, identified as part of EU-08, and

(2) Evaporation process, identified as EU-09.

D.4.4 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-1] [326 IAC 7-2-1] [326 IAC 2-2]

(a) Pursuant to 326 IAC 7-1.1 (SO_2 Emissions Limitations), the SO_2 emissions from the two (2) 8.0 million British thermal units per hour RTOs when burning No. 2 fuel oil shall not exceed five tenths (0.5) pound per million British thermal units heat input. Compliance shall be demonstrated on a monthly average.

(b) Compliance with this limit makes the modification to combust No. 2 fuel oil in the two (2) RTOs minor with respect to 326 IAC 2-2.

D.4.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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.4.6 Volatile Organic Compounds (VOC) [326 IAC 2-3]

Pursuant to 326 IAC 2-3, the Permittee shall operate the RTOs to achieve compliance with Condition D.4.1.

D.4.7 Particulate Control [326 IAC 2-7-6(6)]

In order to comply with Conditions D.1.1(a)(4)(B) and D.4.2, the scrubbers (SF-511 through SF-515) and at least one (1) of the two (2) RTOs for particulate control shall be in operation and control emissions from the DDGS dryer operation (EU10) at all times that one (1) or more of the DDGS dryers are in operation.

D.4.8 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

(a) Within one hundred eighty (180) days of the issuance of this Part 70 Operating Permit in order to demonstrate compliance with Condition D.4.1(b), the Permittee shall perform overall VOC control efficiency testing of one (1) of the two (2) RTOs on natural gas utilizing methods as approved by the Commissioner and every 2.5 years from the last valid compliance demonstration, such that each individual RTO shall be tested every five (5) years. Testing shall be conducted in accordance with Section C - Performance Testing.

(b) Within ninety (90) days after startup of either RTO on fuel oil in order to demonstrate compliance with Condition D.4.1(b), the Permittee shall perform overall VOC control efficiency testing of one (1) of the two (2) oil-fired RTOs utilizing methods as approved by the Commissioner and every 2.5 years from the last valid compliance demonstration, such that each individual RTO shall be tested every five (5) years. Testing shall be conducted in accordance with Section C - Performance Testing.

(c) Within one hundred eighty (180) days after issuance of this Part 70 Operating Permit, in order to demonstrate compliance with Condition D.4.2, the Permittee shall perform PM testing for the distillers dried grain and solubles (DDGS) dryer operation, identified as EU-10, controlled by the RTOs and scrubbers, exhausted through Stack 5002 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.

D.4.9 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizers for measuring operating temperatures. For the purposes of this condition continuous shall mean no less than once per minute. The outputs of these systems shall be recorded as a 3-hour average. From the date of issuance of this permit (T141-6956-00033) until the approved stack test results are available, the Permittee shall operate the thermal oxidizers at or above the 3-hour average temperature of 1,600°F.

(b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limit in Condition D.4.1(b), as approved by IDEM.

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

D.4.10 Thermal Oxidizer Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with the limit in Condition D.4.1(b), as approved by IDEM.

(b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizers are 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.

D.4.11 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

Compliance with Condition D.4.4 for the two (2) RTOs when burning fuel oil shall be determined utilizing one (1) of the following options:

(a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million British thermal units of heat input by:

(1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or;

(2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

(A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

(B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

(b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from both of the eight (8.0) million British thermal units per hour RTOs, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

(c) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(g)]

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

Compliance Monitoring Requirements [326 IAC 2-7-6 (1)] [326 IAC 2-7-5 (1)]

D.4.12 Scrubber Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) The Permittee shall record the pressure drop across the scrubber (V-424) used in conjunction with the recovery column (EU-08) at least once per day when this process is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of 0.5 and 2.0 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.

(b) The Permittee shall record the pressure drop across the scrubber (V-230) used in conjunction with the degasser (EU-08) at least once per day when this process is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range of 15 and 28 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.4.13 Scrubber Flow Rate [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

(a) The Permittee shall record the flow rate of the scrubbing liquor used in conjunction with the scrubber (V-424) at least once per day when the recovery column (EU-08) is in operation. When for any one reading, the liquor flow rate is below a minimum flow of 1 gallon per minute for the scrubber exhausted to Stack BL-601 or a minimum 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 reading that is less than 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.

(b) The Permittee shall record the flow rate of the scrubbing liquor used in conjunction with the CO_2 scrubber (V-230) at least once per day when the degasser (EU-08) is in operation. When for any one reading, the liquor flow rate is below a minimum flow of 80 gallons per minute for the scrubber exhausted to Stack BL-230 or a minimum 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 reading that is less than 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 instrument 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.

D.4.14 Scrubber Failure Detection

(a) For a scrubber controlling emissions from a process operated continuously, a failed unit 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 scrubber 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. 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).

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

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.4.15 Record Keeping Requirements

(a) To document compliance with Condition D.4.9, the Permittee shall maintain records of the continuous operating temperature required under Condition D.4.9.

(b) To document compliance with Condition D.4.10, the Permittee shall maintain a daily record of the duct pressure or fan amperage of the thermal oxidizer controlling the degasser and recovery column, evaporation process and the DDGS dryer operation. The Permittee shall include in its daily record when a duct pressure or fan amperage reading is not taken and the reason for the lack of a duct pressure or fan amperage reading (e.g., the degasser and recovery column, evaporation process and the DDGS dryer operation did not operate that day).

(c) To document compliance with Condition D.4.12(a), the Permittee shall maintain a daily record of the pressure drop across the scrubber (V-424) controlling the recovery column (EU-08). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the recovery column did not operate that day).

(d) To document compliance with Condition D.4.12(b), the Permittee shall maintain a daily record of the pressure drop across the scrubber (V-230) controlling the degasser (EU-08). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the degasser did not operate that day).

(e) To document compliance with Condition D.4.13(a), the Permittee shall maintain a daily record of the water flow rate in the scrubber (V-424) controlling the recovery column (EU-08). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a water flow rate reading (e.g., the recovery column did not operate that day).

(f) To document compliance with Condition D.4.13(b), the Permittee shall maintain a daily record of the water flow rate in the scrubber (V-230) controlling the degasser (EU-08). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a water flow rate reading (e.g., the degasser did not operate that day).

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

SECTION D.5 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: DDGS Handling and Alcohol Load Out Handling (Continued)

(k) One (1) DDGS handling operation, identified as EU-11, installed in October 1982, consisting of two (2) bucket elevators, identified as EL-0601 and EL-0602, two (2) dust suppression nozzles, identified as DN-0601 and DN-0602, and four (4) drag conveyors, identified as CV-0600 through CV-0603, capacity: 38.98 tons of DDGS product per hour.

(l) One (1) DDGS load-out operation, identified as EU-12, installed in October 1982, equipped with a baghouse, identified as D-0601, exhausted through Stack DC-0601, consisting of five (5) drag conveyors, identified as CV-0604 through CV-0608, one (1) bucket elevator, identified as EL-0603, one (1) surge bin, identified as S-0601, one (1) belt conveyor with tripper, identified as CV-0609, one (1) dust filter, identified as D-0601, one (1) dust fan, identified as DC-0601, one (1) airlock, identified as DA-0601, one (1) winch drive, identified as H-0601, three (3) dust suspension nozzles, identified as DN-0603 through DN-0605, and one (1) shuttle belt conveyor, identified as CV-0610, maximum capacity: 83.96 tons of DDGS product per hour.

(m) One (1) alcohol load-out operation, identified as EU-13, installed in October 1982, exhausted through Stack G-602, equipped with a load-out natural gas-fired flare, identified as G-602, rated at 0.100 million British thermal units per hour, two (2) bottom transfer loading arms, identified as G-604 and G-607, two (2) bottom transfer vapor recovery arms, identified as G-605 and G-608, two (2) truck/rail vapor recovery loading arms, identified as G-603 and G-606, two (2) product filters, identified as F-660 and F-661, and two (2) fuel grade alcohol load-out pumps, identified as P-610 and P-611, capacity: 72,000 gallons of ethanol per hour. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(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 2-7-5(1)]

D.5.1 BACT Requirements (VOC) [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6, BACT has been determined to be the following for the alcohol load-out operation, identified as EU-13:

(a) The VOC emissions from the alcohol load-out operation, identified as EU-13, shall be collected and controlled by the load-out natural gas-fired flare, identified as G-602.

(b) The overall efficiency of the flare, identified as G-602 (including the capture efficiency and destruction efficiency) shall be at least 98%.

(c) The VOC emissions from the load-out natural gas-fired flare, identified as G-602, shall not exceed 6.32 pounds per hour.

D.5.2 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

(a) Pursuant to 326 IAC 6.5-1-2(a), particulate matter (PM) emissions from the DDGS handling operation (EU-11) shall be limited to 0.03 grains per dry standard cubic foot of exhaust air.

(b) Pursuant to 326 IAC 6.5-1-2(a), particulate matter (PM) emissions from the DDGS load-out operation (EU-12) Stack DC-0601 exhaust shall be limited to 0.03 grains per dry standard cubic foot of exhaust air.

D.5.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the DDGS load-out operation (EU-12) and its control device.

Compliance Determination Requirements

D.5.4 Particulate Control [326 IAC 2-7-6(6)]

(a) Pursuant to St. Joseph County Health Department construction permit/PSD approval, issued on February 12, 1982, and in order to comply with Condition D.1.1(a)(4)(B), the baghouse (D-0601) for particulate control shall be in operation and control emissions from the DDGS load-out operation (EU-12) at all times that this DDGS load-out is in operation.

(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.5.5 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

Within one hundred eighty (180) days after issuance of this Part 70 Operating Permit, in order to demonstrate compliance with Condition D.5.2(b), the Permittee shall perform PM testing for the baghouse (D-0601) 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.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.5.6 Visible Emissions Notations

(a) Visible emission notations of the DDGS load-out operation (EU-12) Stack DC-0601 exhaust shall be performed once per day during normal daylight operations. 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.5.7 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

The Permittee shall record the pressure drop across the baghouse (D-0601) used in conjunction with the DDGS load-out operation (EU-12), at least once per day when this process is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 8.0 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.5.8 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 emission unit. 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, or dust traces.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.5.9 Record Keeping Requirements

(a) To document compliance with Condition D.5.6, the Permittee shall maintain a daily record of visible emission notations of the DDGS load-out operation stack exhaust DC-0601. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the DDGS load-out operation did not operate that day).

(b) To document compliance with Condition D.5.7, the Permittee shall maintain a daily record of the pressure drop across the baghouse (D-0601) controlling the DDGS load-out operation. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the DDGS load-out operation did not operate that day).

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

SECTION D.6 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Riley-Stoker and Package Boilers

(n) One (1) Riley-Stoker coal-fired boiler, equipped with an 8 module baghouse (D-4000), rated at 414 million British thermal units per hour, installed in 1982, identified as EU-14, modified with low NO_X burners in October 2003, exhausted through Stack 001. Under NSPS, 40 CFR Part 60.40, Subpart D, the boiler is considered an affected facility.

(o) A spray dryer absorber SO_2 removal system for control of SO_2 emissions from the Riley-Stoker coal-fired boiler including the following:

(1) One (1) lime storage silo (Q-4106), with one (1) baghouse (D-4107) for particulate matter control exhausting through stack ST-4102;

(2) One (1) ash silo (Q-4105), with one (1) baghouse (D-4105) for control of particulate matter emissions from the conveying of ash to the silo and one (1) baghouse (D-4106) for control of particulate matter emissions from ash transfer and unloading.

(p) Two (2) natural gas-fired package boilers with No. 2 fuel oil backup, identified as EU-15, rated at 220 million British thermal units per hour each, installed in October 1982, exhausted through Stack 001.

(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 2-7-5(1)]

D.6.1 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO_2 Emissions Limitations), the SO_2 emissions from the Riley-Stoker coal-fired boiler (EU-14) shall not exceed six (6.0) pounds per million British thermal units heat input while combusting coal. Compliance shall be demonstrated on a monthly average.

D.6.2 Sulfur Dioxide (SO_2) [326 IAC 7-1.1-1] [326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO_2 Emissions Limitations), the SO_2 emissions from the two (2) 220 million British thermal units per hour package boilers (EU-15) when burning No. 2 fuel oil shall not exceed five tenths (0.5) pound per million British thermal units heat input. Compliance shall be demonstrated on a monthly average.

D.6.3 Particulate Matter (PM) [326 IAC 6.5-1-2]

(a) Pursuant to 326 IAC 6.5-1-2(b)(1), the PM emissions from the Riley-Stoker coal-fired boiler exhausted through Stack 001, shall not exceed 0.10 pounds per million British thermal units.

(b) Pursuant to 326 IAC 6.5-1-2(b)(2), the PM emissions from the one or both package boilers exhausted through Stack 001, shall not exceed 0.15 pounds per million British thermal units, when combusting fuel oil.

(c) Pursuant to 326 IAC 6.5-1-2(b)(3), the PM emissions from one or both package boilers shall not exceed 0.01 grains per dry standard cubic foot of exhaust air, when combusting natural gas.

(d) Pursuant to 326 IAC 6.5-1-2(a), the PM emissions from the lime storage silo exhausting through baghouse D-4107 shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (three-hundredths (0.03) grain per dry standard cubic foot) of exhaust air.

(e) Pursuant to 326 IAC 6.5-1-2(a), the PM emissions from the conveyance of the ash to the ash silo exhausting through baghouse D-4105 shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (three-hundredths (0.03) grain per dry standard cubic foot) of exhaust air.

(f) Pursuant to 326 IAC 6.5-1-2(a), the PM emissions from the ash transfer and unloading to the ash silo exhausting through baghouse D-4106 shall not exceed seven-hundredths (0.07) gram per dry standard cubic meter (three-hundredths (0.03) grain per dry standard cubic foot) of exhaust air.

D.6.4 Particulate Matter (PM) and Particulate Matter Less than 10 Microns (PM10) [326 IAC 2-2]

(a) The PM emission rate from the ash conveying baghouse (D-4105), the ash transfer and unloading baghouse (D-4106), and the lime silo baghouse (D-4107) shall not exceed 5.7 pounds per hour.

(b) The PM10 emission rate from the ash conveying baghouse (D-4105), the ash transfer and unloading baghouse (D-4106), and the lime silo baghouse (D-4107), shall not exceed 3.4 pounds per hour.

Compliance with the above emission limits will ensure that the potential to emit from the addition of the spray dryer absorber SO_2 removal system is less than twenty-five (25) tons of PM per year and less than fifteen (15) tons of PM10 per year and therefore will render the requirements of 326 IAC 2-2 not applicable.

D.6.5 PM and PM10 [326 IAC 2-7-10.5(d)(4)(C)]

The lime storage silo, the ash conveying and the ash transfer and unloading controlled by baghouses D-4107, D-4105, and D-4106, respectively, shall meet the requirements of 326 IAC 2-7-10.5(d)(4)(C), including the following:

(a) A ninety-nine percent (99%) control efficiency must be achieved and maintained for each of the baghouses D-4105, D-4106, and D-4107;

(b) There shall be no visible emissions from the lime storage silo and the ash conveying and ash transfer and unloading;

(c) The Permittee shall certify to the OAQ that the control device supplier guarantees that a specific outlet concentration, in conjunction with design air flow, will result in actual emissions from the lime storage silo and the ash conveying and ash transfer and unloading of less than 25 tons per year of PM or PM-10.

D.6.6 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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.6.7 Particulate Control [326 IAC 2-7-6(6)]

(a) Pursuant to St. Joseph County Health Department construction permit/PSD approval, issued on February 12, 1982, and in order to comply with Conditions D.1.1(a)(4)(B) and D.6.3(a), the baghouse for particulate control shall be in operation and control emissions from the Riley-Stoker coal-fired boiler (EU-14) at all times that the coal-fired boiler is in operation.

(b) In order to comply with Conditions D.6.3, D.6.4, and D.6.5, the baghouse (D-4107) for particulate control shall be in operation and control emissions from the lime storage silo at all times the lime storage silo is in operation and the baghouses (D-4105 and D-4106) for particulate control shall be in operation and control emissions from the ash conveying and ash transfer and unloading at all times that the ash conveying and ash transfer and unloading are in operation.

(c) 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.6.8 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

Within one hundred eighty (180) days after issuance of this Part 70 Operating Permit, in order to demonstrate compliance with Condition D.6.3(a), the Permittee shall perform PM testing for the Riley-Stoker coal-fired boiler (EU-14) utilizing methods as approved by the Commissioner. This test shall be repeated at least once every two and a half (2.5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

D.6.9 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 2-7-5(3)(A)] [326 IAC 2-7-6]

The following conditions apply to the Riley-Stoker coal-fired boiler (EU-14):

Compliance with Condition D.6.1 shall be determined utilizing one (1) of the following options:

(a) Providing vendor analysis of coal delivered, if accompanied by a certification from the fuel supplier, as described under 40 CFR 60.48c(f)(3). The certification shall include:

(1) The name of the coal supplier; and

(2) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the coal was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected); and

(3) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and

(4) The methods used to determine the properties of the coal; or

(b) Sampling and analyzing the coal by using one of the following procedures:

(1) Minimum Coal Sampling Requirements and Analysis Methods:

(A) The coal sample acquisition point shall be at a location where representative samples of the total coal flow to be combusted by the facility or facilities may be obtained. A single as-bunkered or as-burned sampling station may be used to represent the coal to be combusted by multiple facilities using the same stockpile feed system;

(B) Coal shall be sampled at least one (1) time per day;

(C) Minimum sample size shall be five hundred (500) grams;

(D) Samples shall be composited and analyzed at the end of each calendar quarter;

(E) Preparation of the coal sample, heat content analysis, and sulfur content analysis shall be determined pursuant to 326 IAC 3-7-2(c), (d), (e); or

(2) Sample and analyze the coal pursuant to 326 IAC 3-7-3; or

(c) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from the boiler, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6, which is conducted with such frequency as to generate the amount of information required by (a) or (b) above. [326 IAC 7-2-1(b)]

(d) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(g)]

A determination of noncompliance pursuant to any of the methods specified in (a), (b), (c) or (d) above shall not be refuted by evidence of compliance pursuant to the other method.

D.6.10 Sulfur Dioxide Emissions and Sulfur Content [326 IAC 3] [326 IAC 7-2] [326 IAC 7-1.1-2]

Compliance with Condition D.6.2 for the two (2) package boilers when burning fuel oil shall be determined utilizing one (1) of the following options:

(a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million British thermal units of heat input by:

(1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or;

(2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.

(A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and

(B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.

(b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from both of the two hundred twenty (220) million British thermal units per hour boilers, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

(c) Upon written notification to IDEM by a facility owner or operator, continuous emission monitoring data collected and reported pursuant to 326 IAC 3-5 may be used as the means for determining compliance with the emission limitations in 326 IAC 7. Upon such notification, the other requirements of 326 IAC 7-2 shall not apply. [326 IAC 7-2-1(g)]

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

D.6.11 Continuous Emissions Monitoring Requirements [326 IAC 3-5] [326 IAC 12] [326 IAC 2-2]

(a) Pursuant to 326 IAC 3-5 (Continuous Monitoring of Emissions), a continuous monitoring system for the Riley-Stoker coal-fired boiler (EU-14) shall be calibrated, maintained, and operated for measuring SO_2, NO_X, and either CO_2 or O_2, which meets the performance specifications of 326 IAC 3-5-2.

(b) All continuous emission monitoring systems are subject to monitor system certification requirements pursuant to 326 IAC 3-5-3 and 326 IAC 2-2.

(c) The Permittee shall submit to IDEM, OAQ, with one hundred eighty (180) days of issuance of T 141-6956-00033, a complete written continuous monitoring standard operating procedure (CMSOP), in accordance with the requirements of 326 IAC 3-5-4.

(d) The Permittee shall record the output of the continuous monitoring system(s) and shall perform the required record keeping and reporting, pursuant to 326 IAC 3-5-6 and 326 IAC 3-5-7.

(e) Nothing in this permit shall excuse the Permittee from complying with the requirements to operate a continuous emission monitoring system pursuant to 326 IAC 3-5, 326 IAC 10-4, 40 CFR 60, or 40 CFR 75.

D.6.12 Continuous Opacity Monitoring (COM) [326 IAC 3-5] [326 IAC 2-2]

(a) Pursuant to 326 IAC 2-2 and 326 IAC 3-5, the Permittee shall calibrate, certify, operate, and maintain a continuous monitoring system and related equipment to measure opacity from the Riley-Stoker coal-fired boiler (EU-14) Stack 001 in accordance with 326 IAC 3-5-2 and 326 IAC 3-5-3.

(b) The Permittee shall submit to IDEM, OAQ, with one hundred eighty (180) days of issuance of T 141-6956-00033, a complete written continuous monitoring standard operating procedure (CMSOP), in accordance with the requirements of 326 IAC 3-5-4.

(c) The Permittee shall record the output of the continuous monitoring system(s) and shall perform the required record keeping and reporting, pursuant to 326 IAC 3-5-6 and 326 IAC 3-5-7.

D.6.13 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

Within 60 days after achieving maximum production rate, but no later than 180 days after initial start-up, in order to demonstrate compliance with Conditions D.6.3, D.6.4, and D.6.5(c), the Permittee shall perform PM and PM10 testing on the outlet exhaust for the baghouses (D-4105, D-4106, and D-4107) controlling PM and PM10 emissions from the ash conveying, ash transfer and unloading, and the lime storage silo, respectively, 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.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.6.14 Baghouse Parametric Monitoring

Whenever a COMS is malfunctioning or is down for maintenance or repairs for a period of twenty-four (24) hours or more and a backup COMS is not online within twenty-four (24) hours of shutdown or malfunction of the primary COMS for the Riley-Stoker coal-fired boiler (EU-14) and the two (2) package boilers (EU-15) when either or both of the package boilers are combusting fuel oil, the Permittee shall record the following:

(a) The pressure drop across the baghouse used in conjunction with the Riley-Stoker coal-fired boiler (EU-14), at least twice per day, with at least four (4) hours between each set of readings, until a COM is online when the boiler is in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 8.0 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.

(b) Visible emission notations of the Riley-Stoker coal-fired boiler Stack 001 exhaust shall be performed at least twice per day during normal daylight operations with at least four (4) hours between each set of readings, until a COM is online when the boiler is in operation. A trained employee shall record whether emissions are normal or abnormal.

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.

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.

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.

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.6.15 Visible Emissions Notations

(a) Visible emission notations of the baghouses D-4105, D-4106, and D-4107 stack exhausts shall be performed once per day during normal daylight operations. 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.6.16 Parametric Monitoring

The Permittee shall record the pressure drop across each of the baghouses (D-4105, D-4106, and D-4107) used in conjunction with the lime storage silo, ash conveying and ash transfer and unloading, at least once per day when these processes are in operation. When for any one reading, the pressure drop across any of the baghouses is outside the normal range of 1.0 and 6.0 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.6.17 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 emission unit. 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, or dust traces.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.6.18 Record Keeping Requirements

(a) To document compliance with Section C - Opacity and Conditions D.1.1(a)(4)(B), D.6.3, D.6.8 and D.6.12, the Permittee shall maintain records in accordance with (1) and (2) below. Records shall be complete and sufficient to establish compliance with the limits established in Section C - Opacity, and Conditions D.1.1(a)(4)(B) and D.6.3.

(1) Data and results from the most recent stack test.

(2) All continuous opacity monitoring data, pursuant to 326 IAC 3-5-6 and 40 CFR 60.42.

(b) To document compliance with Condition D.6.14(a), the Permittee shall maintain records of the pressure drop of the baghouse controlling the Riley-Stoker coal-fired boiler (EU-14). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the Riley Stoker coal-fired boiler did not operate that day).

(c) To document compliance with Condition D.6.14(b), the Permittee shall maintain a daily record of the results of all visible emission notations of the two (2) package boilers when burning No. 2 fuel oil and/or the Riley-Stoker coal-fired boiler Stack 001 exhaust. The Permittee shall include in its daily record when a visible notation reading is not taken and the reason for the lack of a visible notation reading (e.g., the two (2) package boilers and the Riley Stoker coal-fired boiler did not operate that day).

(d) To document compliance with SO_2 Conditions D.1.1(a)(1)(A and C), D.6.1, D.6.2 and D.6.10, the Permittee shall maintain records in accordance with (1) and (2) below. Records shall be complete and sufficient to establish compliance with the SO_2 limits as required in Conditions D.1.1(a)(1)(A and C), D.6.1, D.6.2 and D.6.10. The Permittee shall maintain records in accordance with (2) below during SO_2 CEM system downtime.

(1) All SO_2 continuous emissions monitoring data, pursuant to 326 IAC 3-5-6 and 40 CFR 60.45.

(2) Actual fuel usage during each SO_2 CEM downtime.

(e) To document compliance with NO_X Condition D.1.1(a)(2)(A and C), the Permittee shall maintain records of all NO_X and CO_2 or O_2 continuous emissions monitoring data, pursuant to 326 IAC 3-5-6, 326 IAC 2-3 and 40 CFR 60.45. Records shall be complete and sufficient to establish compliance with the NO_X limits as required in Condition D.1.1(a)(2)(A and C). The Permittee shall maintain records of actual fuel usage during each NO_X CEM downtime.

(f) Pursuant to 326 IAC 3-7-5(a), the Permittee shall develop a standard operating procedure (SOP) to be followed for sampling, handling, analysis, quality control, quality assurance, and data reporting of the information collected pursuant to 326 IAC 3-7-2 through 326 IAC 3-7-4. In addition, any revision to the SOP shall be submitted to IDEM, OAQ.

(g) To document compliance with Condition D.6.10, the Permittee shall maintain records in accordance with (1) through (6) below.

(1) Calendar dates covered in the compliance determination period;

(2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;

(3) To certify compliance when burning natural gas only, the Permittee shall maintain records of fuel used.

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

(4) Fuel supplier certifications;

(5) The name of the fuel supplier; and

(6) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

(h) To document compliance with Condition D.6.15, the Permittee shall maintain records of visible emission notations of the stack exhausts for the baghouses D-4105, D-4106, and D-4107 once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(i) To document compliance with Condition D.6.16, the Permittee shall maintain records once per day of the pressure drop. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

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

D.6.19 Reporting Requirements

(a) A quarterly summary of the information to document compliance with Condition D.6.14(b) shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) Pursuant to 326 IAC 3-5-7(5), reporting of continuous monitoring system instrument downtime, except for zero (0) and span checks, which shall be reported separately, shall include the following:

(1) Date of downtime.

(2) Time of commencement.

(3) Duration of each downtime.

(4) Reasons for each downtime.

(5) Nature of system repairs and adjustments.

The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The natural gas boiler certification 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 its equivalent, within thirty (30) days after the end of the six (6) month period being reported. The natural gas-fired boiler certification does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: DDGS Cooler System

(q) One (1) distillers dried grains and solubles (DDGS) cooler system, identified as EU-18, equipped with a baghouse, identified as DC-503, installed in March 2000, exhausting through Stack DC-0503, consisting of one (1) fan, identified as BL-502, one (1) cooling coil, identified as CC-500, one (1) cooler inlet rotary valve, identified as RV-502, one (1) cooler, identified as RC-502, and four (4) conveyors, identified as CV-522, CV-530, CV-531 and CV-532, DDGS capacity: 42.3 tons of DDGS per hour based on monthly DDGS production. Baghouse DC-503 exhausts through a regenerative thermal oxidizer system, approved in 2012 for construction, consisting of knockout pot KO-503, fan BL-503, oxidizer RTO-503, and outlet stack ST-503.

(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 2-7-5(1)]

D.7.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a), particulate matter (PM) emissions from the distillers dried grains and solubles (DDGS) cooler system (EU-18) Stack DC-0503 exhaust shall be limited to 0.03 grains per dry standard cubic foot of exhaust air.

D.7.2 PM PSD Minor Limit [326 IAC 2-2]

The PM emissions from the one (1) distillers dried grains and solubles (DDGS) cooler system (EU-18) shall be less than 5.70 pounds per hour. Compliance with this emission limit renders the requirements of 326 IAC 2-2 not applicable to the distillers dried grains and solubles (DDGS) cooler system.

D.7.3 PM_{10} PSD Minor Limit [326 IAC 2-2]

The PM_{10} emissions from the distillers dried grains and solubles (DDGS) cooler system (EU-18) shall be less than 3.42 pounds per hour. Compliance with this emission limit renders the requirements of 326 IAC 2-2 not applicable to the distillers dried grains and solubles (DDGS) cooler system.

D.7.4 BACT Requirements (VOC) [326 IAC 8-1-6] [326 IAC 2-2-3]

Pursuant to 326 IAC 8-1-6, 326 IAC 2-2-3, and PSD/SSM 141-30226-00033, BACT has been determined to be the following for the distillers dried grains and solubles (DDGS) cooler system, identified as EU-18:

For the DDGS cooler system, the BACT for VOC is the use of a thermal oxidizer; and:

(a) Whenever the thermal oxidizer RTO-503 is in service:

(1) The thermal oxidizer RTO-503 shall have an overall VOC control efficiency of not less than 98%, and the maximum VOC emission rate shall be less than 0.55 lb/hr; or

(2) The thermal oxidizer RTO-503 shall have an outlet VOC concentration of not more than 10 ppmvw.

(b) Whenever the thermal oxidizer RTO-503 is out of service due to maintenance or malfunction:

(1) The two (2) thermal oxidizers controlling VOC emissions from the DDGS dryers (EU-10), the evaporation process (EU-09), and the recovery column vent condenser, identified as E-409 (part of EU-08), shall control the DDGS cooler system (EU-18) and shall have an overall VOC control efficiency of not less than 95%; and

(2) The use of this Alternative Operating Scenario shall not exceed 750 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.

D.7.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.7.6 Particulate Control [326 IAC 2-7-6(6)]

(a) In order to comply with Conditions D.7.1, D.7.2, and D.7.3, the baghouse for particulate control shall be in operation and control emissions from the distillers dried grains and solubles (DDGS) cooler system (EU-18) at all times that the distillers dried grains and solubles (DDGS) cooler system is in operation.

(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.7.7 Volatile Organic Compounds (VOC) Control

(a) In order to comply with Condition D.7.4, thermal oxidizer RTO-503 shall be in operation and control VOC emissions from the DDGS cooler system (EU-18) at all times when the emission unit is in operation.

(b) In order to comply with Condition D.7.4 whenever thermal oxidizer RTO-503 is out of service due to maintenance or malfunction, VOC emissions from the DDGS cooler system (EU-18) shall be routed to the two (2) thermal oxidizers controlling VOC emissions from the DDGS dryers (EU-10), the evaporation process (EU-09), and the recovery column vent condenser, identified as E-409 (part of EU-08), and the two thermal oxidizers associated with the DDGS dryer operation (EU-10) shall be in operation and control VOC emissions from the DDGS cooler system (EU-18) at all times when the DDGS cooler system (EU-18) is in operation. One of the five (5) DDGS dryers, identified as D-511 through D-515, shall be taken out of service in order to provide the additional capacity necessary for the DDGS dryer operation (EU-10) to accept the exhaust.

D.7.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

(a) Within one hundred eighty (180) days after issuance of this Part 70 Operating Permit, in order to demonstrate compliance with Conditions D.7.1, D.7.2 and D.7.3, the Permittee shall perform PM and PM_{10} testing for the baghouse (DC-503) 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. PM_{10} includes filterable and condensible PM_{10}. Testing shall be conducted in accordance with Section C - Performance Testing.

(b) Within sixty (60) days after achieving maximum production levels but no later than one hundred eighty (180) days after start-up of the control device, in order to demonstrate compliance with Condition D.7.4(a), the Permittee shall perform VOC testing of the DDGS cooler system utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

(c) Not later than ninety (90) days after initial use of the Alternative Operating Scenario as stated in Condition D.7.7(b), in order to demonstrate compliance with Condition D.7.4(b), the Permittee shall perform VOC testing of the DDGS cooler system utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.7.9 Baghouse Parametric Monitoring [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

The Permittee shall record the pressure drop across the baghouse (DC-503) used in conjunction with the distillers dried grains and solubles (DDGS) cooler system (EU-18), at least once per day when these processes are in operation. When for any one reading, the pressure drop across the baghouse is outside the normal range of 3.0 and 9.0 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.7.10 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 emission unit. 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, or dust traces.

D.7.11 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer (RTO-503) for measuring operating temperature. For the purpose of this condition, continuous means no less often than once per fifteen (15) minutes. The output of this system shall be recorded as a 3-hour average. From the date of issuance of this permit until the stack test results are available, the Permittee shall operate the thermal oxidizer (RTO-503) at or above the 3-hour average temperature of 1550°F. The Permittee shall take appropriate response steps whenever the three (3) hour average temperature of the thermal oxidizer (RTO-503) is below 1550°F. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A three (3) hour average temperature that is below 1550°F is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with the limits in Condition D.7.4.

(c) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizer (RTO-503) at or above the 3-hour average temperature as observed during the compliant stack test.

D.7.12 Thermal Oxidizer Parametric Monitoring

(a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates the compliance status with the limits in Condition D.7.4.

(b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer (RTO-503) 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 at or above the duct pressure or fan amperage as established in the most recent compliant stack test.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.13 Record Keeping Requirements

(a) To document compliance with Condition D.7.4(b)(2), the Permittee shall maintain records of the total hours the Alternative Operating Scenario, as stated in Condition D.7.7(b), is utilized.

(b) To document compliance with Condition D.7.9, the Permittee shall maintain a daily record of the pressure drop across the baghouse (DC-503) controlling the distillers dried grains and solubles (DDGS) cooler system (EU-18). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the distillers dried grains and solubles (DDGS) cooler system did not operate that day).

(c) To document compliance with Condition D.7.11, the Permittee shall maintain continuous temperature records of thermal oxidizer RTO-503 and the 3-hour average temperature used to demonstrate compliance from the most recent valid stack test.

(d) To document compliance with Condition D.7.12, the Permittee shall maintain a daily record of the duct pressure or fan amperage for thermal oxidizer RTO-503. The Permittee shall include in its daily record when a duct pressure or fan amperage reading is not taken and the reason for the lack of a reading (e.g., the distillers dried grains and solubles (DDGS) cooler system did not operate that day).

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

D.7.14 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.7.4(b)(2) 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 the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.8 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: DDGS Grinding Operation

(t) One (1) distillers dried grains and solubles (DDGS) grinding operation identified as EU-19, approved for construction in 2008, consisting of two (2) hammermills, identified as M-0611 and M-0612, with each having a maximum capacity of 50 tons per hour, using baghouses D-0611 and D-0612 as control, and exhausting to stacks ST-0611 and ST-0612, respectively.

(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 2-7-5(1)]

D.8.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a), the PM emissions from each of the two DDGS hammermills identified as M-0611 and M-0612 shall not exceed 0.03 grain per dry standard cubic foot of exhaust air.

D.8.2 PSD Minor Limit for PM/PM10 [326 IAC 2-2]

(a) The PM emission rate from each of the two DDGS hammermills identified as M-0611 and M-0612 shall not exceed 2.84 pounds per hour.

(b) The PM10 emission rate from each of the two DDGS hammermills identified as M-0611 and M-0612 shall not exceed 1.7 pounds per hour.

Compliance with the above emission limits will ensure that the potential to emit from the addition of the two DDGS hammermills identified as M-0611 and M-0612 is less than twenty-five (25) tons of PM per year and less than fifteen (15) tons of PM10 per year and therefore will render the requirements of 326 IAC 2-2 (PSD) not applicable.

D.8.3 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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.8.4 Particulate Control

In order to comply with Conditions D.6.1 and D.6.2, the baghouses (D-0611 and D-0612) for particulate control shall be in operation and control emissions from each of the hammermills identified as M-0611 and M-0612 at all times that the hammermills are in operation.

D.8.5 Testing Requirements [326 IAC 2-7-6(1), (6)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.8.1 and D.8.2, the Permittee shall perform PM and PM10 testing for one of the Baghouses D-0611 and D-0612, controlling two (2) hammermills identified as M-0611 and M-0612, within 60 days after achieving maximum production capacity, but no 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 the prior valid compliance demonstration. The source will test the baghouse for which the longest period of time has passed since the last valid compliance test. Testing shall be conducted in accordance with Section C - Performance Testing. PM10 includes filterable and condensable PM10.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

D.8.6 Visible Emissions Notations

(a) Visible emission notations of the stacks exhausts from baghouses D-0611 and D-0612 controlling hammermills M-0611 and M-0612 shall be performed once per day during normal daylight operations. 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.8.7 Baghouses Parametric Monitoring

The Permittee shall record the pressure drop across baghouses D-0611 and D-0612, at least once per day when the respective emission units are in operation. When, for any one reading, the pressure drop across each baghouse is outside of the normal range of 1.0 and 6.0 inches of water or a range established during the last 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 instruments used for determining the pressure shall comply with Section C - Instrument Specification of this permit, and shall be calibrated at least once every six (6) months.

D.8.8 Broken or Failed Bag Detection

In the event that bag failure has been observed:

(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); or

(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, or leaks, or dust traces.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.8.9 Record Keeping Requirements

(a) To document compliance with Condition D.8.6, the Permittee shall maintain a daily record of visible emission notations of the stack exhausts from baghouses D-0611 and D-0612 controlling hammermills M-0611 and M-0612. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).

(b) To document compliance with Condition D.8.7, the Permittee shall maintain a daily record of the pressure drop across each of the baghouses D-0611 and D-0612 controlling hammermills M-0611 and M-0612.

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

SECTION D.9 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Storage Tanks

(r) Five (5) storage tanks, consisting of:

(1) One (1) floating roof gasoline storage tank, identified as T-601, installed in 1983, capacity: 75,000 gallons. Under NSPS, 40 CFR Part 60.110a, Subpart Ka, this tank is considered an existing volatile organic liquid storage tank.

(2) One (1) floating roof fuel ethanol storage tank, identified as T-610, installed in 1983, capacity: 750,000 gallons.

(3) One (1) ethanol internal floating roof storage tank, identified as T-611, installed in 2001, capacity: 1,250,000 gallons. Under NSPS, 40 CFR Part 60.110b, Subpart Kb, this tank is considered an existing volatile organic liquid storage tank.

(4) One (1) floating roof in-process ethanol storage tank, identified as T-612, installed in 1983, capacity: 75,000 gallons.

(5) One (1) fuel oil storage tank, identified as T-4120, installed in 1983, capacity: 250,000 gallons.

(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 2-7-5(1)]

D.9.1 Petroleum Liquid Storage Facility [326 IAC 8-4-3]

Storage tank (T-601) shall be maintained such that there are no visible holes, tears, or other openings in the seal or any seal fabric or materials. All openings, except stub drains, shall be equipped with covers, lids, or seals such that:

(a) the cover, lid, or seal is in the closed position at all times except when in actual use;

(b) automatic bleeder vents are closed at all times except when the roof is floated off or landed on the roof leg supports; and

(c) rim vents, if provided, are set to open when the roof is being floated off the roof leg supports or at the manufacturer's recommended setting.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.9.2 Record Keeping Requirements [326 IAC 8-4-3]

(a) Pursuant to 326 IAC 8-4-3, the Permittee will maintain records of the types of volatile petroleum liquid stored, the maximum true vapor pressure of the liquid as stored, and the results of the inspections performed on the storage vessels. Such records shall be maintained for a period of two (2) years and shall be made available to the commissioner upon written request.

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

SECTION D.10 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Insignificant Activities

(dd) Bag Dump-Process 326 IAC 6.5-1-2(a).

(gg) DDGS finishing 326 IAC 6.5-1-2(a).

(jj) Ash handling 326 IAC 6.5-1-2(a).

(kk) Ash loadout 326 IAC 6.5-1-2(a).

(ll) Coal receiving/handling and storage 326 IAC 6.5-1-2(a).

(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 2-7-5(1)]

D.10.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a), particulate matter (PM) emissions from the above insignificant activities (dd) through (ll) shall be limited to 0.03 grains per dry standard cubic foot of exhaust air.

SECTION E.1 Nitrogen Oxides Budget Trading Program - NO_X Budget Permit for NO_X Budget Units Under 326 IAC 10-4-1(a)

ORIS Code: 880087

NO_X Budget Source [326 IAC 2-7-5(15)]

(n) One (1) Riley-Stoker coal-fired boiler, equipped with an 8 module baghouse (D-4000), rated at 414 million British thermal units per hour, installed in 1982, identified as EU-14, modified with low NO_X burners in October 2003, exhausted through Stack 001. Under NSPS, 40 CFR Part 60.40, Subpart D, the boiler is considered an affected facility.

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

E.1.1 Automatic Incorporation of Definitions [326 IAC 10-4-7(e)]

This NO_X budget permit is deemed to incorporate automatically the definitions of terms under 326 IAC 10-4-2.

E.1.2 Standard Permit Requirements [326 IAC 10-4-4(a)]

The owners and operators of the NO_X budget source and the NO_X budget unit, EU-14 (also identified as unit 003), shall operate the unit in compliance with this NO_X budget permit.

E.1.3 Monitoring Requirements [326 IAC 10-4-4(b)]

(a) The owners and operators and, to the extent applicable, the NO_X authorized account representative of the NO_X budget source and each NO_X budget unit at the source shall comply with the monitoring requirements of 40 CFR 75 and 326 IAC 10-4-12.

(b) The emissions measurements recorded and reported in accordance with 40 CFR 75 and 326 IAC 10-4-12 shall be used to determine compliance by each unit with the NO_X budget emissions limitation under 326 IAC 10-4-4(c) and Condition E.1.4, Nitrogen Oxides Requirements.

E.1.4 Nitrogen Oxides Requirements [326 IAC 10-4-4(c)]

(a) The owners and operators of the NO_X budget source and each NO_X budget unit at the source shall hold NO_X allowances available for compliance deductions under 326 IAC 10-4-10(j), as of the NO_X allowance transfer deadline, in each unit's compliance account and the source's overdraft account in an amount:

(1) Not less than the total NO_X emissions for the ozone control period from the unit, as determined in accordance with 40 CFR 75 and 326 IAC 10-4-12;

(2) To account for excess emissions for a prior ozone control period under 326 IAC 10-4-10(k)(5); or

(3) To account for withdrawal from the NO_X budget trading program, or a change in regulatory status of a NO_X budget opt-in unit.

(b) Each ton of NO_X emitted in excess of the NO_X budget emissions limitation shall constitute a separate violation of the Clean Air Act (CAA) and 326 IAC 10-4.

(c) The NO_X budget unit shall be subject to the requirements under (a) above and 326 IAC 10-4-4(c)(1) starting on May 31, 2004.

(d) NO_X allowances shall be held in, deducted from, or transferred among NO_X allowance tracking system accounts in accordance with 326 IAC 10-4-9 through 11, 326 IAC 10-4-13, and 326 IAC 10-4-14.

(e) A NO_X allowance shall not be deducted, in order to comply with the requirements under (a) above and 326 IAC 10-4-4(c)(1), for an ozone control period in a year prior to the year for which the NO_X allowance was allocated.

(f) A NO_X allowance allocated under the NO_X budget trading program is a limited authorization to emit one (1) ton of NO_X in accordance with the NO_X budget trading program. No provision of the NO_X budget trading program, the NO_X budget permit application, the NO_X budget permit, or an exemption under 326 IAC 10-4-3 and no provision of law shall be construed to limit the authority of the U.S. EPA or IDEM, OAQ to terminate or limit the authorization.

(g) A NO_X allowance allocated under the NO_X budget trading program does not constitute a property right.

(h) Upon recordation by the U.S. EPA under 326 IAC 10-4-10, 326 IAC 10-4-11, or 326 IAC 10-4-13, every allocation, transfer, or deduction of a NO_X allowance to or from each NO_X budget unit's compliance account or the overdraft account of the source where the unit is located is deemed to amend automatically, and become a part of, this NO_X budget permit of the NO_X budget unit by operation of law without any further review.

E.1.5 Excess Emissions Requirements [326 IAC 10-4-4(d)]

The owners and operators of each NO_X budget unit that has excess emissions in any ozone control period shall do the following:

(a) Surrender the NO_X allowances required for deduction under 326 IAC 10-4-10(k)(5).

(b) Pay any fine, penalty, or assessment or comply with any other remedy imposed under 326 IAC 10-4-10(k)(7).

E.1.6 Record Keeping Requirements [326 IAC 10-4-4(e)] [326 IAC 2-7-5(3)]

Unless otherwise provided, the owners and operators of the NO_X budget source and each NO_X budget unit at the source shall keep, either on site at the source or at a central location within Indiana for those owners or operators with unattended sources, each of the following documents for a period of five (5) years:

(a) The account certificate of representation for the NO_X authorized account representative for the source and each NO_X budget unit at the source and all documents that demonstrate the truth of the statements in the account certificate of representation, in accordance with 326 IAC 10-4-6(h). The certificate and documents shall be retained either on site at the source or at a central location within Indiana for those owners or operators with unattended sources beyond the five (5) year period until the documents are superseded because of the submission of a new account certificate of representation changing the NO_X authorized account representative.

(b) All emissions monitoring information, in accordance with 40 CFR 75 and 326 IAC 10-4-12, provided that to the extent that 40 CFR 75 and 326 IAC 10-4-12 provide for a three (3) year period for record keeping, the three (3) year period shall apply.

(c) Copies of all reports, compliance certifications, and other submissions and all records made or required under the NO_X budget trading program.

(d) Copies of all documents used to complete a NO_X budget permit application and any other submission under the NO_X budget trading program or to demonstrate compliance with the requirements of the NO_X budget trading program.

This period may be extended for cause, at any time prior to the end of five (5) years, in writing by IDEM, OAQ or the U.S. EPA. Records retained at a central location within Indiana shall be available immediately at the location and submitted to IDEM, OAQ or U.S. EPA within three (3) business days following receipt of a written request. Nothing in 326 IAC 10-4-4(e) shall alter the record retention requirements for a source under 40 CFR 75. Unless otherwise provided, all records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

E.1.7 Reporting Requirements [326 IAC 10-4-4(e)]

(a) The NO_X authorized account representative of the NO_X budget source and each NO_X budget unit at the source shall submit the reports and compliance certifications required under the NO_X budget trading program, including those under 326 IAC 10-4-8, 326 IAC 10-4-12, or 326 IAC 10-4-13.

(b) Pursuant to 326 IAC 10-4-6(e), each submission shall include the following certification statement by the NO_X authorized account representative: "I am authorized to make this submission on behalf of the owners and operators of the NO_X budget sources or NO_X budget units for which the submission is made. I certify under penalty of law that I have personally examined, and am familiar with, the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine or imprisonment."

(c) Where 326 IAC 10-4 requires a submission to IDEM, OAQ, the NO_X authorized account representative shall submit required information to:

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

(d) Where 326 IAC 10-4 requires a submission to U.S. EPA, the NO_X authorized account representative shall submit required information to:

U.S. Environmental Protection Agency
Clean Air Markets Division
1200 Pennsylvania Avenue, NW
Mail Code 6204N
Washington, DC 20460

E.1.8 Liability [326 IAC 10-4-4(f)]

The owners and operators of each NO_X budget source shall be liable as follows:

(a) Any person who knowingly violates any requirement or prohibition of the NO_X budget trading program, a NO_X budget permit, or an exemption under 326 IAC 10-4-3 shall be subject to enforcement pursuant to applicable state or federal law.

(b) Any person who knowingly makes a false material statement in any record, submission, or report under the NO_X budget trading program shall be subject to criminal enforcement pursuant to the applicable state or federal law.

(c) No permit revision shall excuse any violation of the requirements of the NO_X budget trading program that occurs prior to the date that the revision takes effect.

(d) Each NO_X budget source and each NO_X budget unit shall meet the requirements of the NO_X budget trading program.

(e) Any provision of the NO_X budget trading program that applies to a NO_X budget source, including a provision applicable to the NO_X authorized account representative of a NO_X budget source, shall also apply to the owners and operators of the source and of the NO_X budget units at the source.

(f) Any provision of the NO_X budget trading program that applies to a NO_X budget unit, including a provision applicable to the NO_X authorized account representative of a NO_X budget unit, shall also apply to the owners and operators of the unit. Except with regard to the requirements applicable to units with a common stack under 40 CFR 75 and 326 IAC 10-4-12, the owners and operators and the NO_X authorized account representative of one (1) NO_X budget unit shall not be liable for any violation by any other NO_X budget unit of which they are not owners or operators or the NO_X authorized account representative and that is located at a source of which they are not owners or operators or the NO_X authorized account representative.

E.1.9 Effect on Other Authorities [326 IAC 10-4-4(g)]

No provision of the NO_X budget trading program, a NO_X budget permit application, a NO_X budget permit, or an exemption under 326 IAC 10-4-3 shall be construed as exempting or excluding the owners and operators and, to the extent applicable, the NO_X authorized account representative of a NO_X budget source or NO_X budget unit from compliance with any other provision of the applicable, approved state implementation plan, a federally enforceable permit, or the CAA.

SECTION F.1 FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: NSPS Subpart D for Coal-Fired Boiler (EU-14)

(n) One (1) Riley-Stoker coal-fired boiler, equipped with an 8 module baghouse (D-4000), rated at 414 million British thermal units per hour, installed in 1982, identified as EU-14, modified with low NO_X burners in October 2003, exhausted through Stack 001. Under NSPS, 40 CFR Part 60.40, Subpart D, the boiler is considered an affected facility.

(o) A spray dryer absorber SO_2 removal system for control of SO_2 emissions from the Riley-Stoker coal-fired boiler including the following:

(1) One (1) lime storage silo (Q-4106), with one (1) baghouse (D-4107) for particulate matter control exhausting through stack ST-4102;

(2) One (1) ash silo (Q-4105), with one (1) baghouse (D-4105) for control of particulate matter emissions from the conveying of ash to the silo and one (1) baghouse (D-4106) for control of particulate matter emissions from ash transfer and unloading.

(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)]

F.1.1 General Provisions Relating to NSPS D [326 IAC 12-1] [40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.40, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the Riley-Stoker coal-fired boiler, identified as EU-14, described in this section except when otherwise specified in 40 CFR 60.40 through 60.46, Subpart D.

(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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

F.1.2 New Source Performance Standards for Storage Vessels for for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971 Requirements [40 CFR Part 60, Subpart D] [326 IAC 12-1]

Pursuant to 40 CFR Part 60, Subpart D, the Permittee shall comply with the provisions of 40 CFR Part 60,40, which are incorporated by reference as 326 IAC 12-1 for the Riley-Stoker coal-fired boiler, identified as EU-14, as specified as follows:

Subpart D—Standards of Performance for Fossil-Fuel-Fired Steam Generators for Which Construction Is Commenced After August 17, 1971

§ 60.40 Applicability and designation of affected facility.

(a) The affected facilities to which the provisions of this subpart apply are:
(1) Each fossil-fuel-fired steam generating unit of more than 73 megawatts (MW) heat input rate (250 million British thermal units per hour (MMBtu/hr)).
(2) Each fossil-fuel and wood-residue-fired steam generating unit capable of firing fossil fuel at a heat input rate of more than 73 MW (250 MMBtu/hr).

(b) Any change to an existing fossil-fuel-fired steam generating unit to accommodate the use of combustible materials, other than fossil fuels as defined in this subpart, shall not bring that unit under the applicability of this subpart.
(c) Except as provided in paragraph (d) of this section, any facility under paragraph (a) of this section that commenced construction or modification after August 17, 1971, is subject to the requirements of this subpart.
(d) The requirements of §§60.44 (a)(4), (a)(5), (b) and (d), and 60.45(f)(4)(vi) are applicable to lignite-fired steam generating units that commenced construction or modification after December 22, 1976.
(e) Any facility covered under subpart Da is not covered under this subpart.

§ 60.41 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act, and in subpart A of this part.
Boiler 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 steam-generating unit. It is not necessary for fuel to be combusted the entire 24-hour period.
Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by ASTM D388 (incorporated by reference, see §60.17).
Coal refuse means waste-products of coal mining, cleaning, and coal preparation operations (e.g. culm, gob, etc.) containing coal, matrix material, clay, and other organic and inorganic material.
Fossil fuel means natural gas, petroleum, coal, and any form of solid, liquid, or gaseous fuel derived from such materials for the purpose of creating useful heat.
Fossil fuel and wood residue-fired steam generating unit means a furnace or boiler used in the process of burning fossil fuel and wood residue for the purpose of producing steam by heat transfer.
Fossil-fuel-fired steam generating unit means a furnace or boiler used in the process of burning fossil fuel for the purpose of producing steam by heat transfer.
Wood residue means bark, sawdust, slabs, chips, shavings, mill trim, and other wood products derived from wood processing and forest management operations.

§ 60.42 Standard for particulate matter (PM).

(a) On and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases that:
(1) Contain PM in excess of 43 nanograms per joule (ng/J) heat input (0.10 lb/MMBtu) derived from fossil fuel or fossil fuel and wood residue.
(2) Exhibit greater than 20 percent opacity except for one six-minute period per hour of not more than 27 percent opacity.

§ 60.43 Standard for sulfur dioxide (SO_2).(a) Except as provided under paragraph (d) of this section, on and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this subpart shall cause to be discharged into the atmosphere from any affected facility any gases that contain SO_2 in excess of:

(2) 520 ng/J heat input (1.2 lb/MMBtu) derived from solid fossil fuel or solid fossil fuel and wood residue, except as provided in paragraph (e) of this section.
(c) Compliance shall be based on the total heat input from all fossil fuels burned, including gaseous fuels.
(d) As an alternate to meeting the requirements of paragraphs (a) and (b) of this section, an owner or operator can petition the Administrator (in writing) to comply with §60.43Da(i)(3) of subpart Da of this part or comply with §60.42b(k) of subpart Db of this part, as applicable to the affected source. If the Administrator grants the petition, the source will from then on (unless the unit is modified or reconstructed in the future) have to comply with the requirements in §60.43Da(i)(3) of subpart Da of this part or §60.42b(k) of subpart Db of this part, as applicable to the affected source.

§ 60.44 Standard for nitrogen oxides (NOX).

(a) Except as provided under paragraph (e) of this section, on and after the date on which the performance test required to be conducted by §60.8 is completed, no owner or operator subject to the provisions of this

subpart shall cause to be discharged into the atmosphere from any affected facility any gases that contain NO_X, expressed as NO_2 in excess of:

(3) 300 ng/J heat input (0.70 lb/MMBtu) derived from solid fossil fuel or solid fossil fuel and wood residue (except lignite or a solid fossil fuel containing 25 percent, by weight, or more of coal refuse).

(e) As an alternate to meeting the requirements of paragraphs (a), (b), and (d) of this section, an owner or operator can petition the Administrator (in writing) to comply with §60.44Da(e)(3) of subpart Da of this part. If the Administrator grants the petition, the source will from then on (unless the unit is modified or reconstructed in the future) have to comply with the requirements in §60.44Da(e)(3) of subpart Da of this part.

§ 60.45 Emissions and fuel monitoring.

(a) Each owner or operator shall install, calibrate, maintain, and operate continuous emissions monitoring systems (CEMS) for measuring the opacity of emissions, SO_2 emissions, NO_X emissions, and either oxygen (O_2) or carbon dioxide (CO_2) except as provided in paragraph (b) of this section.

(b) Certain of the CEMS requirements under paragraph (a) of this section do not apply to owners or operators under the following conditions:

(5) An owner or operator may petition the Administrator (in writing) to install a PM CEMS as an alternative to the CEMS for monitoring opacity emissions.

(c) For performance evaluations under §60.13(c) and calibration checks under §60.13(d), the following procedures shall be used:

(1) Methods 6, 7, and 3B of appendix A of this part, as applicable, shall be used for the performance evaluations of SO_2 and NO_X continuous monitoring systems. Acceptable alternative methods for Methods 6, 7, and 3B of appendix A of this part are given in §60.46(d).

(2) Sulfur dioxide or nitric oxide, as applicable, shall be used for preparing calibration gas mixtures under Performance Specification 2 of appendix B to this part.

(3) For affected facilities burning fossil fuel(s), the span value for a continuous monitoring system measuring the opacity of emissions shall be 80, 90, or 100 percent. For a continuous monitoring system measuring sulfur oxides or NO_X the span value shall be determined using one of the following procedures:

(i) Except as provided under paragraph (c)(3)(ii) of this section, SO_2 and NO_X span values shall be determined as follows:

Fossil fuel	In parts per million	
	Span value for SO_2	Span value for NO_X
Gas	([1])	500.
Liquid	1,000	500.
Solid	1,500	1,000.
Combinations	1,000y + 1,500z	500 (x + y) + 1,000z.

[1]Not applicable.

Where:

x = Fraction of total heat input derived from gaseous fossil fuel;

y = Fraction of total heat input derived from liquid fossil fuel; and

z = Fraction of total heat input derived from solid fossil fuel.

(ii) As an alternative to meeting the requirements of paragraph (c)(3)(i) of this section, the owner or operator of an affected facility may elect to use the SO_2 and NO_X span values determined according to sections 2.1.1 and 2.1.2 in appendix A to part 75 of this chapter.

(4) All span values computed under paragraph (c)(3)(i) of this section for burning combinations of fossil fuels shall be rounded to the nearest 500 ppm. Span values that are computed under paragraph (c)(3)(ii) of this section shall be rounded off according to the applicable procedures in section 2 of appendix A to part 75 of this chapter.

(e) For any CEMS installed under paragraph (a) of this section, the following conversion procedures shall be used to convert the continuous monitoring data into units of the applicable standards (ng/J, lb/MMBtu):

(1) When a CEMS for measuring O_2 is selected, the measurement of the pollutant concentration and O_2 concentration shall each be on a consistent basis (wet or dry). Alternative procedures approved by the Administrator shall be used when measurements are on a wet basis. When measurements are on a dry

basis, the following conversion procedure shall be used:

$$E = CF\left(\frac{20.9}{(20.9 - \%O_2)}\right)$$

Where E, C, F, and $\%O_2$ are determined under paragraph (f) of this section.
(2) When a CEMS for measuring CO_2 is selected, the measurement of the pollutant concentration and CO_2 concentration shall each be on a consistent basis (wet or dry) and the following conversion procedure shall be used:

$$E = CF_c\left(\frac{100}{\%CO_2}\right)$$

Where E, C, F_c and $\%CO_2$ are determined under paragraph (f) of this section.
(f) The values used in the equations under paragraphs (e)(1) and (2) of this section are derived as follows:
(1) E = pollutant emissions, ng/J (lb/MMBtu).
(2) C = pollutant concentration, ng/dscm (lb/dscf), determined by multiplying the average concentration (ppm) for each one-hour period by 4.15×10^4 M ng/dscm per ppm (2.59×10^{-9}M lb/dscf per ppm) where M = pollutant molecular weight, g/g-mole (lb/lb-mole). M = 64.07 for SO_2 and 46.01 for NO_X.
(3) $\%O_2$, $\%CO_2$= O_2 or CO_2 volume (expressed as percent), determined with equipment specified under paragraph (a) of this section.
(4) F, F_c= a factor representing a ratio of the volume of dry flue gases generated to the calorific value of the fuel combusted (F), and a factor representing a ratio of the volume of CO_2 generated to the calorific value of the fuel combusted (F_c), respectively. Values of F and F_c are given as follows:
(ii) For subbituminous and bituminous coal as classified according to ASTM D388 (incorporated by reference, see §60.17), $F = 2.637 \times 10^{-7}$dscm/J (9,820 dscf/MMBtu) and $F_c = 0.486 \times 10^{-7}$scm CO_2/J (1,810 scf CO_2/MMBtu).
(5) The owner or operator may use the following equation to determine an F factor (dscm/J or dscf/MMBtu) on a dry basis (if it is desired to calculate F on a wet basis, consult the Administrator) or Fc factor (scm CO_2/J, or scf CO_2/MMBtu) on either basis in lieu of the F or F_c factors specified in paragraph (f)(4) of this section:

$$F = 10^{-6}\frac{[227.2\ (\%H) + 95.5\ (\%C) + 35.6\ (\%S) + 8.7\ (\%N) - 28.7\ (\%O)]}{GCV}$$

$$F_c = \frac{2.0 \times 10^{-5}(\%C)}{GCV\ (SI\ units)}$$

$$F = 10^{-6}\frac{[3.64\ (\%H) + 1.53\ (\%C) + 0.57\ (\%S) + 0.14\ (\%N) - 0.46\ (\%O)]}{GCV\ (English\ units)}$$

$$F_c = \frac{20.0\ (\%C)}{GCV\ (SI\ units)}$$

$$F_c = \frac{321 \times 10^3\ (\%C)}{GCV\ (English\ units)}$$

(i) %H, %C, %S, %N, and %O are content by weight of hydrogen, carbon, sulfur, nitrogen, and O_2 (expressed as percent), respectively, as determined on the same basis as GCV by ultimate analysis of the fuel fired, using ASTM D3178 or D3176 (solid fuels), or computed from results using ASTM D1137, D1945, or D1946 (gaseous fuels) as applicable. (These five methods are incorporated by reference, see §60.17.)
(ii) GVC is the gross calorific value (kJ/kg, Btu/lb) of the fuel combusted determined by the ASTM test methods D2015 or D5865 for solid fuels and D1826 for gaseous fuels as applicable. (These three methods are incorporated by reference, see §60.17.)
(g) Excess emission and monitoring system performance reports shall be submitted to the Administrator

semiannually for each six-month period in the calendar year. All semiannual reports shall be postmarked by the 30th day following the end of each six-month period. Each excess emission and MSP report shall include the information required in §60.7(c). Periods of excess emissions and monitoring systems (MS) downtime that shall be reported are defined as follows:
(1) *Opacity* . Excess emissions are defined as any six-minute period during which the average opacity of emissions exceeds 20 percent opacity, except that one six-minute average per hour of up to 27 percent opacity need not be reported.
(2) *Sulfur dioxide* . Excess emissions for affected facilities are defined as:
(i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) of SO_2 as measured by a CEMS exceed the applicable standard under §60.43, or
(ii) Any 30 operating day period during which the average emissions (arithmetic average of all one-hour periods during the 30 operating days) of SO_2 as measured by a CEMS exceed the applicable standard under §60.43. Facilities complying with the 30-day SO_2 standard shall use the most current associated SO_2 compliance and monitoring requirements in §§60.48Da and 60.49Da of subpart Da of this part.
(3) *Nitrogen oxides* . Excess emissions for affected facilities using a CEMS for measuring NO_X are defined as:
(i) Any three-hour period during which the average emissions (arithmetic average of three contiguous one-hour periods) exceed the applicable standards under §60.44, or
(ii) Any 30 operating day period during which the average emissions (arithmetic average of all one-hour periods during the 30 operating days) of NO_X as measured by a CEMS exceed the applicable standard under §60.43. Facilities complying with the 30-day NO_X standard shall use the most current associated NO_X compliance and monitoring requirements in §§60.48Da and 60.49Da of subpart Da of this part.
(4) *Particulate matter* . Excess emissions for affected facilities using a CEMS for measuring PM are defined as any boiler operating day period during which the average emissions (arithmetic average of all operating one-hour periods) exceed the applicable standards under §60.43. Affected facilities using PM CEMS in lieu of a CEMS for monitoring opacity emissions must follow the most current applicable compliance and monitoring provisions in §§60.48Da and 60.49Da of subpart Da of this part.

§ 60.46 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, and subsequent performance tests as requested by the EPA Administrator, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b). Acceptable alternative methods and procedures are given in paragraph (d) of this section.
(b) The owner or operator shall determine compliance with the PM, SO_2, and NO_X standards in §§60.42, 60.43, and 60.44 as follows:
(1) The emission rate (E) of PM, SO_2, or NO_X shall be computed for each run using the following equation:

$$E = CF_d\left(\frac{20.9}{(20.9 - \%O_2)}\right)$$

Where:
E = Emission rate of pollutant, ng/J (1b/million Btu);
C = Concentration of pollutant, ng/dscm (1b/dscf);
$\%O_2$= O_2 concentration, percent dry basis; and
F_d= Factor as determined from Method 19 of appendix A of this part.
(2) Method 5 of appendix A of this part shall be used to determine the PM concentration (C) at affected facilities without wet flue-gas-desulfurization (FGD) systems and Method 5B of appendix A of this part shall be used to determine the PM concentration (C) after FGD systems.
(i) The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf). The probe and filter holder heating systems in the sampling train shall be set to provide an average gas temperature of 160±14 °C (320±25 °F).
(ii) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B of appendix A of this part shall be used to determine the O_2 concentration ($\%O_2$). The O_2sample shall be obtained simultaneously with, and at the same traverse points as, the particulate sample. If the grab sampling procedure is used, the O_2 concentration for the run shall be the arithmetic mean of the sample O_2 concentrations at all traverse points.

(iii) If the particulate run has more than 12 traverse points, the O_2 traverse points may be reduced to 12 provided that Method 1 of appendix A of this part is used to locate the 12 O_2 traverse points.
(3) Method 9 of appendix A of this part and the procedures in §60.11 shall be used to determine opacity.
(4) Method 6 of appendix A of this part shall be used to determine the SO_2 concentration.
(i) The sampling site shall be the same as that selected for the particulate sample. The sampling location in the duct shall be at the centroid of the cross section or at a point no closer to the walls than 1 m (3.28 ft). The sampling time and sample volume for each sample run shall be at least 20 minutes and 0.020 dscm (0.71 dscf). Two samples shall be taken during a 1-hour period, with each sample taken within a 30-minute interval.
(ii) The emission rate correction factor, integrated sampling and analysis procedure of Method 3B of appendix A of this part shall be used to determine the O_2 concentration ($\%O_2$). The O_2 sample shall be taken simultaneously with, and at the same point as, the SO_2 sample. The SO_2 emission rate shall be computed for each pair of SO_2 and O_2 samples. The SO_2 emission rate (E) for each run shall be the arithmetic mean of the results of the two pairs of samples.
(5) Method 7 of appendix A of this part shall be used to determine the NO_X concentration.
(i) The sampling site and location shall be the same as for the SO_2 sample. Each run shall consist of four grab samples, with each sample taken at about 15-minute intervals.
(ii) For each NO_X sample, the emission rate correction factor, grab sampling and analysis procedure of Method 3B of appendix A of this part shall be used to determine the O_2 concentration ($\%O_2$). The sample shall be taken simultaneously with, and at the same point as, the NO_X sample.
(iii) The NO_X emission rate shall be computed for each pair of NO_X and O_2 samples. The NO_X emission rate (E) for each run shall be the arithmetic mean of the results of the four pairs of samples.
(d) The owner or operator may use the following as alternatives to the reference methods and procedures in this section or in other sections as specified:
(1) The emission rate (E) of PM, SO_2 and NO_X may be determined by using the Fc factor, provided that the following procedure is used:
(i) The emission rate (E) shall be computed using the following equation:

$$E = CF_c\left(\frac{100}{\%CO_2}\right)$$

Where:
E = Emission rate of pollutant, ng/J (lb/MMBtu);
C = Concentration of pollutant, ng/dscm (lb/dscf);
$\%CO_2$= CO_2 concentration, percent dry basis; and
F_c= Factor as determined in appropriate sections of Method 19 of appendix A of this part.
(ii) If and only if the average Fc factor in Method 19 of appendix A of this part is used to calculate E and either E is from 0.97 to 1.00 of the emission standard or the relative accuracy of a continuous emission monitoring system is from 17 to 20 percent, then three runs of Method 3B of appendix A of this part shall be used to determine the O_2 and CO_2 concentration according to the procedures in paragraph (b)(2)(ii), (4)(ii), or (5)(ii) of this section. Then if F_o (average of three runs), as calculated from the equation in Method 3B of appendix A of this part, is more than ±3 percent than the average F_o value, as determined from the average values of F_d and F_c in Method 19 of appendix A of this part, *i.e.* , F_{oa}= 0.209 (F_{da}/F_{ca}), then the following procedure shall be followed:
(A) When F_o is less than 0.97 F_{oa}, then E shall be increased by that proportion under 0.97 F_{oa}, *e.g.* , if $F_o$is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the emission standard.
(B) When F_o is less than 0.97 F_{oa} and when the average difference (d) between the continuous monitor minus the reference methods is negative, then E shall be increased by that proportion under 0.97 F_{oa}, *e.g.*, if F_o is 0.95 F_{oa}, E shall be increased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
(C) When F_o is greater than 1.03 F_{oa} and when the average difference d is positive, then E shall be decreased by that proportion over 1.03 F_{oa}, *e.g.* , if F_o is 1.05 F_{oa}, E shall be decreased by 2 percent. This recalculated value shall be used to determine compliance with the relative accuracy specification.
(2) For Method 5 or 5B of appendix A of this part, Method 17 of appendix A of this part may be used at facilities with or without wet FGD systems if the stack gas temperature at the sampling location does not exceed an average temperature of 16 0 °C (320 °F). The procedures of sections 2.1 and 2.3 of Method 5B of appendix A of this part may be used with Method 17 of appendix A of this part only if it is used after wet

FGD systems. Method 17 of appendix A of this part shall not be used after wet FGD systems if the effluent gas is saturated or laden with water droplets.
(3) Particulate matter and SO_2 may be determined simultaneously with the Method 5 of appendix A of this part train provided that the following changes are made:
(i) The filter and impinger apparatus in sections 2.1.5 and 2.1.6 of Method 8 of appendix A of this part is used in place of the condenser (section 2.1.7) of Method 5 of appendix A of this part.
(ii) All applicable procedures in Method 8 of appendix A of this part for the determination of SO_2 (including moisture) are used:
(4) For Method 6 of appendix A of this part, Method 6C of appendix A of this part may be used. Method 6A of appendix A of this part may also be used whenever Methods 6 and 3B of appendix A of this part data are specified to determine the SO_2 emission rate, under the conditions in paragraph (d)(1) of this section.
(5) For Method 7 of appendix A of this part, Method 7A, 7C, 7D, or 7E of appendix A of this part may be used. If Method 7C, 7D, or 7E of appendix A of this part is used, the sampling time for each run shall be at least 1 hour and the integrated sampling approach shall be used to determine the O_2 concentration ($\%O_2$) for the emission rate correction factor.
(6) For Method 3 of appendix A of this part, Method 3A or 3B of appendix A of this part may be used.
(7) For Method 3B of appendix A of this part, Method 3A of appendix A of this part may be used.

SECTION F.2 FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: NSPS Subpart Ka for: Gasoline Storage Tank (T-601)

(r) (1) One (1) floating roof gasoline storage tank, identified as T-601, installed in 1983, capacity: 75,000 gallons. Under NSPS, 40 CFR Part 60.110a, Subpart Ka, this tank is considered an existing volatile organic liquid storage tank.

(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)]

F.2.1 General Provisions Relating to NSPS Ka [326 IAC 12-1] [40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.110a, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the floating roof gasoline storage tank, identified as T-601, described in this section except when otherwise specified in 40 CFR 60.110a through 60.115a, Subpart Ka.

(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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

F.2.2 New Source Performance Standards for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 Requirements [40 CFR Part 60, Subpart Ka] [326 IAC 12-1]

Pursuant to 40 CFR Part 60, Subpart Ka, the Permittee shall comply with the provisions of 40 CFR Part 60,110a, which are incorporated by reference as 326 IAC 12-1 for the floating roof gasoline storage tank, identified as T-601, as specified as follows:

Subpart Ka—Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984

§ 60.110a Applicability and designation of affected facility.

(a) *Affected facility.* Except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a storage capacity greater than 151,416 liters (40,000 gallons) that is used to store petroleum liquids for which construction is commenced after May 18, 1978.
(c) *Alternative means of compliance* —(1) *Option to comply with part 65.* Owners or operators may choose to comply with 40 CFR part 65, subpart C, to satisfy the requirements of §§60.112a through 60.114a for storage vessels that are subject to this subpart that store petroleum liquids that, as stored, have a maximum true vapor pressure equal to or greater than 10.3 kPa (1.5 psia). Other provisions applying to owners or operators who choose to comply with 40 CFR part 65 are provided in 40 CFR 65.1.
(2) *Part 60, subpart A.* Owners or operators who choose to comply with 40 CFR part 65, subpart C, must also comply with §§60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for those storage vessels. All sections and paragraphs of subpart A of this part that are not mentioned in this paragraph (c)(2) do not apply to owners or operators of storage vessels complying with 40 CFR part 65, subpart C, except that provisions required to be met prior to implementing 40 CFR part 65 still apply. Owners and operators who choose to comply with 40 CFR part 65, subpart C, must comply with 40 CFR part 65, subpart A.

[45 FR 23379, Apr. 4, 1980, as amended at 65 FR 78275, Dec. 14, 2000]

§ 60.111a Definitions.

In addition to the terms and their definitions listed in the Act and subpart A of this part the following definitions apply in this subpart:
(a) *Storage vessel* means each tank, reservoir, or container used for the storage of petroleum liquids, but does not include:
(1) Pressure vessels which are designed to operate in excess of 204.9 kPa (15 psig) without emissions to the atmosphere except under emergency conditions.
(2) Subsurface caverns or porous rock reservoirs, or
(3) Underground tanks if the total volume of petroleum liquids added to and taken from a tank annually does not exceed twice the volume of the tank.
(b) *Petroleum liquids* means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery but does not mean Nos. 2 through 6 fuel oils as specified in ASTM D396–78, 89, 90, 92, 96, or 98, gas turbine fuel oils Nos. 2–GT through 4–GT as specified in ASTM D2880–78 or 96, gas turbine fuel oils Nos. 2–GT through 4–GT as specified in ASTM D2880–78 or 96, or diesel fuel oils Nos. 2–D and 4–D as specified in ASTM D975–78, 96, or 98a. (These three methods are incorporated by reference—see §60.17.)
(c) *Petroleum refinery* means each facility engaged in producing gasoline, kerosene, distillate fuel oils, residual fuel oils, lubricants, or other products through distillation of petroleum or through redistillation, cracking, extracting, or reforming of unfinished petroleum derivatives.
(d) *Petroleum* means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.
(e) *Condensate* means hydrocarbon liquid separated from natural gas which condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.
(f) *True vapor pressure* means the equilibrium partial pressure exerted by a petroleum liquid such as determined in accordance with methods described in American Petroleum Institute Bulletin 2517, Evaporation Loss from External Floating-Roof Tanks, Second Edition, February 1980 (incorporated by reference—see §60.17).
(g) *Reid vapor pressure* is the absolute vapor pressure of volatile crude oil and nonviscous petroleum liquids, except liquified petroleum gases, as determined by ASTM D323–82 or 94 (incorporated by reference—see §60.17).
(h) *Liquid-mounted seal* means a foam or liquid-filled primary seal mounted in contact with the liquid between the tank wall and the floating roof continuously around the circumference of the tank.
(i) *Metallic shoe seal* includes but is not limited to a metal sheet held vertically against the tank wall 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.
(j) *Vapor-mounted seal* means a foam-filled primary seal mounted continuously around the circumference of the tank so there is an annular vapor space underneath the seal. The annular vapor space is bounded by the bottom of the primary seal, the tank wall, the liquid surface, and the floating roof.
(k) *Custody transfer* means the transfer of produced petroleum and/or condensate, after processing and/or treating in the producing operations, from storage tanks or automatic transfer facilities to pipelines or any other forms of transportation.
[45 FR 23379, Apr. 4, 1980, as amended at 48 FR 3737, Jan. 27, 1983; 52 FR 11429, Apr. 8, 1987; 65 FR 61756, Oct. 17, 2000]

§ 60.112a Standard for volatile organic compounds (VOC).

(a) The owner or operator of each storage vessel to which this subpart applies which contains a petroleum liquid which, as stored, has a true vapor pressure equal to or greater than 10.3 kPa (1.5 psia) but not greater than 76.6 kPa (11.1 psia) shall equip the storage vessel with one of the following:
(1) An external floating roof, consisting of a pontoon-type or double-deck-type cover that rests on the surface of the liquid contents and is equipped with a closure device between the tank wall and the roof edge. Except as provided in paragraph (a)(1)(ii)(D) of this section, the closure device is to consist of two seals, one above the other. The lower seal is referred to as the primary seal and the upper seal is referred to as the secondary seal. The roof is to be floating on the liquid at all times (i.e., off the roof leg supports) except during initial fill and when the tank is completely emptied and subsequently refilled. The process of

emptying and refilling when the roof is resting on the leg supports shall be continuous and shall be accomplished as rapidly as possible.
(i) The primary seal is to be either a metallic shoe seal, a liquid-mounted seal, or a vapor-mounted seal. Each seal is to meet the following requirements:
(A) The accumulated area of gaps between the tank wall and the metallic shoe seal or the liquid-mounted seal shall not exceed 212 cm^2 per meter of tank diameter (10.0 in^2 per ft of tank diameter) and the width of any portion of any gap shall not exceed 3.81 cm (11/2in).
(B) The accumulated area of gaps between the tank wall and the vapor-mounted seal shall not exceed 21.2 cm^2 per meter of tank diameter (1.0 in^2 per ft of tank diameter) and the width of any portion of any gap shall not exceed 1.27 cm (1/2in).
(C) One end of the metallic shoe is to extend into the stored liquid and the other end is to extend a minimum vertical distance of 61 cm (24 in) above the stored liquid surface.
(D) There are to be no holes, tears, or other openings in the shoe, seal fabric, or seal envelope.
(ii) The secondary seal is to meet the following requirements:
(A) The secondary seal is to be installed above the primary seal so that it completely covers the space between the roof edge and the tank wall except as provided in paragraph (a)(1)(ii)(B) of this section.
(B) The accumulated area of gaps between the tank wall and the secondary seal used in combination with a metallic shoe or liquid-mounted primary seal shall not exceed 21.2 cm^2 per meter of tank diameter (1.0 in^2 per ft. of tank diameter) and the width of any portion of any gap shall not exceed 1.27 cm (1/2in.). There shall be no gaps between the tank wall and the secondary seal used in combination with a vapor-mounted primary seal.
(C) There are to be no holes, tears or other openings in the seal or seal fabric.
(D) The owner or operator is exempted from the requirements for secondary seals and the secondary seal gap criteria when performing gap measurements or inspections of the primary seal.
(iii) Each opening in the roof except for automatic bleeder vents and rim space vents is to provide a projection below the liquid surface. Each opening in the roof except for automatic bleeder vents, rim space vents and leg sleeves is to be equipped with a cover, seal 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 or as described in pargraph (a)(1)(iv) of this section. Automatic bleeder vents 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. Rim vents are to be set to open when the roof is being floated off the roof legs supports or at the manufacturer's recommended setting.
(iv) Each emergency roof drain is to be provided with a slotted membrane fabric cover that covers at least 90 percent of the area of the opening.
(3) A vapor recovery system which collects all VOC vapors and gases discharged from the storage vessel, and a vapor return or disposal system which is designed to process such VOC vapors and gases so as to reduce their emission to the atmosphere by at least 95 percent by weight.
(4) A system equivalent to those described in paragraphs (a)(1), (a)(2), or (a)(3) of this section as provided in §60.114a.
(b) The owner or operator of each storage vessel to which this subpart applies which contains a petroleum liquid which, as stored, has a true vapor pressure greater than 76.6 kPa (11.1 psia), shall equip the storage vessel with a vapor recovery system which collects all VOC vapors and gases discharged from the storage vessel, and a vapor return or disposal system which is designed to process such VOC vapors and gases so as to reduce their emission to the atmosphere by at least 95 percent by weight.
[45 FR 23379, Apr. 4, 1980, as amended at 45 FR 83229, Dec. 18, 1980]

§ 60.113a Testing and procedures.

(a) Except as provided in §60.8(b) compliance with the standard prescribed in §60.112a shall be determined as follows or in accordance with an equivalent procedure as provided in §60.114a.
(1) The owner or operator of each storage vessel to which this subpart applies which has an external floating roof shall meet the following requirements:
(i) Determine the gap areas and maximum gap widths between the primary seal and the tank wall and between the secondary seal and the tank wall according to the following frequency:
(A) For primary seals, gap measurements shall be performed within 60 days of the initial fill with petroleum liquid and at least once every five years thereafter. All primary seal inspections or gap measurements which require the removal or dislodging of the secondary seal shall be accomplished as rapidly as possible and the secondary seal shall be replaced as soon as possible.

(B) For secondary seals, gap measurements shall be performed within 60 days of the initial fill with petroleum liquid and at least once every year thereafter.
(C) If any storage vessel is out of service for a period of one year or more, subsequent refilling with petroleum liquid shall be considered initial fill for the purposes of paragraphs (a)(1)(i)(A) and (a)(1)(i)(B) of this section.
(D) Keep records of each gap measurement at the plant for a period of at least 2 years following the date of measurement. Each record shall identify the vessel on which the measurement was performed and shall contain the date of the seal gap measurement, the raw data obtained in the measurement process required by paragraph (a)(1)(ii) of this section and the calculation required by paragraph (a)(1)(iii) of this section.
(E) If either the seal gap calculated in accord with paragraph (a)(1)(iii) of this section or the measured maximum seal gap exceeds the limitations specified by §60.112a of this subpart, a report shall be furnished to the Administrator within 60 days of the date of measurements. The report shall identify the vessel and list each reason why the vessel did not meet the specifications of §60.112a. The report shall also describe the actions necessary to bring the storage vessel into compliance with the specifications of §60.112a.
(ii) Determine gap widths in the primary and secondary seals individually by the following procedures:
(A) Measure seal gaps, if any, at one or more floating roof levels when the roof is floating off the roof leg supports.
(B) Measure seal gaps around the entire circumference of the tank in each place where a1/8&inch; diameter uniform probe passes freely (without forcing or binding against seal) between the seal and the tank wall and measure the circumferential distance of each such location.
(C) The total surface area of each gap described in paragraph (a)(1)(ii)(B) of this section shall be determined by using probes of various widths to accurately measure the actual distance from the tank wall to the seal and multiplying each such width by its respective circumferential distance.
(iii) Add the gap surface area of each gap location for the primary seal and the secondary seal individually. Divide the sum for each seal by the nominal diameter of the tank and compare each ratio to the appropriate ratio in the standard in §60.112a(a)(1)(i) and §60.112a(a)(1)(ii).
(iv) Provide the Administrator 30 days prior notice of the gap measurement to afford the Administrator the opportunity to have an observer present.
(2) The owner or operator of each storage vessel to which this subpart applies which has a vapor recovery and return or disposal system shall provide the following information to the Administrator on or before the date on which construction of the storage vessel commences:
(i) Emission data, if available, for a similar vapor recovery and return or disposal system used on the same type of storage vessel, which can be used to determine the efficiency of the system. A complete description of the emission measurement method used must be included.
(ii) The manufacturer's design specifications and estimated emission reduction capability of the system.
(iii) The operation and maintenance plan for the system.
(iv) Any other information which will be useful to the Administrator in evaluating the effectiveness of the system in reducing VOC emissions.
[45 FR 23379, Apr. 4, 1980, as amended at 52 FR 11429, Apr. 8, 1987]

§ 60.114a Alternative means of emission limitation.

(a) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in emissions at least equivalent to the reduction in emissions achieved by any requirement in §60.112a, the Administrator will publish in the Federal Register a notice permitting the use of the alternative means for purposes of compliance with that requirement.
(b) Any notice under paragraph (a) of this section will be published only after notice and an opportunity for a hearing.
(c) Any person seeking permission under this section shall submit to the Administrator a written application including:
(1) An actual emissions test that uses a full-sized or scale-model storage vessel that accurately collects and measures all VOC emissions from a given control device and that accurately simulates wind and accounts for other emission variables such as temperature and barometric pressure.
(2) An engineering evaluation that the Administrator determines is an accurate method of determining equivalence.
(d) The Administrator may condition the permission on requirements that may be necessary to ensure

operation and maintenance to achieve the same emissions reduction as specified in §60.112a.
(e) The primary vapor-mounted seal in the “Volume-Maximizing Seal” manufactured by R.F.I. Services Corporation is approved as equivalent to the vapor-mounted seal required by §60.112a(a)(1)(i) and must meet the gap criteria specified in §60.112a(a)(1)(i)(B). There shall be no gaps between the tank wall and any secondary seal used in conjunction with the primary seal in the “Volume-Maximizing Seal”.
[52 FR 11429, Apr. 8, 1987]

§ 60.115a Monitoring of operations.

(a) Except as provided in paragraph (d) of this section, the owner or operator subject to this subpart shall maintain a record of the petroleum liquid stored, the period of storage, and the maximum true vapor pressure of that liquid during the respective storage period.
(b) Available data on the typical Reid vapor pressure and the maximum expected storage temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517, unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
(c) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa (2.0 psia) or whose physical properties preclude determination by the recommended method is to be determined from available data and recorded if the estimated true vapor pressure is greater than 6.9 kPa (1.0 psia).
(d) The following are exempt from the requirements of this section:
(2) The owner or operator of each storage vessel equipped with a vapor recovery and return or disposal system in accordance with the requirements of §60.112a(a)(3) and (b), or a closed vent system and control device meeting the specifications of 40 CFR 65.42(b)(4), (b)(5), or (c).
[45 FR 23379, Apr. 4, 1980, as amended at 65 FR 78275, Dec. 14, 2000]

SECTION F.3 FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: NSPS Subpart Kb for: Ethanol Storage Tank (T-611)

(r) (3) One (1) ethanol internal floating roof storage tank, identified as T-611, installed in 2001, capacity: 1,250,000 gallons. Under NSPS, 40 CFR Part 60.110b, Subpart Kb, this tank is considered an existing volatile organic liquid storage tank.

(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)]

F.3.1 General Provisions Relating to NSPS Kb [326 IAC 12-1] [40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.110b, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the ethanol internal floating roof storage tank, identified as T-611, described in this section except when otherwise specified in 40 CFR 60.110b through 60.117b, Subpart Kb.

(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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

F.3.2 New Source Performance Standards for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 Requirements [40 CFR Part 60, Subpart Kb] [326 IAC 12-1]

Pursuant to 40 CFR Part 60, Subpart Kb, the Permittee shall comply with the provisions of 40 CFR Part 60,110b, which are incorporated by reference as 326 IAC 12-1 for the ethanol internal floating roof storage tank, identified as T-611, as specified as follows:

Subpart Kb—Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984

§ 60.110b Applicability and designation of affected facility.

(a) Except as provided in paragraph (b) of this section, the affected facility to which this subpart applies is each storage vessel with a capacity greater than or equal to 75 cubic meters (m^3) that is used to store volatile organic liquids (VOL) for which construction, reconstruction, or modification is commenced after July 23, 1984.
(d) This subpart does not apply to the following:
(1) Vessels at coke oven by-product plants.
(2) Pressure vessels designed to operate in excess of 204.9 kPa and without emissions to the atmosphere.
(3) Vessels permanently attached to mobile vehicles such as trucks, railcars, barges, or ships.
(4) Vessels with a design capacity less than or equal to 1,589.874 m^3 used for petroleum or condensate stored, processed, or treated prior to custody transfer.
(5) Vessels located at bulk gasoline plants.
(6) Storage vessels located at gasoline service stations.
(7) Vessels used to store beverage alcohol.
(8) Vessels subject to subpart GGGG of 40 CFR part 63.
(e) *Alternative means of compliance* —(1) *Option to comply with part 65.* Owners or operators may choose

to comply with 40 CFR part 65, subpart C, to satisfy the requirements of §§60.112b through 60.117b for storage vessels that are subject to this subpart that meet the specifications in paragraphs (e)(1)(i) and (ii) of this section. When choosing to comply with 40 CFR part 65, subpart C, the monitoring requirements of §60.116b(c), (e), (f)(1), and (g) still apply. Other provisions applying to owners or operators who choose to comply with 40 CFR part 65 are provided in 40 CFR 65.1.
(i) A storage vessel with a design capacity greater than or equal to 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa; or
(ii) A storage vessel with a design capacity greater than 75 m^3 but less than 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa.
(2) *Part 60, subpart A.* Owners or operators who choose to comply with 40 CFR part 65, subpart C, must also comply with §§60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for those storage vessels. All sections and paragraphs of subpart A of this part that are not mentioned in this paragraph (e)(2) do not apply to owners or operators of storage vessels complying with 40 CFR part 65, subpart C, except that provisions required to be met prior to implementing 40 CFR part 65 still apply. Owners and operators who choose to comply with 40 CFR part 65, subpart C, must comply with 40 CFR part 65, subpart A.
(3) *Internal floating roof report.* If an owner or operator installs an internal floating roof and, at initial startup, chooses to comply with 40 CFR part 65, subpart C, a report shall be furnished to the Administrator stating that the control equipment meets the specifications of 40 CFR 65.43. This report shall be an attachment to the notification required by 40 CFR 65.5(b).

§ 60.111b Definitions.

Terms used in this subpart are defined in the Act, in subpart A of this part, or in this subpart as follows:
Bulk gasoline plant means any gasoline distribution facility that has a gasoline throughput less than or equal to 75,700 liters per day. Gasoline throughput shall be the maximum calculated design throughput as may be limited by compliance with an enforceable condition under Federal requirement or Federal, State or local law, and discoverable by the Administrator and any other person.
Condensate means hydrocarbon liquid separated from natural gas that condenses due to changes in the temperature or pressure, or both, and remains liquid at standard conditions.
Custody transfer means the transfer of produced petroleum and/or condensate, after processing and/or treatment in the producing operations, from storage vessels or automatic transfer facilities to pipelines or any other forms of transportation.
Fill means the introduction of VOL into a storage vessel but not necessarily to complete capacity.
Gasoline service station means any site where gasoline is dispensed to motor vehicle fuel tanks from stationary storage tanks.
Maximum true vapor pressure means the equilibrium partial pressure exerted by the volatile organic compounds (as defined in 40 CFR 51.100) in the stored VOL at the temperature equal to the highest calendar-month average of the VOL storage temperature for VOL's stored above or below the ambient temperature or at the local maximum monthly average temperature as reported by the National Weather Service for VOL's stored at the ambient temperature, as determined:
(1) In accordance with methods described in American Petroleum institute Bulletin 2517, Evaporation Loss From External Floating Roof Tanks, (incorporated by reference—see §60.17); or
(2) As obtained from standard reference texts; or
(3) As determined by ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17);
(4) Any other method approved by the Administrator.
Petroleum means the crude oil removed from the earth and the oils derived from tar sands, shale, and coal.
Petroleum liquids means petroleum, condensate, and any finished or intermediate products manufactured in a petroleum refinery.
Process tank means a tank that is used within a process (including a solvent or raw material recovery process) to collect material discharged from a feedstock storage vessel or equipment within the process before the material is transferred to other equipment within the process, to a product or by-product storage vessel, or to a vessel used to store recovered solvent or raw material. In many process tanks, unit operations such as reactions and blending are conducted. Other process tanks, such as surge control vessels and bottoms receivers, however, may not involve unit operations.
Reid vapor pressure means the absolute vapor pressure of volatile crude oil and volatile nonviscous petroleum liquids except liquified petroleum gases, as determined by ASTM D323–82 or 94 (incorporated

by reference—see §60.17).
Storage vessel means each tank, reservoir, or container used for the storage of volatile organic liquids but does not include:
(1) Frames, housing, auxiliary supports, or other components that are not directly involved in the containment of liquids or vapors;
(2) Subsurface caverns or porous rock reservoirs; or
(3) Process tanks.
Volatile organic liquid (VOL) means any organic liquid which can emit volatile organic compounds (as defined in 40 CFR 51.100) into the atmosphere.
Waste means any liquid resulting from industrial, commercial, mining or agricultural operations, or from community activities that is discarded or is being accumulated, stored, or physically, chemically, or biologically treated prior to being discarded or recycled.
[52 FR 11429, Apr. 8, 1987, as amended at 54 FR 32973, Aug. 11, 1989; 65 FR 61756, Oct. 17, 2000; 68 FR 59333, Oct. 15, 2003]

§ 60.112b Standard for volatile organic compounds (VOC).

(a) The owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 5.2 kPa but less than 76.6 kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 containing a VOL that, as stored, has a maximum true vapor pressure equal to or greater than 27.6 kPa but less than 76.6 kPa, shall equip each storage vessel with one of the following:
(1) A fixed roof in combination with an internal floating roof meeting the following specifications:
(i) The internal floating roof shall rest or float on the liquid surface (but not necessarily in complete contact with it) inside a storage vessel that has a fixed roof. The internal floating roof shall be floating on the liquid surface at all times, except during initial fill and during those intervals when the storage vessel is completely emptied or subsequently emptied and refilled. When the roof is resting on the leg supports, the process of filling, emptying, or refilling shall be continuous and shall be accomplished as rapidly as possible.
(ii) Each internal floating roof shall be equipped with one of the following closure devices between the wall of the storage vessel and the edge of the internal floating roof:
(A) A foam- or liquid-filled seal mounted in contact with the liquid (liquid-mounted seal). A liquid-mounted seal means a foam- or liquid-filled seal mounted in contact with the liquid between the wall of the storage vessel and the floating roof continuously around the circumference of the tank.
(B) Two seals mounted one above the other so that each forms a continuous closure that completely covers the space between the wall of the storage vessel and the edge of the internal floating roof. The lower seal may be vapor-mounted, but both must be continuous.
(C) A mechanical shoe seal. A mechanical shoe seal is a metal sheet held vertically against the wall of the storage vessel by springs or weighted levers and is connected by braces to the floating roof. A flexible coated fabric (envelope) spans the annular space between the metal sheet and the floating roof.
(iii) Each opening in a noncontact internal floating roof except for automatic bleeder vents (vacuum breaker vents) and the rim space vents is to provide a projection below the liquid surface.
(iv) Each opening in the internal floating roof except for leg sleeves, automatic bleeder vents, rim space vents, column wells, ladder wells, sample wells, and stub drains is to be equipped with a cover or lid which is to be maintained in a closed position at all times (i.e., no visible gap) except when the device is in actual use. The cover or lid shall be equipped with a gasket. Covers on each access hatch and automatic gauge float well shall be bolted except when they are in use.
(v) Automatic bleeder vents shall be equipped with a gasket and are to be closed at all times when the roof is floating except when the roof is being floated off or is being landed on the roof leg supports.
(vi) Rim space vents shall be equipped with a gasket and are to be set to open only when the internal floating roof is not floating or at the manufacturer's recommended setting.
(vii) Each penetration of the internal floating roof for the purpose of sampling shall be a sample well. The sample well shall have a slit fabric cover that covers at least 90 percent of the opening.
(viii) Each penetration of the internal floating roof that allows for passage of a column supporting the fixed roof shall have a flexible fabric sleeve seal or a gasketed sliding cover.
(ix) Each penetration of the internal floating roof that allows for passage of a ladder shall have a gasketed sliding cover.
(3) A closed vent system and control device meeting the following specifications:
(i) The closed vent system shall be designed to collect all VOC vapors and gases discharged from the

storage vessel and operated with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background and visual inspections, as determined in part 60, subpart VV, §60.485(b).
(ii) The control device shall be designed and operated to reduce inlet VOC emissions by 95 percent or greater. If a flare is used as the control device, it shall meet the specifications described in the general control device requirements (§60.18) of the General Provisions.

(4) A system equivalent to those described in paragraphs (a)(1), (a)(2), or (a)(3) of this section as provided in §60.114b of this subpart.
(b) The owner or operator of each storage vessel with a design capacity greater than or equal to 75 m^3 which contains a VOL that, as stored, has a maximum true vapor pressure greater than or equal to 76.6 kPa shall equip each storage vessel with one of the following:
(1) A closed vent system and control device as specified in §60.112b(a)(3).
(2) A system equivalent to that described in paragraph (b)(1) as provided in §60.114b of this subpart.

§ 60.113b Testing and procedures.

The owner or operator of each storage vessel as specified in §60.112b(a) shall meet the requirements of paragraph (a), (b), or (c) of this section. The applicable paragraph for a particular storage vessel depends on the control equipment installed to meet the requirements of §60.112b.
(a) After installing the control equipment required to meet §60.112b(a)(1) (permanently affixed roof and internal floating roof), each owner or operator shall:
(1) Visually inspect the internal floating roof, the primary seal, and the secondary seal (if one is in service), prior to filling the storage vessel with VOL. If there are holes, tears, or other openings in the primary seal, the secondary seal, or the seal fabric or defects in the internal floating roof, or both, the owner or operator shall repair the items before filling the storage vessel.
(2) For Vessels equipped with a liquid-mounted or mechanical shoe primary seal, visually inspect the internal floating roof and the primary seal or the secondary seal (if one is in service) through manholes and roof hatches on the fixed roof at least once every 12 months after initial fill. If the internal floating roof is not resting on the surface of the VOL inside the storage vessel, or there is liquid accumulated on the roof, or the seal is detached, or there are holes or tears in the seal fabric, the owner or operator shall repair the items or empty and remove the storage vessel from service within 45 days. If a failure that is detected during inspections required in this paragraph cannot be repaired within 45 days and if the vessel cannot be emptied within 45 days, a 30-day extension may be requested from the Administrator in the inspection report required in §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.
(3) For vessels equipped with a double-seal system as specified in §60.112b(a)(1)(ii)(B):
(i) Visually inspect the vessel as specified in paragraph (a)(4) of this section at least every 5 years; or
(ii) Visually inspect the vessel as specified in paragraph (a)(2) of this section.
(4) Visually inspect the internal floating roof, the primary seal, the secondary seal (if one is in service), gaskets, slotted membranes and sleeve seals (if any) each time the storage vessel is emptied and degassed. If the internal floating roof has defects, the primary seal has holes, tears, or other openings in the seal or the seal fabric, or the secondary seal has holes, tears, or other openings in the seal or the seal fabric, or the gaskets no longer close off the liquid surfaces from the atmosphere, or the slotted membrane has more than 10 percent open area, the owner or operator shall repair the items as necessary so that none of the conditions specified in this paragraph exist before refilling the storage vessel with VOL. In no event shall inspections conducted in accordance with this provision occur at intervals greater than 10 years in the case of vessels conducting the annual visual inspection as specified in paragraphs (a)(2) and (a)(3)(ii) of this section and at intervals no greater than 5 years in the case of vessels specified in paragraph (a)(3)(i) of this section.
(5) Notify the Administrator in writing at least 30 days prior to the filling or refilling of each storage vessel for which an inspection is required by paragraphs (a)(1) and (a)(4) of this section to afford the Administrator the opportunity to have an observer present. If the inspection required by paragraph (a)(4) of this section is not planned and the owner or operator could not have known about the inspection 30 days in advance or refilling the tank, the owner or operator shall notify the Administrator 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) The owner or operator of each source that is equipped with a closed vent system and control device as required in §60.112b (a)(3) or (b)(2) (other than a flare) is exempt from §60.8 of the General Provisions and shall meet the following requirements.
(1) Submit for approval by the Administrator as an attachment to the notification required by §60.7(a)(1) or, if the facility is exempt from §60.7(a)(1), as an attachment to the notification required by §60.7(a)(2), an operating plan containing the information listed below.
(i) Documentation demonstrating that the control device will achieve the required control efficiency during maximum loading conditions. This documentation is to include a description of the gas stream which enters the control device, including flow and VOC content under varying liquid level conditions (dynamic and static) and manufacturer's design specifications for the control device. If the control device or the closed vent capture system receives vapors, gases, or liquids other than fuels from sources that are not designated sources under this subpart, the efficiency demonstration is to include consideration of all vapors, gases, and liquids received by the closed vent capture system and control device. If an enclosed combustion device with a minimum residence time of 0.75 seconds and a minimum temperature of 816 °C is used to meet the 95 percent requirement, documentation that those conditions will exist is sufficient to meet the requirements of this paragraph.
(ii) A description of the parameter or parameters to be monitored to ensure that the control device will be operated in conformance with its design and an explanation of the criteria used for selection of that parameter (or parameters).
(2) Operate the closed vent system and control device and monitor the parameters of the closed vent system and control device in accordance with the operating plan submitted to the Administrator in accordance with paragraph (c)(1) of this section, unless the plan was modified by the Administrator during the review process. In this case, the modified plan applies.
[52 FR 11429, Apr. 8, 1987, as amended at 54 FR 32973, Aug. 11, 1989]

§ 60.114b Alternative means of emission limitation.

(a) If, in the Administrator's judgment, an alternative means of emission limitation will achieve a reduction in emissions at least equivalent to the reduction in emissions achieved by any requirement in §60.112b, the Administrator will publish in the Federal Register a notice permitting the use of the alternative means for purposes of compliance with that requirement.
(b) Any notice under paragraph (a) of this section will be published only after notice and an opportunity for a hearing.
(c) Any person seeking permission under this section shall submit to the Administrator a written application including:
(1) An actual emissions test that uses a full-sized or scale-model storage vessel that accurately collects and measures all VOC emissions from a given control device and that accurately simulates wind and accounts for other emission variables such as temperature and barometric pressure.
(2) An engineering evaluation that the Administrator determines is an accurate method of determining equivalence.
(d) The Administrator may condition the permission on requirements that may be necessary to ensure operation and maintenance to achieve the same emissions reduction as specified in §60.112b.

§ 60.115b Reporting and recordkeeping requirements.

The owner or operator of each storage vessel as specified in §60.112b(a) shall keep records and furnish reports as required by paragraphs (a), (b), or (c) of this section depending upon the control equipment installed to meet the requirements of §60.112b. The owner or operator shall keep copies of all reports and records required by this section, except for the record required by (c)(1), for at least 2 years. The record required by (c)(1) will be kept for the life of the control equipment.
(a) After installing control equipment in accordance with §60.112b(a)(1) (fixed roof and internal floating roof), the owner or operator shall meet the following requirements.
(1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(1) and §60.113b(a)(1). This report shall be an attachment to the notification required by §60.7(a)(3).
(2) Keep a record of each inspection performed as required by §60.113b (a)(1), (a)(2), (a)(3), and (a)(4).

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).
(3) If any of the conditions described in §60.113b(a)(2) are detected during the annual visual inspection required by §60.113b(a)(2), a report shall be furnished to the Administrator within 30 days of the inspection. Each report shall identify the storage vessel, the nature of the defects, and the date the storage vessel was emptied or the nature of and date the repair was made.
(4) After each inspection required by §60.113b(a)(3) 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 §60.113b(a)(3)(ii), a report shall be furnished to the Administrator within 30 days of the inspection. The report shall identify the storage vessel and the reason it did not meet the specifications of §61.112b(a)(1) or §60.113b(a)(3) and list each repair made.
(b) After installing control equipment in accordance with §61.112b(a)(2) (external floating roof), the owner or operator shall meet the following requirements.
(1) Furnish the Administrator with a report that describes the control equipment and certifies that the control equipment meets the specifications of §60.112b(a)(2) and §60.113b(b)(2), (b)(3), and (b)(4). This report shall be an attachment to the notification required by §60.7(a)(3).
(2) Within 60 days of performing the seal gap measurements required by §60.113b(b)(1), furnish the Administrator with a report that contains:
(i) The date of measurement.
(ii) The raw data obtained in the measurement.
(iii) The calculations described in §60.113b (b)(2) and (b)(3).
(3) Keep a record of each gap measurement performed as required by §60.113b(b). Each record shall identify the storage vessel in which the measurement was performed and shall contain:
(i) The date of measurement.
(ii) The raw data obtained in the measurement.
(iii) The calculations described in §60.113b (b)(2) and (b)(3).
(4) After each seal gap measurement that detects gaps exceeding the limitations specified by §60.113b (b)(4), submit a report to the Administrator within 30 days of the inspection. The report will identify the vessel and contain the information specified in paragraph (b)(2) of this section and the date the vessel was emptied or the repairs made and date of repair.
(c) After installing control equipment in accordance with §60.112b (a)(3) or (b)(1) (closed vent system and control device other than a flare), the owner or operator shall keep the following records.
(1) A copy of the operating plan.
(2) A record of the measured values of the parameters monitored in accordance with §60.113b(c)(2).
(d) After installing a closed vent system and flare to comply with §60.112b, the owner or operator shall meet the following requirements.
(1) A report containing the measurements required by §60.18(f) (1), (2), (3), (4), (5), and (6) shall be furnished to the Administrator as required by §60.8 of the General Provisions. This report shall be submitted within 6 months of the initial start-up date.
(2) Records shall be kept of all periods of operation during which the flare pilot flame is absent.
(3) Semiannual reports of all periods recorded under §60.115b(d)(2) in which the pilot flame was absent shall be furnished to the Administrator.

§ 60.116b Monitoring of operations.

(a) The owner or operator shall keep copies of all records required by this section, except for the record required by paragraph (b) of this section, for at least 2 years. The record required by paragraph (b) of this section will be kept for the life of the source.
(b) The owner or operator of each storage vessel as specified in §60.110b(a) shall keep readily accessible records showing the dimension of the storage vessel and an analysis showing the capacity of the storage vessel.
(c) Except as provided in paragraphs (f) and (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure greater than or equal to 3.5 kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure greater than or equal to 15.0 kPa shall maintain a record of the VOL stored, the period of storage, and the maximum true vapor pressure of that VOL during the respective storage period.
(d) Except as provided in paragraph (g) of this section, the owner or operator of each storage vessel either with a design capacity greater than or equal to 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 5.2 kPa or with a design capacity greater than or equal to 75 m^3 but less than 151 m^3 storing a liquid with a maximum true vapor pressure that is normally less than 27.6 kPa shall notify the Administrator within 30 days when the maximum true vapor pressure of the liquid exceeds the respective maximum true vapor vapor pressure values for each volume range.
(e) Available data on the storage temperature may be used to determine the maximum true vapor pressure as determined below.
(1) For vessels operated above or below ambient temperatures, the maximum true vapor pressure is calculated based upon the highest expected calendar-month average of the storage temperature. For vessels operated at ambient temperatures, the maximum true vapor pressure is calculated based upon the maximum local monthly average ambient temperature as reported by the National Weather Service.
(2) For crude oil or refined petroleum products the vapor pressure may be obtained by the following:
(i) Available data on the Reid vapor pressure and the maximum expected storage temperature based on the highest expected calendar-month average temperature of the stored product may be used to determine the maximum true vapor pressure from nomographs contained in API Bulletin 2517 (incorporated by reference—see §60.17), unless the Administrator specifically requests that the liquid be sampled, the actual storage temperature determined, and the Reid vapor pressure determined from the sample(s).
(ii) The true vapor pressure of each type of crude oil with a Reid vapor pressure less than 13.8 kPa or with physical properties that preclude determination by the recommended method is to be determined from available data and recorded if the estimated maximum true vapor pressure is greater than 3.5 kPa.
(3) For other liquids, the vapor pressure:
(i) May be obtained from standard reference texts, or
(ii) Determined by ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17); or
(iii) Measured by an appropriate method approved by the Administrator; or
(iv) Calculated by an appropriate method approved by the Administrator.
(f) The owner or operator of each vessel storing a waste mixture of indeterminate or variable composition shall be subject to the following requirements.
(1) Prior to the initial filling of the vessel, the highest maximum true vapor pressure for the range of anticipated liquid compositions to be stored will be determined using the methods described in paragraph (e) of this section.
(2) For vessels in which the vapor pressure of the anticipated liquid composition is above the cutoff for monitoring but below the cutoff for controls as defined in §60.112b(a), an initial physical test of the vapor pressure is required; and a physical test at least once every 6 months thereafter is required as determined by the following methods:
(i) ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17); or
(ii) ASTM D323–82 or 94 (incorporated by reference—see §60.17); or
(iii) As measured by an appropriate method as approved by the Administrator.
(g) The owner or operator of each vessel equipped with a closed vent system and control device meeting the specification of §60.112b or with emissions reductions equipment as specified in 40 CFR 65.42(b)(4), (b)(5), (b)(6), or (c) is exempt from the requirements of paragraphs (c) and (d) of this section.
[52 FR 11429, Apr. 8, 1987, as amended at 65 FR 61756, Oct. 17, 2000; 65 FR 78276, Dec. 14, 2000; 68 FR 59333, Oct. 15, 2003]

§ 60.117b Delegation of authority.

(a) In delegating implementation and enforcement authority to a State under section 111(c) of the Act, the authorities contained in paragraph (b) of this section shall be retained by the Administrator and not transferred to a State.

(b) Authorities which will not be delegated to States: §§60.111b(f)(4), 60.114b, 60.116b(e)(3)(iii), 60.116b(e)(3)(iv), and 60.116b(f)(2)(iii).

[52 FR 11429, Apr. 8, 1987, as amended at 52 FR 22780, June 16, 1987]

SECTION F.4 FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: NSPS Subpart VV for:

Fermentation Operation (EU-05), APV Column (EU-06), Beerwell (EU-07) and Alcohol Load-Out (EU-13)

(e) One (1) fermentation operation, identified as EU-05, installed in October 1982, exhausted through Stacks VT-005 through VT-019, VT-019a and BL-230, consisting of sixteen (16) fermenter agitators, identified as A-202 through A-215, A-220 and A-221, eight (8) fermenter coolers, identified as E-210 through E-217, sixteen (16) pumps, identified as P-202 through P-215, P-220, P-221 and P-231, sixteen (16) fermenters identified as T-202 through T-215, T-220 and T-221, one (1) blower, identified as BL-230, one (1) foam trap, identified as FT-230, one (1) CO_2 scrubber, identified as V-230 installed in 1984, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, one (1) scrubber pump, identified as P-230, one foam trap bleed pump, identified as P-231, capacity: 319,000 gallons per tank and 2,100 tank turnovers per year. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this operation are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(f) One (1) APV column, identified as EU-06, installed in May 1989, exhausted through Stack VT-020, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) stripper column, identified as V-2402, two (2) reflux pumps, identified as P-2404 A and P-2404 B, two (2) feed preheaters, identified as E-2410 and E-2412, one (1) stripper column reboiler, identified as E-2414, one (1) stripper column overhead condenser, identified as E-2416, one (1) stripper column reflux drum, identified as V-2404, and one (1) stripper column vent condenser, identified as E-2418, maximum capacity: 150 gallons of scrubber water per minute. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(g) One (1) beerwell, identified as EU-07, installed in December 1986, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) beerwell, identified as T-222, two (2) beerwell pumps, identified as P-222A and P-222B and two (2) beerwell agitators, identified as A-222A and A-222B, capacity: 1,750 gallons of beer per minute. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

Facility Description [326 IAC 2-7-5(15)]: NSPS Subpart VV for:

Fermentation Operation (EU-05), APV Column (EU-06), Beerwell (EU-07) and Alcohol Load-Out (EU-13)

(m) One (1) alcohol load-out operation, identified as EU-13, installed in October 1982, exhausted through Stack G-602, equipped with a load-out natural gas-fired flare, identified as G-602, rated at 0.100 million British thermal units per hour, two (2) bottom transfer loading arms, identified as G-604 and G-607, two (2) bottom transfer vapor recovery arms, identified as G-605 and G-608, two

(2) truck/rail vapor recovery loading arms, identified as G-603 and G-606, two (2) product filters, identified as F-660 and F-661, and two (2) fuel grade alcohol load-out pumps, identified as P-610 and P-611, capacity: 72,000 gallons of ethanol per hour. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(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)]

F.4.1 General Provisions Relating to NSPS VV [326 IAC 12-1] [40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.480, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the fermentation operation, identified as EU-05, the APV column, identified as EU-06, the beerwell, identified as EU-07, and alcohol load-out operation, identified as EU-13, described in this section except when otherwise specified in 40 CFR 60.480 through 60.489 Subpart VV.

(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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

F.4.2 New Source Performance Standards for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry Requirements [40 CFR Part 60, Subpart VV] [326 IAC 12-1]

Pursuant to 40 CFR Part 60, Subpart VV, the Permittee shall comply with the provisions of 40 CFR Part 60.480, which are incorporated by reference as 326 IAC 12-1 for the fermentation operation, identified as EU-05, the APV column, identified as EU-06, the beerwell, identified as EU-07 and alcohol load-out operation, identified as EU-13, as specified as follows:

NSPS Subpart VV—Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry

§ 60.480 Applicability and designation of affected facility.

(a)(1) The provisions of this subpart apply to affected facilities in the synthetic organic chemicals manufacturing industry.
(2) The group of all equipment (defined in §60.481) within a process unit is an affected facility.
(b) Any affected facility under paragraph (a) of this section that commences construction or modification after January 5, 1981, shall be subject to the requirements of this subpart.
(c) Addition or replacement of equipment for the purpose of process improvement which is accomplished without a capital expenditure shall not by itself be considered a modification under this subpart.
(e) *Alternative means of compliance* —(1) *Option to comply with part 65.* Owners or operators may choose to comply with the provisions of 40 CFR part 65, subpart F, to satisfy the requirements of §§60.482 through 60.487 for an affected facility. When choosing to comply with 40 CFR part 65, subpart F, the requirements of §60.485(d), (e), and (f), and §60.486(i) and (j) still apply. Other provisions applying to an owner or operator who chooses to comply with 40 CFR part 65 are provided in 40 CFR 65.1.
(2) *Part 60, subpart A.* Owners or operators who choose to comply with 40 CFR part 65, subpart F must also comply with §§60.1, 60.2, 60.5, 60.6, 60.7(a)(1) and (4), 60.14, 60.15, and 60.16 for that equipment.

All sections and paragraphs of subpart A of this part that are not mentioned in this paragraph (e)(2) do not apply to owners or operators of equipment subject to this subpart complying with 40 CFR part 65, subpart F, except that provisions required to be met prior to implementing 40 CFR part 65 still apply. Owners and operators who choose to comply with 40 CFR part 65, subpart F, must comply with 40 CFR part 65, subpart A.
[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22607, May 30, 1984; 65 FR 61762, Oct. 17, 2000; 65 FR 78276, Dec. 14, 2000]

§ 60.481 Definitions.

As used in this subpart, all terms not defined herein shall have the meaning given them in the Act or in subpart A of part 60, and the following terms shall have the specific meanings given them.
Capital expenditure means, in addition to the definition in 40 CFR 60.2, an expenditure for a physical or operational change to an existing facility that:
(a) Exceeds P, the product of the facility's replacement cost, R, and an adjusted annual asset guideline repair allowance, A, as reflected by the following equation: $P = R \times A$, where
(1) The adjusted annual asset guideline repair allowance, A, is the product of the percent of the replacement cost, Y, and the applicable basic annual asset guideline repair allowance, B, divided by 100 as reflected by the following equation:

$A = Y \times (B \div 100)$;

(2) The percent Y is determined from the following equation: $Y = 1.0 - 0.575 \log X$, where X is 1982 minus the year of construction; and
(3) The applicable basic annual asset guideline repair allowance, B, is selected from the following table consistent with the applicable subpart:

Table for Determining Applicable for B

Subpart applicable to facility	Value of B to be used in equation
VV	12.5
DDD	12.5
GGG	7.0
KKK	4.5

Closed vent system means a system that is not open to the atmosphere and that is composed of hard-piping, ductwork, connections, and, if necessary, flow-inducing devices that transport gas or vapor from a piece or pieces of equipment to a control device or back to a process.
Connector means flanged, screwed, welded, or other joined fittings used to connect two pipe lines or a pipe line and a piece of process equipment.
Control device means an enclosed combustion device, vapor recovery system, or flare.
Distance piece means an open or enclosed casing through which the piston rod travels, separating the compressor cylinder from the crankcase.
Double block and bleed system means two block valves connected in series with a bleed valve or line that can vent the line between the two block valves.
Duct work means a conveyance system such as those commonly used for heating and ventilation systems. It is often made of sheet metal and often has sections connected by screws or crimping. Hard-piping is not ductwork.
Equipment means each pump, compressor, pressure relief device, sampling connection system, open-ended valve or line, valve, and flange or other connector in VOC service and any devices or systems required by this subpart.
First attempt at repair means to take rapid action for the purpose of stopping or reducing leakage of organic material to atmosphere using best practices.
Fuel gas means gases that are combusted to derive useful work or heat.
Fuel gas system means the offsite and onsite piping and flow and pressure control system that gathers gaseous stream(s) generated by onsite operations, may blend them with other sources of gas, and transports the gaseous stream for use as fuel gas in combustion devices or in-process combustion equipment, such as furnaces and gas turbines, either singly or in combination.

Hard-piping means pipe or tubing that is manufactured and properly installed using good engineering judgement and standards such as ASME B31.3, Process Piping (available from the American Society of Mechanical Engineers, PO Box 2900, Fairfield, NJ 07007–2900).
In gas/vapor service means that the piece of equipment contains process fluid that is in the gaseous state at operating conditions.
In heavy liquid service means that the piece of equipment is not in gas/vapor service or in light liquid service.
In light liquid service means that the piece of equipment contains a liquid that meets the conditions specified in §60.485(e).
In-situ sampling systems means nonextractive samplers or in-line samplers.
In vacuum service means that equipment is operating at an internal pressure which is at least 5 kilopascals (kPa)(0.7 psia) below ambient pressure.
In VOC service means that the piece of equipment contains or contacts a process fluid that is at least 10 percent VOC by weight. (The provisions of §60.485(d) specify how to determine that a piece of equipment is not in VOC service.)
Liquids dripping means any visible leakage from the seal including spraying, misting, clouding, and ice formation.
Open-ended valve or line means any valve, except safety relief valves, having one side of the valve seat in contact with process fluid and one side open to the atmosphere, either directly or through open piping.
Pressure release means the emission of materials resulting from system pressure being greater than set pressure of the pressure relief device.
Process improvement means routine changes made for safety and occupational health requirements, for energy savings, for better utility, for ease of maintenance and operation, for correction of design deficiencies, for bottleneck removal, for changing product requirements, or for environmental control.
Process unit means components assembled to produce, as intermediate or final products, one or more of the chemicals listed in §60.489 of this part. A process unit can operate independently if supplied with sufficient feed or raw materials and sufficient storage facilities for the product.
Process unit shutdown means a work practice or operational procedure that stops production from a process unit or part of a process unit. An unscheduled work practice or operational procedure that stops production from a process unit or part of a process unit for less than 24 hours is not a process unit shutdown. The use of spare equipment and technically feasible bypassing of equipment without stopping production are not process unit shutdowns.
Quarter means a 3-month period; the first quarter concludes on the last day of the last full month during the 180 days following initial startup.
Repaired means that equipment is adjusted, or otherwise altered, in order to eliminate a leak as indicated by one of the following: an instrument reading of 10,000 ppm or greater, indication of liquids dripping, or indication by a sensor that a seal or barrier fluid system has failed.
Replacement cost means the capital needed to purchase all the depreciable components in a facility.
Sampling connection system means an assembly of equipment within a process unit used during periods of representative operation to take samples of the process fluid. Equipment used to take nonroutine grab samples is not considered a sampling connection system.
Sensor means a device that measures a physical quantity or the change in a physical quantity such as temperature, pressure, flow rate, pH, or liquid level.
Synthetic organic chemicals manufacturing industry means the industry that produces, as intermediates or final products, one or more of the chemicals listed in §60.489.
Volatile organic compounds or VOC means, for the purposes of this subpart, any reactive organic compounds as defined in §60.2 Definitions.
[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22607, May 30, 1984; 49 FR 26738, June 29, 1984; 60 FR 43258, Aug. 18, 1995; 65 FR 61762, Oct. 17, 2000; 65 FR 78276, Dec. 14, 2000]

§ 60.482-1 Standards: General.

(a) Each owner or operator subject to the provisions of this subpart shall demonstrate compliance with the requirements of §§60.482–1 through 60.482–10 or §60.480(e) for all equipment within 180 days of initial startup.
(b) Compliance with §§60.482–1 to 60.482–10 will be determined by review of records and reports, review of performance test results, and inspection using the methods and procedures specified in §60.485.
(c)(1) An owner or operator may request a determination of equivalence of a means of emission limitation

to the requirements of §§60.482–2, 60.482–3, 60.482–5, 60.482–6, 60.482–7, 60.482–8, and 60.482–10 as provided in §60.484.
(2) If the Administrator makes a determination that a means of emission limitation is at least equivalent to the requirements of §§60.482–2, 60.482–3, 60.482–5, 60.482–6, 60.482–7, 60.482–8, or 60.482–10, an owner or operator shall comply with the requirements of that determination.
(d) Equipment that is in vacuum service is excluded from the requirements of §§60.482–2 to 60.482–10 if it is identified as required in §60.486(e)(5).
[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22608, May 30, 1984; 65 FR 78276, Dec. 14, 2000]

§ 60.482-2 Standards: Pumps in light liquid service.

(a)(1) Each pump in light liquid service shall be monitored monthly to detect leaks by the methods specified in §60.485(b), except as provided in §60.482–1(c) and paragraphs (d), (e), and (f) of this section.
(2) Each pump in light liquid service shall be checked by visual inspection each calendar week for indications of liquids dripping from the pump seal.
(b)(1) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
(2) If there are indications of liquids dripping from the pump seal, a leak is detected.
(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.
(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
(d) Each pump equipped with a dual mechanical seal system that includes a barrier fluid system is exempt from the requirements of paragraph (a), *Provided* the following requirements are met:
(1) Each dual mechanical seal system is—
(i) Operated with the barrier fluid at a pressure that is at all times greater than the pump stuffing box pressure; or
(ii) Equipment with a barrier fluid degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of §60.482–10; or
(iii) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.
(2) The barrier fluid system is in heavy liquid service or is not in VOC service.
(3) Each barrier fluid system is equipped with a sensor that will detect failure of the seal system, the barrier fluid system, or both.
(4) Each pump is checked by visual inspection, each calendar week, for indications of liquids dripping from the pump seals.
(5)(i) Each sensor as described in paragraph (d)(3) is checked daily or is equipped with an audible alarm, and
(ii) The owner or operator determines, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
(6)(i) If there are indications of liquids dripping from the pump seal or the sensor indicates failure of the seal system, the barrier fluid system, or both based on the criterion determined in paragraph (d)(5)(ii), a leak is detected.
(ii) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.
(iii) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
(e) Any pump that is designated, as described in §60.486(e)(1) and (2), for no detectable emission, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a), (c), and (d) of this section if the pump:
(1) Has no externally actuated shaft penetrating the pump housing,
(2) Is demonstrated to be operating with no detectable emissions as indicated by an instrument reading of less than 500 ppm above background as measured by the methods specified in §60.485(c), and
(3) Is tested for compliance with paragraph (e)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.
(f) If any pump is equipped with a closed vent system capable of capturing and transporting any leakage from the seal or seals to a process or to a fuel gas system or to a control device that complies with the requirements of §60.482–10, it is exempt from paragraphs (a) through (e) of this section.
(g) Any pump that is designated, as described in §60.486(f)(1), as an unsafe-to-monitor pump is exempt from the monitoring and inspection requirements of paragraphs (a) and (d)(4) through (6) of this section if:

(1) The owner or operator of the pump demonstrates that the pump is unsafe-to-monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a) of this section; and
(2) The owner or operator of the pump has a written plan that requires monitoring of the pump as frequently as practicable during safe-to-monitor times but not more frequently than the periodic monitoring schedule otherwise applicable, and repair of the equipment according to the procedures in paragraph (c) of this section if a leak is detected.
(h) Any pump that is located within the boundary of an unmanned plant site is exempt from the weekly visual inspection requirement of paragraphs (a)(2) and (d)(4) of this section, and the daily requirements of paragraph (d)(5) of this section, provided that each pump is visually inspected as often as practicable and at least monthly.
[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78276, Dec. 14, 2000]

§ 60.482-3 Standards: Compressors.

(a) Each compressor shall be equipped with a seal system that includes a barrier fluid system and that prevents leakage of VOC to the atmosphere, except as provided in §60.482–1(c) and paragraph (h) and (i) of this section.
(b) Each compressor seal system as required in paragraph (a) shall be:
(1) Operated with the barrier fluid at a pressure that is greater than the compressor stuffing box pressure; or
(2) Equipped with a barrier fluid system degassing reservoir that is routed to a process or fuel gas system or connected by a closed vent system to a control device that complies with the requirements of §60.482–10; or
(3) Equipped with a system that purges the barrier fluid into a process stream with zero VOC emissions to the atmosphere.
(c) The barrier fluid system shall be in heavy liquid service or shall not be in VOC service.
(d) Each barrier fluid system as described in paragraph (a) shall be equipped with a sensor that will detect failure of the seal system, barrier fluid system, or both.
(e)(1) Each sensor as required in paragraph (d) shall be checked daily or shall be equipped with an audible alarm.
(2) The owner or operator shall determine, based on design considerations and operating experience, a criterion that indicates failure of the seal system, the barrier fluid system, or both.
(f) If the sensor indicates failure of the seal system, the barrier system, or both based on the criterion determined under paragraph (e)(2), a leak is detected.
(g)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.
(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
(h) A compressor is exempt from the requirements of paragraphs (a) and (b) of this section, if it is equipped with a closed vent system to capture and transport leakage from the compressor drive shaft back to a process or fuel gas system or to a control device that complies with the requirements of §60.482–10, except as provided in paragraph (i) of this section.
(i) Any compressor that is designated, as described in §60.486(e) (1) and (2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraphs (a)–(h) if the compressor:
(1) Is demonstrated to be operating with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as measured by the methods specified in §60.485(c); and
(2) Is tested for compliance with paragraph (i)(1) of this section initially upon designation, annually, and at other times requested by the Administrator.
(j) Any existing reciprocating compressor in a process unit which becomes an affected facility under provisions of §60.14 or §60.15 is exempt from §60.482(a), (b), (c), (d), (e), and (h), provided the owner or operator demonstrates that recasting the distance piece or replacing the compressor are the only options available to bring the compressor into compliance with the provisions of paragraphs (a) through (e) and (h) of this section.
[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78277, Dec. 14, 2000]

§ 60.482-4 Standards: Pressure relief devices in gas/vapor service.

(a) Except during pressure releases, each pressure relief device in gas/vapor service shall be operated with no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as determined by the methods specified in §60.485(c).
(b)(1) After each pressure release, the pressure relief device shall be returned to a condition of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, as soon as practicable, but no later than 5 calendar days after the pressure release, except as provided in §60.482–9.
(2) No later than 5 calendar days after the pressure release, the pressure relief device shall be monitored to confirm the conditions of no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, by the methods specified in §60.485(c).
(c) Any pressure relief device that is routed to a process or fuel gas system or equipped with a closed vent system capable of capturing and transporting leakage through the pressure relief device to a control device as described in §60.482–10 is exempted from the requirements of paragraphs (a) and (b) of this section.
(d)(1) Any pressure relief device that is equipped with a rupture disk upstream of the pressure relief device is exempt from the requirements of paragraphs (a) and (b) of this section, provided the owner or operator complies with the requirements in paragraph (d)(2) of this section.
(2) After each pressure release, a new rupture disk shall be installed upstream of the pressure relief device as soon as practicable, but no later than 5 calendar days after each pressure release, except as provided in §60.482–9.
[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78277, Dec. 14, 2000]

§ 60.482-5 Standards: Sampling connection systems.

(a) Each sampling connection system shall be equipped with a closed-purged, closed-loop, or closed-vent system, except as provided in §60.482–1(c). Gases displaced during filling of the sample container are not required to be collected or captured.
(b) Each closed-purge, closed-loop, or closed-vent system as required in paragraph (a) of this section shall comply with the requirements specified in paragraphs (b)(1) through (4) of this section:
(1) Return the purged process fluid directly to the process line; or
(2) Collect and recycle the purged process fluid to a process; or
(3) Be designed and operated to capture and transport all the purged process fluid to a control device that complies with the requirements of §60.482–10; or
(4) Collect, store, and transport the purged process fluid to any of the following systems or facilities:
(i) A waste management unit as defined in 40 CFR 63.111, if the waste management unit is subject to, and operated in compliance with the provisions of 40 CFR part 63, subpart G, applicable to Group 1 wastewater streams;
(ii) A treatment, storage, or disposal facility subject to regulation under 40 CFR part 262, 264, 265, or 266; or
(iii) A facility permitted, licensed, or registered by a State to manage municipal or industrial solid waste, if the process fluids are not hazardous waste as defined in 40 CFR part 261.
(c) In situ sampling systems and sampling systems without purges are exempt from the requirements of paragraphs (a) and (b) of this section.
[60 FR 43258, Aug. 18, 1995, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78277, Dec. 14, 2000]

§ 60.482-6 Standards: Open-ended valves or lines.

(a)(1) Each open-ended valve or line shall be equipped with a cap, blind flange, plug, or a second valve, except as provided in §60.482–1(c).
(2) The cap, blind flange, plug, or second valve shall seal the open end at all times except during operations requiring process fluid flow through the open-ended valve or line.
(b) Each open-ended valve or line equipped with a second valve shall be operated in a manner such that the valve on the process fluid end is closed before the second valve is closed.
(c) When a double block-and-bleed system is being used, the bleed valve or line may remain open during operations that require venting the line between the block valves but shall comply with paragraph (a) at all other times.
(d) Open-ended valves or lines in an emergency shutdown system which are designed to open automatically in the event of a process upset are exempt from the requirements of paragraphs (a), (b) and (c) of this

section.
(e) Open-ended valves or lines containing materials which would autocatalytically polymerize or would present an explosion, serious overpressure, or other safety hazard if capped or equipped with a double block and bleed system as specified in paragraphs (a) through (c) of this section are exempt from the requirements of paragraphs (a) through (c) of this section.
[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22607, May 30, 1984; 65 FR 78277, Dec. 14, 2000]

§ 60.482-7 Standards: Valves in gas/vapor service and in light liquid service.

(a) Each valve shall be monitored monthly to detect leaks by the methods specified in §60.485(b) and shall comply with paragraphs (b) through (e), except as provided in paragraphs (f), (g), and (h), §60.483–1, 2, and §60.482–1(c).
(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
(c)(1) Any valve for which a leak is not detected for 2 successive months may be monitored the first month of every quarter, beginning with the next quarter, until a leak is detected.
(2) If a leak is detected, the valve shall be monitored monthly until a leak is not detected for 2 successive months.
(d)(1) When a leak is detected, it shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected, except as provided in §60.482–9.
(2) A first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
(e) First attempts at repair include, but are not limited to, the following best practices where practicable:
(1) Tightening of bonnet bolts;
(2) Replacement of bonnet bolts;
(3) Tightening of packing gland nuts;
(4) Injection of lubricant into lubricated packing.
(f) Any valve that is designated, as described in §60.486(e)(2), for no detectable emissions, as indicated by an instrument reading of less than 500 ppm above background, is exempt from the requirements of paragraph (a) if the valve:
(1) Has no external actuating mechanism in contact with the process fluid,
(2) Is operated with emissions less than 500 ppm above background as determined by the method specified in §60.485(c), and
(3) Is tested for compliance with paragraph (f)(2) of this section initially upon designation, annually, and at other times requested by the Administrator.
(g) Any valve that is designated, as described in §60.486(f)(1), as an unsafe-to-monitor valve is exempt from the requirements of paragraph (a) if:
(1) The owner or operator of the valve demonstrates that the valve is unsafe to monitor because monitoring personnel would be exposed to an immediate danger as a consequence of complying with paragraph (a), and
(2) The owner or operator of the valve adheres to a written plan that requires monitoring of the valve as frequently as practicable during safe-to-monitor times.
(h) Any valve that is designated, as described in §60.486(f)(2), as a difficult-to-monitor valve is exempt from the requirements of paragraph (a) if:
(1) The owner or operator of the valve demonstrates that the valve cannot be monitored without elevating the monitoring personnel more than 2 meters above a support surface.
(2) The process unit within which the valve is located either becomes an affected facility through §60.14 or §60.15 or the owner or operator designates less than 3.0 percent of the total number of valves as difficult-to-monitor, and
(3) The owner or operator of the valve follows a written plan that requires monitoring of the valve at least once per calendar year.
[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22608, May 30, 1984; 65 FR 61762, Oct. 17, 2000]

§ 60.482-8 Standards: Pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors.

(a) If evidence of a potential leak is found by visual, audible, olfactory, or any other detection method at pumps and valves in heavy liquid service, pressure relief devices in light liquid or heavy liquid service, and connectors, the owner or operator shall follow either one of the following procedures:
(1) The owner or operator shall monitor the equipment within 5 days by the method specified in §60.485(b) and shall comply with the requirements of paragraphs (b) through (d) of this section.

(2) The owner or operator shall eliminate the visual, audible, olfactory, or other indication of a potential leak.
(b) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
(c)(1) When a leak is detected, it shall be repaired as soon as practicable, but not later than 15 calendar days after it is detected, except as provided in §60.482–9.
(2) The first attempt at repair shall be made no later than 5 calendar days after each leak is detected.
(d) First attempts at repair include, but are not limited to, the best practices described under §60.482–7(e).
[48 CFR 48335, Oct. 18, 1983, as amended at 65 FR 78277, Dec. 14, 2000]

§ 60.482-9 Standards: Delay of repair.

(a) Delay of repair of equipment for which leaks have been detected will be allowed if repair within 15 days is technically infeasible without a process unit shutdown. Repair of this equipment shall occur before the end of the next process unit shutdown.
(b) Delay of repair of equipment will be allowed for equipment which is isolated from the process and which does not remain in VOC service.
(c) Delay of repair for valves will be allowed if:
(1) The owner or operator demonstrates that emissions of purged material resulting from immediate repair are greater than the fugitive emissions likely to result from delay of repair, and
(2) When repair procedures are effected, the purged material is collected and destroyed or recovered in a control device complying with §60.482–10.
(d) Delay of repair for pumps will be allowed if:
(1) Repair requires the use of a dual mechanical seal system that includes a barrier fluid system, and
(2) Repair is completed as soon as practicable, but not later than 6 months after the leak was detected.
(e) Delay of repair beyond a process unit shutdown will be allowed for a valve, if valve assembly replacement is necessary during the process unit shutdown, valve assembly supplies have been depleted, and valve assembly supplies had been sufficiently stocked before the supplies were depleted. Delay of repair beyond the next process unit shutdown will not be allowed unless the next process unit shutdown occurs sooner than 6 months after the first process unit shutdown.
[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 78277, Dec. 14, 2000]

§ 60.482-10 Standards: Closed vent systems and control devices.

(a) Owners or operators of closed vent systems and control devices used to comply with provisions of this subpart shall comply with the provisions of this section.
(b) Vapor recovery systems (for example, condensers and absorbers) shall be designed and operated to recover the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, whichever is less stringent.
(c) Enclosed combustion devices shall be designed and operated to reduce the VOC emissions vented to them with an efficiency of 95 percent or greater, or to an exit concentration of 20 parts per million by volume, on a dry basis, corrected to 3 percent oxygen, whichever is less stringent or to provide a minimum residence time of 0.75 seconds at a minimum temperature of 816 °C.
(d) Flares used to comply with this subpart shall comply with the requirements of §60.18.
(e) Owners or operators of control devices used to comply with the provisions of this subpart shall monitor these control devices to ensure that they are operated and maintained in conformance with their designs.
(f) Except as provided in paragraphs (i) through (k) of this section, each closed vent system shall be inspected according to the procedures and schedule specified in paragraphs (f)(1) and (f)(2) of this section.
(1) If the vapor collection system or closed vent system is constructed of hard-piping, the owner or operator shall comply with the requirements specified in paragraphs (f)(1)(i) and (f)(1)(ii) of this section:
(i) Conduct an initial inspection according to the procedures in §60.485(b); and
(ii) Conduct annual visual inspections for visible, audible, or olfactory indications of leaks.
(2) If the vapor collection system or closed vent system is constructed of ductwork, the owner or operator shall:
(i) Conduct an initial inspection according to the procedures in §60.485(b); and
(ii) Conduct annual inspections according to the procedures in §60.485(b).
(g) Leaks, as indicated by an instrument reading greater than 500 parts per million by volume above background or by visual inspections, shall be repaired as soon as practicable except as provided in paragraph (h) of this section.

(1) A first attempt at repair shall be made no later than 5 calendar days after the leak is detected.
(2) Repair shall be completed no later than 15 calendar days after the leak is detected.
(h) Delay of repair of a closed vent system for which leaks have been detected is allowed if the repair is technically infeasible without a process unit shutdown or if the owner or operator determines that emissions resulting from immediate repair would be greater than the fugitive emissions likely to result from delay of repair. Repair of such equipment shall be complete by the end of the next process unit shutdown.
(i) If a vapor collection system or closed vent system is operated under a vacuum, it is exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section.
(j) Any parts of the closed vent system that are designated, as described in paragraph (l)(1) of this section, as unsafe to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (j)(1) and (j)(2) of this section:
(1) The owner or operator determines that the equipment is unsafe to inspect because inspecting personnel would be exposed to an imminent or potential danger as a consequence of complying with paragraphs (f)(1)(i) or (f)(2) of this section; and
(2) The owner or operator has a written plan that requires inspection of the equipment as frequently as practicable during safe-to-inspect times.
(k) Any parts of the closed vent system that are designated, as described in paragraph (l)(2) of this section, as difficult to inspect are exempt from the inspection requirements of paragraphs (f)(1)(i) and (f)(2) of this section if they comply with the requirements specified in paragraphs (k)(1) through (k)(3) of this section:
(1) The owner or operator determines that the equipment cannot be inspected without elevating the inspecting personnel more than 2 meters above a support surface; and
(2) The process unit within which the closed vent system is located becomes an affected facility through §§60.14 or 60.15, or the owner or operator designates less than 3.0 percent of the total number of closed vent system equipment as difficult to inspect; and
(3) The owner or operator has a written plan that requires inspection of the equipment at least once every 5 years. A closed vent system is exempt from inspection if it is operated under a vacuum.
(l) The owner or operator shall record the information specified in paragraphs (l)(1) through (l)(5) of this section.
(1) Identification of all parts of the closed vent system that are designated as unsafe to inspect, an explanation of why the equipment is unsafe to inspect, and the plan for inspecting the equipment.
(2) Identification of all parts of the closed vent system that are designated as difficult to inspect, an explanation of why the equipment is difficult to inspect, and the plan for inspecting the equipment.
(3) For each inspection during which a leak is detected, a record of the information specified in §60.486(c).
(4) For each inspection conducted in accordance with §60.485(b) during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
(5) For each visual inspection conducted in accordance with paragraph (f)(1)(ii) of this section during which no leaks are detected, a record that the inspection was performed, the date of the inspection, and a statement that no leaks were detected.
(m) Closed vent systems and control devices used to comply with provisions of this subpart shall be operated at all times when emissions may be vented to them.
[48 FR 48335, Oct. 18, 1983, as amended at 51 FR 2702, Jan. 21, 1986; 60 FR 43258, Aug. 18, 1995; 61 FR 29878, June 12, 1996; 65 FR 78277, Dec. 14, 2000]

§ 60.483-1 Alternative standards for valves—allowable percentage of valves leaking.

(a) An owner or operator may elect to comply with an allowable percentage of valves leaking of equal to or less than 2.0 percent.
(b) The following requirements shall be met if an owner or operator wishes to comply with an allowable percentage of valves leaking:
(1) An owner or operator must notify the Administrator that the owner or operator has elected to comply with the allowable percentage of valves leaking before implementing this alternative standard, as specified in §60.487(d).
(2) A performance test as specified in paragraph (c) of this section shall be conducted initially upon designation, annually, and at other times requested by the Administrator.
(3) If a valve leak is detected, it shall be repaired in accordance with §60.482–7(d) and (e).

(c) Performance tests shall be conducted in the following manner:
(1) All valves in gas/vapor and light liquid service within the affected facility shall be monitored within 1 week by the methods specified in §60.485(b).
(2) If an instrument reading of 10,000 ppm or greater is measured, a leak is detected.
(3) The leak percentage shall be determined by dividing the number of valves for which leaks are detected by the number of valves in gas/vapor and light liquid service within the affected facility.
(d) Owners and operators who elect to comply with this alternative standard shall not have an affected facility with a leak percentage greater than 2.0 percent.
[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78278, Dec. 14, 2000]

§ 60.483-2 Alternative standards for valves—skip period leak detection and repair.

(a)(1) An owner or operator may elect to comply with one of the alternative work practices specified in paragraphs (b)(2) and (3) of this section.
(2) An owner or operator must notify the Administrator before implementing one of the alternative work practices, as specified in §60.487(d).
(b)(1) An owner or operator shall comply initially with the requirements for valves in gas/vapor service and valves in light liquid service, as described in §60.482–7.
(2) After 2 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 1 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
(3) After 5 consecutive quarterly leak detection periods with the percent of valves leaking equal to or less than 2.0, an owner or operator may begin to skip 3 of the quarterly leak detection periods for the valves in gas/vapor and light liquid service.
(4) If the percent of valves leaking is greater than 2.0, the owner or operator shall comply with the requirements as described in §60.482–7 but can again elect to use this section.
(5) The percent of valves leaking shall be determined by dividing the sum of valves found leaking during current monitoring and valves for which repair has been delayed by the total number of valves subject to the requirements of this section.
(6) An owner or operator must keep a record of the percent of valves found leaking during each leak detection period.
[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000; 65 FR 78278, Dec. 14, 2000]

§ 60.484 Equivalence of means of emission limitation.

(a) Each owner or operator subject to the provisions of this subpart may apply to the Administrator for determination of equivalance for any means of emission limitation that achieves a reduction in emissions of VOC at least equivalent to the reduction in emissions of VOC achieved by the controls required in this subpart.
(b) Determination of equivalence to the equipment, design, and operational requirements of this subpart will be evaluated by the following guidelines:
(1) Each owner or operator applying for an equivalence determination shall be responsible for collecting and verifying test data to demonstrate equivalence of means of emission limitation.
(2) The Administrator will compare test data for the means of emission limitation to test data for the equipment, design, and operational requirements.
(3) The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the equipment, design, and operational requirements.
(c) Determination of equivalence to the required work practices in this subpart will be evaluated by the following guidelines:
(1) Each owner or operator applying for a determination of equivalence shall be responsible for collecting and verifying test data to demonstrate equivalence of an equivalent means of emission limitation.
(2) For each affected facility for which a determination of equivalence is requested, the emission reduction achieved by the required work practice shall be demonstrated.
(3) For each affected facility, for which a determination of equivalence is requested, the emission reduction achieved by the equivalent means of emission limitation shall be demonstrated.
(4) Each owner or operator applying for a determination of equivalence shall commit in writing to work practice(s) that provide for emission reductions equal to or greater than the emission reductions achieved by the required work practice.

(5) The Administrator will compare the demonstrated emission reduction for the equivalent means of emission limitation to the demonstrated emission reduction for the required work practices and will consider the commitment in paragraph (c)(4).
(6) The Administrator may condition the approval of equivalence on requirements that may be necessary to assure operation and maintenance to achieve the same emission reduction as the required work practice.
(d) An owner or operator may offer a unique approach to demonstrate the equivalence of any equivalent means of emission limitation.
(e)(1) After a request for determination of equivalence is received, the Administrator will publish a notice in the Federal Register and provide the opportunity for public hearing if the Administrator judges that the request may be approved.
(2) After notice and opportunity for public hearing, the Administrator will determine the equivalence of a means of emission limitation and will publish the determination in the Federal Register.
(3) Any equivalent means of emission limitations approved under this section shall constitute a required work practice, equipment, design, or operational standard within the meaning of section 111(h)(1) of the Clean Air Act.
(f)(1) Manufacturers of equipment used to control equipment leaks of VOC may apply to the Administrator for determination of equivalence for any equivalent means of emission limitation that achieves a reduction in emissions of VOC achieved by the equipment, design, and operational requirements of this subpart.
(2) The Administrator will make an equivalence determination according to the provisions of paragraphs (b), (c), (d), and (e) of this section.
[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61762, Oct. 17, 2000]

§ 60.485 Test methods and procedures.

(a) In conducting the performance tests required in §60.8, the owner or operator shall use as reference methods and procedures the test methods in appendix A of this part or other methods and procedures as specified in this section, except as provided in §60.8(b).
(b) The owner or operator shall determine compliance with the standards in §§60.482, 60.483, and 60.484 as follows:
(1) Method 21 shall be used to determine the presence of leaking sources. The instrument shall be calibrated before use each day of its use by the procedures specified in Method 21. The following calibration gases shall be used:
(i) Zero air (less than 10 ppm of hydrocarbon in air); and
(ii) A mixture of methane or n-hexane and air at a concentration of about, but less than, 10,000 ppm methane or n-hexane.
(c) The owner or operator shall determine compliance with the no detectable emission standards in §§60.482–2(e), 60.482–3(i), 60.482–4, 60.482–7(f), and 60.482–10(e) as follows:
(1) The requirements of paragraph (b) shall apply.
(2) Method 21 shall be used to determine the background level. All potential leak interfaces shall be traversed as close to the interface as possible. The arithmetic difference between the maximum concentration indicated by the instrument and the background level is compared with 500 ppm for determining compliance.
(d) The owner or operator shall test each piece of equipment unless he demonstrates that a process unit is not in VOC service, i.e., that the VOC content would never be reasonably expected to exceed 10 percent by weight. For purposes of this demonstration, the following methods and procedures shall be used:
(1) Procedures that conform to the general methods in ASTM E260–73, 91, or 96, E168–67, 77, or 92, E169–63, 77, or 93 (incorporated by reference—see §60.17) shall be used to determine the percent VOC content in the process fluid that is contained in or contacts a piece of equipment.
(2) Organic compounds that are considered by the Administrator to have negligible photochemical reactivity may be excluded from the total quantity of organic compounds in determining the VOC content of the process fluid.
(3) Engineering judgment may be used to estimate the VOC content, if a piece of equipment had not been shown previously to be in service. If the Administrator disagrees with the judgment, paragraphs (d) (1) and (2) of this section shall be used to resolve the disagreement.
(e) The owner or operator shall demonstrate that an equipment is in light liquid service by showing that all the following conditions apply:

(1) The vapor pressure of one or more of the components is greater than 0.3 kPa at 20 °C (1.2 in. H_2O at 68 °F). Standard reference texts or ASTM D2879–83, 96, or 97 (incorporated by reference—see §60.17) shall be used to determine the vapor pressures.
(2) The total concentration of the pure components having a vapor pressure greater than 0.3 kPa at 20 °C (1.2 in. H_2O at 68 °F) is equal to or greater than 20 percent by weight.
(3) The fluid is a liquid at operating conditions.
(f) Samples used in conjunction with paragraphs (d), (e), and (g) of this section shall be representative of the process fluid that is contained in or contacts the equipment or the gas being combusted in the flare.
(g) The owner or operator shall determine compliance with the standards of flares as follows:
(1) Method 22 shall be used to determine visible emissions.
(2) A thermocouple or any other equivalent device shall be used to monitor the presence of a pilot flame in the flare.
(3) The maximum permitted velocity for air assisted flares shall be computed using the following equation:

$$V_{max} = K_1 + K_2 H_T$$

Where:
V_{max}= Maximum 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 (HT) of the gas being combusted in a flare shall be computed using the following equation:

$$H_T = K \sum_{i=1}^{n} C_i H_i$$

Where:
K = Conversion constant, 1.740 × 10^7 (g-mole)(MJ)/ (ppm-scm-kcal) (metric units)
= 4.674 × 10^8 [(g-mole)(Btu)/(ppm-scf-kcal)] (English units)
C_i= Concentration of sample component "i," ppm
H_i= net heat of combustion of sample component "i" at 25 °C and 760 mm Hg (77 °F and 14.7 psi), kcal/g-mole
(5) Method 18 and ASTM D2504–67, 77, or 88 (Reapproved 1993) (incorporated by reference—see §60.17) shall be used to determine the concentration of sample component "i."
(6) ASTM D2382–76 or 88 or D4809–95 (incorporated by reference—see §60.17) shall be used to determine the net heat of combustion of component "i" if published values are not available or cannot be calculated.
(7) Method 2, 2A, 2C, or 2D, as appropriate, shall be used to determine the actual exit velocity of a flare. If needed, the unobstructed (free) cross-sectional area of the flare tip shall be used.
[54 FR 6678, Feb. 14, 1989, as amended at 54 FR 27016, June 27, 1989; 65 FR 61763, Oct. 17, 2000]

§ 60.486 Recordkeeping requirements.

(a)(1) Each owner or operator subject to the provisions of this subpart shall comply with the recordkeeping requirements of this section.
(2) An owner or operator of more than one affected facility subject to the provisions of this subpart may comply with the recordkeeping requirements for these facilities in one recordkeeping system if the system identifies each record by each facility.
(b) When each leak is detected as specified in §§60.482–2, 60.482–3, 60.482–7, 60.482–8, and 60.483–2, the following requirements apply:
(1) A weatherproof and readily visible identification, marked with the equipment identification number, shall be attached to the leaking equipment.
(2) The identification on a valve may be removed after it has been monitored for 2 successive months as specified in §60.482–7(c) and no leak has been detected during those 2 months.
(3) The identification on equipment except on a valve, may be removed after it has been repaired.

(c) When each leak is detected as specified in §§60.482–2, 60.482–3, 60.482–7, 60.482–8, and 60.483–2, the following information shall be recorded in a log and shall be kept for 2 years in a readily accessible location:
(1) The instrument and operator identification numbers and the equipment identification number.
(2) The date the leak was detected and the dates of each attempt to repair the leak.
(3) Repair methods applied in each attempt to repair the leak.
(4) "Above 10,000" if the maximum instrument reading measured by the methods specified in §60.485(a) after each repair attempt is equal to or greater than 10,000 ppm.
(5) "Repair delayed" and the reason for the delay if a leak is not repaired within 15 calendar days after discovery of the leak.
(6) The signature of the owner or operator (or designate) whose decision it was that repair could not be effected without a process shutdown.
(7) The expected date of successful repair of the leak if a leak is not repaired within 15 days.
(8) Dates of process unit shutdowns that occur while the equipment is unrepaired.
(9) The date of successful repair of the leak.
(d) The following information pertaining to the design requirements for closed vent systems and control devices described in §60.482–10 shall be recorded and kept in a readily accessible location:
(1) Detailed schematics, design specifications, and piping and instrumentation diagrams.
(2) The dates and descriptions of any changes in the design specifications.
(3) A description of the parameter or parameters monitored, as required in §60.482–10(e), to ensure that control devices are operated and maintained in conformance with their design and an explanation of why that parameter (or parameters) was selected for the monitoring.
(4) Periods when the closed vent systems and control devices required in §§60.482–2, 60.482–3, 60.482–4, and 60.482–5 are not operated as designed, including periods when a flare pilot light does not have a flame.
(5) Dates of startups and shutdowns of the closed vent systems and control devices required in §§60.482–2, 60.482–3, 60.482–4, and 60.482–5.
(e) The following information pertaining to all equipment subject to the requirements in §§60.482–1 to 60.482–10 shall be recorded in a log that is kept in a readily accessible location:
(1) A list of identification numbers for equipment subject to the requirements of this subpart.
(2)(i) A list of identification numbers for equipment that are designated for no detectable emissions under the provisions of §§60.482–2(e), 60.482–3(i) and 60.482–7(f).
(ii) The designation of equipment as subject to the requirements of §60.482–2(e), §60.482–3(i), or §60.482–7(f) shall be signed by the owner or operator.
(3) A list of equipment identification numbers for pressure relief devices required to comply with §60.482–4.
(4)(i) The dates of each compliance test as required in §§60.482–2(e), 60.482–3(i), 60.482–4, and 60.482–7(f).
(ii) The background level measured during each compliance test.
(iii) The maximum instrument reading measured at the equipment during each compliance test.
(5) A list of identification numbers for equipment in vacuum service.
(f) The following information pertaining to all valves subject to the requirements of §60.482–7(g) and (h) and to all pumps subject to the requirements of §60.482–2(g) shall be recorded in a log that is kept in a readily accessible location:
(1) A list of identification numbers for valves and pumps that are designated as unsafe-to-monitor, an explanation for each valve or pump stating why the valve or pump is unsafe-to-monitor, and the plan for monitoring each valve or pump.
(2) A list of identification numbers for valves that are designated as difficult-to-monitor, an explanation for each valve stating why the valve is difficult-to-monitor, and the schedule for monitoring each valve.
(g) The following information shall be recorded for valves complying with §60.483–2:
(1) A schedule of monitoring.
(2) The percent of valves found leaking during each monitoring period.
(h) The following information shall be recorded in a log that is kept in a readily accessible location:
(1) Design criterion required in §§60.482–2(d)(5) and 60.482–3(e)(2) and explanation of the design criterion; and
(2) Any changes to this criterion and the reasons for the changes.
(i) The following information shall be recorded in a log that is kept in a readily accessible location for use in determining exemptions as provided in §60.480(d):

(1) An analysis demonstrating the design capacity of the affected facility,
(2) A statement listing the feed or raw materials and products from the affected facilities and an analysis demonstrating whether these chemicals are heavy liquids or beverage alcohol, and
(3) An analysis demonstrating that equipment is not in VOC service.
(j) Information and data used to demonstrate that a piece of equipment is not in VOC service shall be recorded in a log that is kept in a readily accessible location.
(k) The provisions of §60.7 (b) and (d) do not apply to affected facilities subject to this subpart.
[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61763, Oct. 17, 2000; 65 FR 78278, Dec. 14, 2000]

§ 60.487 Reporting requirements.

(a) Each owner or operator subject to the provisions of this subpart shall submit semiannual reports to the Administrator beginning six months after the initial startup date.
(b) The initial semiannual report to the Administrator shall include the following information:
(1) Process unit identification.
(2) Number of valves subject to the requirements of §60.482–7, excluding those valves designated for no detectable emissions under the provisions of §60.482–7(f).
(3) Number of pumps subject to the requirements of §60.482–2, excluding those pumps designated for no detectable emissions under the provisions of §60.482–2(e) and those pumps complying with §60.482–2(f).
(4) Number of compressors subject to the requirements of §60.482–3, excluding those compressors designated for no detectable emissions under the provisions of §60.482–3(i) and those compressors complying with §60.482–3(h).
(c) All semiannual reports to the Administrator shall include the following information, summarized from the information in §60.486:
(1) Process unit identification.
(2) For each month during the semiannual reporting period,
(i) Number of valves for which leaks were detected as described in §60.482(7)(b) or §60.483–2,
(ii) Number of valves for which leaks were not repaired as required in §60.482–7(d)(1),
(iii) Number of pumps for which leaks were detected as described in §60.482–2(b) and (d)(6)(i),
(iv) Number of pumps for which leaks were not repaired as required in §60.482–2(c)(1) and (d)(6)(ii),
(v) Number of compressors for which leaks were detected as described in §60.482–3(f),
(vi) Number of compressors for which leaks were not repaired as required in §60.482–3(g)(1), and
(vii) The facts that explain each delay of repair and, where appropriate, why a process unit shutdown was technically infeasible.
(3) Dates of process unit shutdowns which occurred within the semiannual reporting period.
(4) Revisions to items reported according to paragraph (b) if changes have occurred since the initial report or subsequent revisions to the initial report.
(d) An owner or operator electing to comply with the provisions of §§60.483–1 or 60.483–2 shall notify the Administrator of the alternative standard selected 90 days before implementing either of the provisions.
(e) An owner or operator shall report the results of all performance tests in accordance with §60.8 of the General Provisions. The provisions of §60.8(d) do not apply to affected facilities subject to the provisions of this subpart except that an owner or operator must notify the Administrator of the schedule for the initial performance tests at least 30 days before the initial performance tests.
(f) The requirements of paragraphs (a) through (c) of this section remain in force until and unless EPA, in delegating enforcement authority to a State under section 111(c) of the Act, approves reporting requirements or an alternative means of compliance surveillance adopted by such State. In that event, affected sources within the State will be relieved of the obligation to comply with the requirements of paragraphs (a) through (c) of this section, provided that they comply with the requirements established by the State.
[48 FR 48335, Oct. 18, 1983, as amended at 49 FR 22608, May 30, 1984; 65 FR 61763, Oct. 17, 2000]

§ 60.488 Reconstruction.

For the purposes of this subpart:
(a) The cost of the following frequently replaced components of the facility shall not be considered in calculating either the “fixed capital cost of the new components” or the “fixed capital costs that would be required to construct a comparable new facility” under §60.15: pump seals, nuts and bolts, rupture disks, and packings.
(b) Under §60.15, the “fixed capital cost of new components” includes the fixed capital cost of all depreciable

components (except components specified in §60.488 (a)) which are or will be replaced pursuant to all continuous programs of component replacement which are commenced within any 2-year period following the applicability date for the appropriate subpart. (See the "Applicability and designation of affected facility" section of the appropriate subpart.) For purposes of this paragraph, "commenced" means that an owner or operator has undertaken a continuous program of component replacement or that an owner or operator has entered into a contractual obligation to undertake and complete, within a reasonable time, a continuous program of component replacement.
[49 FR 22608, May 30, 1984]

§ 60.489 List of chemicals produced by affected facilities.

The following chemicals are produced, as intermediates or final products, by process units covered under this subpart. The applicability date for process units producing one or more of these chemicals is January 5, 1981.

CAS No.[a]	Chemical
105–57–7	Acetal.
75–07–0	Acetaldehyde.
107–89–1	Acetaldol.
60–35–5	Acetamide.
103–84–4	Acetanilide.
64–19–7	Acetic acid.
108–24–7	Acetic anhydride.
67–64–1	Acetone.
75–86–5	Acetone cyanohydrin.
75–05–8	Acetonitrile.
98–86–2	Acetophenone.
75–36–5	Acetyl chloride.
74–86–2	Acetylene.
107–02–8	Acrolein.
79–06–1	Acrylamide.
79–10–7	Acrylic acid.
107–13–1	Acrylonitrile.
124–04–9	Adipic acid.
111–69–3	Adiponitrile.
([b])	Alkyl naphthalenes.
107–18–6	Allyl alcohol.
107–05–1	Allyl chloride.
1321–11–5	Aminobenzoic acid.
111–41–1	Aminoethylethanolamine.
123–30–8	p-Aminophenol.
628–63–7, 123–92–2	Amyl acetates.
71–41–0[c]	Amyl alcohols.
110–58–7	Amyl amine.
543–59–9	Amyl chloride.
110–66–7[c]	Amyl mercaptans.
1322–06–1	Amyl phenol.

CAS No.[a]	Chemical
62–53–3	Aniline.
142–04–1	Aniline hydrochloride.
29191–52–4	Anisidine.
100–66–3	Anisole.
118–92–3	Anthranilic acid.
84–65–1	Anthraquinone.
100–52–7	Benzaldehyde.
55–21–0	Benzamide.
71–43–2	Benzene.
98–48–6	Benzenedisulfonic acid.
98–11–3	Benzenesulfonic acid.
134–81–6	Benzil.
76–93–7	Benzilic acid.
65–85–0	Benzoic acid.
119–53–9	Benzoin.
100–47–0	Benzonitrile.
119–61–9	Benzophenone.
98–07–7	Benzotrichloride.
98–88–4	Benzoyl chloride.
100–51–6	Benzyl alcohol.
100–46–9	Benzylamine.
120–51–4	Benzyl benzoate.
100–44–7	Benzyl chloride.
98–87–3	Benzyl dichloride.
92–52–4	Biphenyl.
80–05–7	Bisphenol A.
10–86–1	Bromobenzene.
27497–51–4	Bromonaphthalene.
106–99–0	Butadiene.
106–98–9	1-butene.
123–86–4	n-butyl acetate.
141–32–2	n-butyl acrylate.
71–36–3	n-butyl alcohol.
78–92–2	s-butyl alcohol.
75–65–0	t-butyl alcohol.
109–73–9	n-butylamine.
13952–84–6	s-butylamine.
75–64–9	t-butylamine.
98–73–7	p-tert-butyl benzoic acid.
107–88–0	1,3-butylene glycol.
123–72–8	n-butyraldehyde.
107–92–6	Butyric acid.

CAS No.[a]	Chemical
106–31–0	Butyric anhydride.
109–74–0	Butyronitrile.
105–60–2	Caprolactam.
75–1–50	Carbon disulfide.
558–13–4	Carbon tetrabromide.
56–23–5	Carbon tetrachloride.
9004–35–7	Cellulose acetate.
79–11–8	Chloroacetic acid.
108–42–9	m-chloroaniline.
95–51–2	o-chloroaniline.
106–47–8	p-chloroaniline.
35913–09–8	Chlorobenzaldehyde.
108–90–7	Chlorobenzene.
118–91–2, 535–80–8, 74–11–3[c]	Chlorobenzoic acid.
2136–81–4, 2136–89–2, 5216–25–1[c]	Chlorobenzotrichloride.
1321–03–5	Chlorobenzoyl chloride.
25497–29–4	Chlorodifluoromethane.
75–45–6	Chlorodifluoroethane.
67–66–3	Chloroform.
25586–43–0	Chloronaphthalene.
88–73–3	o-chloronitrobenzene.
100–00–5	p-chloronitrobenzene.
25167–80–0	Chlorophenols.
126–99–8	Chloroprene.
7790–94–5	Chlorosulfonic acid.
108–41–8	m-chlorotoluene.
95–49–8	o-chlorotoluene.
106–43–4	p-chlorotoluene.
75–72–9	Chlorotrifluoromethane.
108–39–4	m-cresol.
95–48–7	o-cresol.
106–44–5	p-cresol.
1319–77–3	Mixed cresols.
1319–77–3	Cresylic acid.
4170–30–0	Crotonaldehyde.
3724–65–0	Crotonic acid.
98–82–8	Cumene.
80–15–9	Cumene hydroperoxide.
372–09–8	Cyanoacetic acid.
506–77–4	Cyanogen chloride.
108–80–5	Cyanuric acid.
108–77–0	Cyanuric chloride.

CAS No.[a]	Chemical
110–82–7	Cyclohexane.
108–93–0	Cyclohexanol.
108–94–1	Cyclohexanone.
110–83–8	Cyclohexene.
108–91–8	Cyclohexylamine.
111–78–4	Cyclooctadiene.
112–30–1	Decanol.
123–42–2	Diacetone alcohol.
27576–04–1	Diaminobenzoic acid.
95–76–1, 95–82–9, 554–00–7, 608–27–5, 608–31–1, 626–43–7, 27134–27–6, 57311–92–9[c]	Dichloroaniline.
541–73–1	m-dichlorobenzene.
95–50–1	o-dichlorobenzene.
106–46–7	p-dichlorobenzene.
75–71–8	Dichlorodifluoromethane.
111–44–4	Dichloroethyl ether.
107–06–2	1,2-dichloroethane (EDC).
96–23–1	Dichlorohydrin.
26952–23–8	Dichloropropene.
101–83–7	Dicyclohexylamine.
109–89–7	Diethylamine.
111–46–6	Diethylene glycol.
112–36–7	Diethylene glycol diethyl ether.
111–96–6	Diethylene glycol dimethyl ether.
112–34–5	Diethylene glycol monobutyl ether.
124–17–4	Diethylene glycol monobutyl ether acetate.
111–90–0	Diethylene glycol monoethyl ether.
112–15–2	Diethylene glycol monoethyl ether acetate.
111–77–3	Diethylene glycol monomethyl ether.
64–67–5	Diethyl sulfate.
75–37–6	Difluoroethane.
25167–70–8	Diisobutylene.
26761–40–0	Diisodecyl phthalate.
27554–26–3	Diisooctyl phthalate.
674–82–8	Diketene.
124–40–3	Dimethylamine.
121–69–7	N,N-dimethylaniline.
115–10–6	N,N-dimethyl ether.
68–12–2	N,N-dimethylformamide.
57–14–7	Dimethylhydrazine.

CAS No.[a]	Chemical
77–78–1	Dimethyl sulfate.
75–18–3	Dimethyl sulfide.
67–68–5	Dimethyl sulfoxide.
120–61–6	Dimethyl terephthalate.
99–34–3	3,5-dinitrobenzoic acid.
51–28–5	Dinitrophenol.
25321–14–6	Dinitrotoluene.
123–91–1	Dioxane.
646–06–0	Dioxilane.
122–39–4	Diphenylamine.
101–84–8	Diphenyl oxide.
102–08–9	Diphenyl thiourea.
25265–71–8	Dipropylene glycol.
25378–22–7	Dodecene.
28675–17–4	Dodecylaniline.
27193–86–8	Dodecylphenol.
106–89–8	Epichlorohydrin.
64–17–5	Ethanol.
141–43–5[c]	Ethanolamines.
141–78–6	Ethyl acetate.
141–97–9	Ethyl acetoacetate.
140–88–5	Ethyl acrylate.
75–04–7	Ethylamine.
100–41–4	Ethylbenzene.
74–96–4	Ethyl bromide.
9004–57–3	Ethylcellulose.
75–00–3	Ethyl chloride.
105–39–5	Ethyl chloroacetate.
105–56–6	Ethylcyanoacetate.
74–85–1	Ethylene.
96–49–1	Ethylene carbonate.
107–07–3	Ethylene chlorohydrin.
107–15–3	Ethylenediamine.
106–93–4	Ethylene dibromide.
107–21–1	Ethylene glycol.
111–55–7	Ethylene glycol diacetate.
110–71–4	Ethylene glycol dimethyl ether.
111–76–2	Ethylene glycol monobutyl ether.
112–07–2	Ethylene glycol monobutyl ether acetate.
110–80–5	Ethylene glycol monoethyl ether.
111–15–9	Ethylene glycol monethyl ether acetate.

CAS No.[a]	Chemical
109–86–4	Ethylene glycol monomethyl ether.
110–49–6	Ethylene glycol monomethyl ether acetate.
122–99–6	Ethylene glycol monophenyl ether.
2807–30–9	Ethylene glycol monopropyl ether.
75–21–8	Ethylene oxide.
60–29–7	Ethyl ether
104–76–7	2-ethylhexanol.
122–51–0	Ethyl orthoformate.
95–92–1	Ethyl oxalate.
41892–71–1	Ethyl sodium oxalacetate.
50–00–0	Formaldehyde.
75–12–7	Formamide.
64–18–6	Formic acid.
110–17–8	Fumaric acid.
98–01–1	Furfural.
56–81–5	Glycerol.
26545–73–7	Glycerol dichlorohydrin.
25791–96–2	Glycerol triether.
56–40–6	Glycine.
107–22–2	Glyoxal.
118–74–1	Hexachlorobenzene.
67–72–1	Hexachloroethane.
36653–82–4	Hexadecyl alcohol.
124–09–4	Hexamethylenediamine.
629–11–8	Hexamethylene glycol.
100–97–0	Hexamethylenetetramine.
74–90–8	Hydrogen cyanide.
123–31–9	Hydroquinone.
99–96–7	p-hydroxybenzoic acid.
26760–64–5	Isoamylene.
78–83–1	Isobutanol.
110–19–0	Isobutyl acetate.
115–11–7	Isobutylene.
78–84–2	Isobutyraldehyde.
79–31–2	Isobutyric acid.
25339–17–7	Isodecanol.
26952–21–6	Isooctyl alcohol.
78–78–4	Isopentane.
78–59–1	Isophorone.
121–91–5	Isophthalic acid.
78–79–5	Isoprene.

CAS No.[a]	Chemical
67–63–0	Isopropanol.
108–21–4	Isopropyl acetate.
75–31–0	Isopropylamine.
75–29–6	Isopropyl chloride.
25168–06–3	Isopropylphenol.
463–51–4	Ketene.
([b])	Linear alkyl sulfonate.
123–01–3	Linear alkylbenzene (linear dodecylbenzene).
110–16–7	Maleic acid.
108–31–6	Maleic anhydride.
6915–15–7	Malic acid.
141–79–7	Mesityl oxide.
121–47–1	Metanilic acid.
79–41–4	Methacrylic acid.
563–47–3	Methallyl chloride.
67–56–1	Methanol.
79–20–9	Methyl acetate.
105–45–3	Methyl acetoacetate.
74–89–5	Methylamine.
100–61–8	n-methylaniline.
74–83–9	Methyl bromide.
37365–71–2	Methyl butynol.
74–87–3	Methyl chloride.
108–87–2	Methylcyclohexane.
1331–22–2	Methylcyclohexanone.
75–09–2	Methylene chloride.
101–77–9	Methylene dianiline.
101–68–8	Methylene diphenyl diisocyanate.
78–93–3	Methyl ethyl ketone.
107–31–3	Methyl formate.
108–11–2	Methyl isobutyl carbinol.
108–10–1	Methyl isobutyl ketone.
80–62–6	Methyl methacrylate.
77–75–8	Methylpentynol.
98–83–9	a-methylstyrene.
110–91–8	Morpholine.
85–47–2	a-naphthalene sulfonic acid.
120–18–3	b-naphthalene sulfonic acid.
90–15–3	a-naphthol.
135–19–3	b-naphthol.
75–98–9	Neopentanoic acid.

CAS No.[a]	Chemical
88–74–4	o-nitroaniline.
100–01–6	p-nitroaniline.
91–23–6	o-nitroanisole.
100–17–4	p-nitroanisole.
98–95–3	Nitrobenzene.
27178–83–2[c]	Nitrobenzoic acid (o,m, and p).
79–24–3	Nitroethane.
75–52–5	Nitromethane.
88–75–5	2-Nitrophenol.
25322–01–4	Nitropropane.
1321–12–6	Nitrotoluene.
27215–95–8	Nonene.
25154–52–3	Nonylphenol.
27193–28–8	Octylphenol.
123–63–7	Paraldehyde.
115–77–5	Pentaerythritol.
109–66–0	n-pentane.
109–67–1	1-pentene
127–18–4	Perchloroethylene.
594–42–3	Perchloromethyl mercaptan.
94–70–2	o-phenetidine.
156–43–4	p-phenetidine.
108–95–2	Phenol.
98–67–9, 585–38–6, 609–46–1, 1333–39–7[c]	Phenolsulfonic acids.
91–40–7	Phenyl anthranilic acid.
([b])	Phenylenediamine.
75–44–5	Phosgene.
85–44–9	Phthalic anhydride.
85–41–6	Phthalimide.
108–99–6	b-picoline.
110–85–0	Piperazine.
9003–29–6, 25036–29–7[c]	Polybutenes.
25322–68–3	Polyethylene glycol.
25322–69–4	Polypropylene glycol.
123–38–6	Propionaldehyde.
79–09–4	Propionic acid.
71–23–8	n-propyl alcohol.
107–10–8	Propylamine.
540–54–5	Propyl chloride.
115–07–1	Propylene.
127–00–4	Propylene chlorohydrin.
78–87–5	Propylene dichloride.

CAS No.[a]	Chemical
57–55–6	Propylene glycol.
75–56–9	Propylene oxide.
110–86–1	Pyridine.
106–51–4	Quinone.
108–46–3	Resorcinol.
27138–57–4	Resorcylic acid.
69–72–7	Salicylic acid.
127–09–3	Sodium acetate.
532–32–1	Sodium benzoate.
9004–32–4	Sodium carboxymethyl cellulose.
3926–62–3	Sodium chloroacetate.
141–53–7	Sodium formate.
139–02–6	Sodium phenate.
110–44–1	Sorbic acid.
100–42–5	Styrene.
110–15–6	Succinic acid.
110–61–2	Succinonitrile.
121–57–3	Sulfanilic acid.
126–33–0	Sulfolane.
1401–55–4	Tannic acid.
100–21–0	Terephthalic acid.
79–34–5[c]	Tetrachloroethanes.
117–08–8	Tetrachlorophthalic anhydride.
78–00–2	Tetraethyl lead.
119–64–2	Tetrahydronaphthalene.
85–43–8	Tetrahydrophthalic anhydride.
75–74–1	Tetramethyl lead.
110–60–1	Tetramethylenediamine.
110–18–9	Tetramethylethylenediamine.
108–88–3	Toluene.
95–80–7	Toluene-2,4-diamine.
584–84–9	Toluene-2,4-diisocyanate.
26471–62–5	Toluene diisocyanates (mixture).
1333–07–9	Toluenesulfonamide.
104–15–4[c]	Toluenesulfonic acids.
98–59–9	Toluenesulfonyl chloride.
26915–12–8	Toluidines.
87–61–6, 108–70–3, 120–82–1[c]	Trichlorobenzenes.
71–55–6	1,1,1-trichloroethane.
79–00–5	1,1,2-trichloroethane.
79–01–6	Trichloroethylene.
75–69–4	Trichlorofluoromethane.

CAS No.[a]	Chemical
96–18–4	1,2,3-trichloropropane.
76–13–1	1,1,2-trichloro-1,2,2-trifluoroethane.
121–44–8	Triethylamine.
112–27–6	Triethylene glycol.
112–49–2	Triethylene glycol dimethyl ether.
7756–94–7	Triisobutylene.
75–50–3	Trimethylamine.
57–13–6	Urea.
108–05–4	Vinyl acetate.
75–01–4	Vinyl chloride.
75–35–4	Vinylidene chloride.
25013–15–4	Vinyl toluene.
1330–20–7	Xylenes (mixed).
95–47–6	o-xylene.
106–42–3	p-xylene.
1300–71–6	Xylenol.
1300–73–8	Xylidine.

[a]CAS numbers refer to the Chemical Abstracts Registry numbers assigned to specific chemicals, isomers, or mixtures of chemicals. Some isomers or mixtures that are covered by the standards do not have CAS numbers assigned to them. The standards apply to all of the chemicals listed, whether CAS numbers have been assigned or not.
[b]No CAS number(s) have been assigned to this chemical, its isomers, or mixtures containing these chemicals.
[c]CAS numbers for some of the isomers are listed; the standards apply to all of the isomers and mixtures, even if CAS numbers have not been assigned.
[48 FR 48335, Oct. 18, 1983, as amended at 65 FR 61763, Oct. 17, 2000]

SECTION G.1 FACILITY CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: NESHAP Subpart FFFF for:

Yeast Propagation Operation (EU-04), Fermentation Operation (EU-05), APV Column (EU-06), Beerwell (EU-07), Degasser and Recovery Column (EU-08), Evaporation Process (EU-09), DDGS Dryer Operation (EU-10) and Alcohol Load-out Operation (EU-13)

(d) One (1) yeast propagation operation, identified as EU-04, installed in October 1982, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) yeast mixing tank, identified as T-320, one (1) yeast mixing tank agitator, identified as A-320, four (4) yeast preparation tanks, identified as T-321 through T-324, four (4) agitators, identified as A-321 through A-324, one (1) cooler, identified as E-321 and three (3) pumps, identified as P-320 through P-322, capacity: 16,000 gallons per tank and 2,100 tank turnovers per year. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(e) One (1) fermentation operation, identified as EU-05, installed in October 1982, exhausted through Stacks VT-005 through VT-019, VT-019a and BL-230, consisting of sixteen (16) fermenter agitators, identified as A-202 through A-215, A-220 and A-221, eight (8) fermenter coolers, identified as E-210 through E-217, sixteen (16) pumps, identified as P-202 through P-215, P-220, P-221 and P-231, sixteen (16) fermenters identified as T-202 through T-215, T-220 and T-221, one (1) blower, identified as BL-230, one (1) foam trap, identified as FT-230, one (1) CO_2 scrubber, identified as V-230 installed in 1984, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, one (1) scrubber pump, identified as P-230, one foam trap bleed pump, identified as P-231, capacity: 319,000 gallons per tank and 2,100 tank turnovers per year. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this operation are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(f) One (1) APV column, identified as EU-06, installed in May 1989, exhausted through Stack VT-020, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) stripper column, identified as V-2402, two (2) reflux pumps, identified as P-2404 A and P-2404 B, two (2) feed preheaters, identified as E-2410 and E-2412, one (1) stripper column reboiler, identified as E-2414, one (1) stripper column overhead condenser, identified as E-2416, one (1) stripper column reflux drum, identified as V-2404, and one (1) stripper column vent condenser, identified as E-2418, maximum capacity: 150 gallons of scrubber water per minute. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(g) One (1) beerwell, identified as EU-07, installed in December 1986, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) beerwell, identified as T-222, two (2) beerwell pumps, identified as P-222A and P-222B and two (2) beerwell agitators, identified

Facility Description [326 IAC 2-7-5(15)]: NESHAP Subpart FFFF for:

Yeast Propagation Operation (EU-04), Fermentation Operation (EU-05), APV Column (EU-06), Beerwell (EU-07), Degasser and Recovery Column (EU-08), Evaporation Process (EU-09), DDGS Dryer Operation (EU-10) and Alcohol Load-out Operation (EU-13)

as A-222A and A-222B, capacity: 1,750 gallons of beer per minute. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(h) One (1) degasser and recovery column, identified as EU-08, installed in October 1982, exhausted through Stacks VT-022, VT-023 and BL-601. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

Stack VT-022 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs) installed in 2003, with fuel-oil back-up approved for construction in 2007, rated at 8.0 million British thermal units per hour each, to control VOC emissions from the one (1) recovery column vent condenser, identified as E-409. The associated equipment consists of:

One (1) recovery column, identified as V-402, one (1) recovery column reflux tank, identified as V-404, three (3) beer preheaters, identified as E-400 A, E-400 B and E-400 C, one (1) recovery column condenser, identified as E-404, one (1) recovery column reboiler #2, identified as E-MS-408, one (1) recovery column vent condenser, identified as E-409, equipped with a scrubber installed in April 1997, one (1) preheater #2, identified as E-412, one (1) recovery column reboiler #1, identified as E-413, one (1) preheater #3, identified as E-418, one (1) auxiliary product cooler, identified as E-419, one (1) duplex strainer, identified as F-401, two (2) recovery column feed pumps, identified as P-401 A & P-401 B, two (2) recovery column bottoms pumps, identified as P-402 A and P-402 B, two (2) recovery column reflux pumps, identified as P-404 A and P-404 B, one (1) fusel oil transfer pump, identified as P-405, one (1) heads transfer pump, identified as P-406, three (3) recovery column recirculation pumps #2, identified as P-407 A, P-407 B and P-408, and one (1) wet scrubber, identified as V-424.

Stack VT-023 associated equipment consists of:

One (1) aqueous alcohol return pump, identified as P-403, one (1) fusel oil decanter tank, identified as P-414, one (1) fusel oil decanter tank, identified as V-403, one (1) fusel oil accumulator tank, identified as V-422. V-403 and V-422 vent to VT-023.

Stack BL-601 routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, associated equipment consists of:

One (1) degasser condenser, identified as E-403, one (1) degasser vent condenser, identified as E-410, one (1) preheater #4, identified as E-414, two (2) beer preheaters, identified as E-415 A and E-415 B, one (1) duplex strainer, identified as F-400, and one (1) degasser, identified as V-401, capacity: 1,750 gallons of beer per minute.

Facility Description [326 IAC 2-7-5(15)]: NESHAP Subpart FFFF for:
Yeast Propagation Operation (EU-04), Fermentation Operation (EU-05), APV Column (EU-06), Beerwell (EU-07), Degasser and Recovery Column (EU-08), Evaporation Process (EU-09), DDGS Dryer Operation (EU-10) and Alcohol Load-out Operation (EU-13)

(i) One (1) stillage concentration and evaporation process, identified as EU-09, installed in October 1982, consisting of five (5) centrifuges, identified as S-501 through S-505, three (3) stillage tanks, identified as T-502, T-515 and T-516, consisting of: one (1) stillage preheater, identified as E-503, four (4) 1st through 4th stage heaters, identified as E-501, E-502, E-504, and E-505, five (5) vapor bodies, identified as T-504 and T-507 through T-510, one (1) 5th and 6th stage heater, identified as E-506, one (1) evaporation condensate tank, identified as T-506, exhausted through Stack VT-024 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs) installed in 2003, with fuel-oil back-up approved for construction in 2007, exhausted through Stack 5002, one (1) lube oil console, identified as C-501C, one (1) gland seal condenser, identified as C-501E, one (1) evaporator concentrates tank, identified as T-505, one (1) compressor, identified as C-501A, one (1) turbine, identified as C-501B, one (1) lube oil head tank, identified as C-501D, one (1) gland seal ejector, identified as C501F, one (1) evaporator concentrates tank agitator, identified as A 505, four (4) stage 1 thru stage 4 circulation pumps, identified as P-504, P-505, P-507 and P 508, one (1) scrubber pump, identified as P-511, two (2) stage 5 and 6 circulation pumps, identified as P-509 and P-510, two (2) evaporator condensate pumps, identified as P-506 and P-521 (spare), and two (2) evaporator concentrates pump, identified as P-516 and P-516A, capacity: 910 gallon per minute evaporator feed rate. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(j) One (1) distillers dried grain and solubles (DDGS) dryer operation, identified as EU-10, installed in October 1982, exhausted through Stacks BL-511 through BL-515, routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs) installed in 2003, with fuel-oil back-up approved for construction in 2007, exhausted through Stack 5002, consisting of five (5) DDGS dryers, identified as D-511 through D-515, each equipped with a scrubber, identified as SF-511 through SF-515, and a DDGS dryer steam trap, identified as TR-511, TR-521, TR-531, TR-541 and TR-551, five (5) dryer feed screw conveyors, identified as CV-511 through CV-515, one (1) wet conveyor, identified as CV-501, one (1) inclined wet conveyor, identified as CV-502, one (1) dryer feed conveyor, identified as CV-516, one (1) recycle conveyor, identified as CV-517, one (1) product conveyor, identified as CV-518, one (1) cooler cross-over conveyor, identified as CV-519, one (1) pug mill, identified as M-511, and five (5) scrubber pumps, identified as P-523 through P-527, capacity: 38.98 tons of DDGS product per hour. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

(m) One (1) alcohol load-out operation, identified as EU-13, installed in October 1982, exhausted through Stack G-602, equipped with a load-out natural gas-fired flare, identified as G-602, rated at 0.100 million British thermal units per hour, two (2) bottom transfer loading arms, identified as G-604 and G-607, two (2) bottom transfer vapor recovery arms, identified as G-605 and G-608, two (2) truck/rail vapor recovery loading arms, identified as G-603 and G-606, two (2) product filters, identified as F-660 and F-661, and two (2) fuel grade alcohol load-out pumps, identified as P-610 and P-611, capacity: 72,000 gallons of ethanol per hour. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 286.

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

National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)]

G.1.1 General Provisions Relating to NESHAP FFFF [326 IAC 20-1-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.2540, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the yeast propagation operation, identified as EU-04, fermentation operation, identified as EU-05, APV column, identified as EU-06, beerwell, identified as EU-07, the degasser and recovery column, identified as EU-08, the evaporation process, identified as EU-09, the distillers dried grain and solubles (DDGS) dryer operation, identified as EU-10, and alcohol load-out operation, identified as EU-13, as specified in Table 12 of 40 CFR 63, Subpart FFFF in accordance with the schedule in 40 CFR 63, Subpart FFFF.

(b) Pursuant to 40 CFR 63.10, 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
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

G.1.2 National Emission Standards for Hazardous Air Pollutants for Miscellaneous Organic Chemical Manufacturing Requirements [40 CFR 63, Subpart FFFF] [326 IAC 20-84]

Pursuant to 40 CFR Part 63, Subpart FFFF, the Permittee shall comply with the provisions of 40 CFR Part 63.2430, which are incorporated by reference as 326 IAC 20-84 for the yeast propagation operation, identified as EU-04, fermentation operation, identified as EU-05, APV column, identified as EU-06, beerwell, identified as EU-07, the degasser and recovery column, identified as EU-08, the evaporation process, identified as EU-09, the distillers dried grain and solubles (DDGS) dryer operation, identified as EU-10, and alcohol load-out operation, identified as EU-13, as specified as follows:

Subpart FFFF—National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing

Source: 68 FR 63888, Nov. 10, 2003, unless otherwise noted.

What This Subpart Covers

§ 63.2430 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous organic chemical manufacturing. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limits, operating limits, and work practice standards.

§ 63.2435 Am I subject to the requirements in this subpart?

(a) You are subject to the requirements in this subpart if you own or operate miscellaneous organic chemical manufacturing process units (MCPU) that are located at, or are part of, a major source of hazardous air pollutants (HAP) emissions as defined in section 112(a) of the Clean Air Act (CAA).
(b) An MCPU includes equipment necessary to operate a miscellaneous organic chemical manufacturing process, as defined in §63.2550, that satisfies all of the conditions specified in paragraphs (b)(1) through (3) of this section. An MCPU also includes any assigned storage tanks and transfer racks; equipment in

open systems that is used to convey or store water having the same concentration and flow characteristics as wastewater; and components such as pumps, compressors, agitators, pressure relief devices, sampling connection systems, open-ended valves or lines, valves, connectors, and instrumentation systems that are used to manufacture any material or family of materials described in paragraphs (b)(1)(i) through (v) of this section.
(1) The MCPU produces material or family of materials that is described in paragraph (b)(1)(i), (ii), (iii), (iv), or (v) of this section.
(i) An organic chemical(s) classified using the 1987 version of SIC code 282, 283, 284, 285, 286, 287, 289, or 386, except as provided in paragraph (c)(5) of this section.
(ii) An organic chemical(s) classified using the 1997 version of NAICS code 325, except as provided in paragraph (c)(5) of this section.
(iii) Quaternary ammonium compounds and ammonium sulfate produced with caprolactam.
(iv) Hydrazine.
(v) Organic solvents classified in any of the SIC or NAICS codes listed in paragraph (b)(1)(i) or (ii) of this section that are recovered using nondedicated solvent recovery operations.
(2) The MCPU processes, uses, or generates any of the organic HAP listed in section 112(b) of the CAA or hydrogen halide and halogen HAP, as defined in §63.2550.
(3) The MCPU is not an affected source or part of an affected source under another subpart of this part 63, except for process vents from batch operations within a chemical manufacturing process unit (CMPU), as identified in §63.100(j)(4). For this situation, the MCPU is the same as the CMPU as defined in §63.100, and you are subject only to the requirements for batch process vents in this subpart.
(d) If the predominant use of a transfer rack loading arm or storage tank (including storage tanks in series) is associated with a miscellaneous organic chemical manufacturing process, and the loading arm or storage tank is not part of an affected source under a subpart of this part 63, then you must assign the loading arm or storage tank to the MCPU for that miscellaneous organic chemical manufacturing process. If the predominant use cannot be determined, then you may assign the loading arm or storage tank to any MCPU that shares it and is subject to this subpart. If the use varies from year to year, then you must base the determination on the utilization that occurred during the year preceding November 10, 2003 or, if the loading arm or storage tank was not in operation during that year, you must base the use on the expected use for the first 5-year period after startup. You must include the determination in the notification of compliance status report specified in §63.2520(d). You must redetermine the primary use at least once every 5 years, or any time you implement emissions averaging or pollution prevention after the compliance date.
(e) For nondedicated equipment used to create at least one MCPU, you may elect to develop process unit groups (PUG), determine the primary product of each PUG, and comply with the requirements of the subpart in 40 CFR part 63 that applies to that primary product as specified in §63.2535(l).
[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40331, July 14, 2006]

§ 63.2440 What parts of my plant does this subpart cover?

(a) This subpart applies to each miscellaneous organic chemical manufacturing affected source.
(b) The miscellaneous organic chemical manufacturing affected source is the facilitywide collection of MCPU and heat exchange systems, wastewater, and waste management units that are associated with manufacturing materials described in §63.2435(b)(1).
(d) An MCPU that is also a CMPU under §63.100 is reconstructed for the purposes of this subpart if, and only if, the CMPU meets the requirements for reconstruction in §63.100(l)(2).

Compliance Dates

§ 63.2445 When do I have to comply with this subpart?

(a) If you have a new affected source, you must comply with this subpart according to the requirements in paragraphs (a)(1) and (2) of this section.
(1) If you startup your new affected source before November 10, 2003, then you must comply with the requirements for new sources in this subpart no later than November 10, 2003.
(b) If you have an existing source on November 10, 2003, you must comply with the requirements for existing sources in this subpart no later than May 10, 2008.
(c) You must meet the notification requirements in §63.2515 according to the dates specified in that section and in subpart A of this part 63. Some of the notifications must be submitted before you are

required to comply with the emission limits, operating limits, and work practice standards in this subpart.
(d) If you have a Group 2 emission point that becomes a Group 1 emission point after the compliance date for your affected source, you must comply with the Group 1 requirements beginning on the date the switch occurs. An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs.
(e) If, after the compliance date for your affected source, hydrogen halide and halogen HAP emissions from process vents in a process increase to more than 1,000 lb/yr, or HAP metals emissions from a process at a new affected source increase to more than 150 lb/yr, you must comply with the applicable emission limits specified in Table 3 to this subpart and the associated compliance requirements beginning on the date the emissions exceed the applicable threshold. An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs.
(f) If you have a small control device for process vent or transfer rack emissions that becomes a large control device, as defined in §63.2550(i), you must comply with monitoring and associated recordkeeping and reporting requirements for large control devices beginning on the date the switch occurs. An initial compliance demonstration as specified in this subpart must be conducted within 150 days after the switch occurs.
[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 10442, Mar. 1, 2006; 71 FR 40332, July 14, 2006]

Emission Limits, Work Practice Standards, and Compliance Requirements

§ 63.2450 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limits and work practice standards in Tables 1 through 7 to this subpart at all times, except during periods of startup, shutdown, and malfunction (SSM), and you must meet the requirements specified in §§63.2455 through 63.2490 (or the alternative means of compliance in §63.2495, §63.2500, or §63.2505), except as specified in paragraphs (b) through (s) of this section. You must meet the notification, reporting, and recordkeeping requirements specified in §§63.2515, 63.2520, and 63.2525.
(b) *Determine halogenated vent streams.* You must determine if an emission stream is a halogenated vent stream, as defined in §63.2550, by calculating the mass emission rate of halogen atoms in accordance with §63.115(d)(2)(v). Alternatively, you may elect to designate the emission stream as halogenated.
(c) *Requirements for combined emission streams.* When organic HAP emissions from different emission types (e.g*.,* continuous process vents, batch process vents, storage tanks, transfer operations, and waste management units) are combined, you must comply with the requirements of either paragraph (c)(1) or (2) of this section.
(1) Comply with the applicable requirements of this subpart for each kind of organic HAP emissions in the stream (e.g*.,* the requirements of Table 1 to this subpart for continuous process vents and the requirements of Table 4 to this subpart for emissions from storage tanks).
(2) Determine the applicable requirements based on the hierarchy presented in paragraphs (c)(2)(i) through (vi) of this section. For a combined stream, the applicable requirements are specified in the highest-listed paragraph in the hierarchy that applies to any of the individual streams that make up the combined stream. For example, if a combined stream consists of emissions from Group 1 batch process vents and any other type of emission stream, then you must comply with the requirements in paragraph (c)(2)(i) of this section for the combined stream; compliance with the requirements in paragraph (c)(2)(i) of this section constitutes compliance for the other emission streams in the combined stream. Two exceptions are that you must comply with the requirements in Table 3 to this subpart and §63.2465 for all process vents with hydrogen halide and halogen HAP emissions, and recordkeeping requirements for Group 2 applicability or compliance are still required (e.g*.,* the requirement in §63.2525(f) to track the number of batches produced and calculate rolling annual emissions for processes with Group 2 batch process vents).
(i) The requirements of Table 2 to this subpart and §63.2460 for Group 1 batch process vents, including applicable monitoring, recordkeeping, and reporting.
(ii) The requirements of Table 1 to this subpart and §63.2455 for continuous process vents that are routed to a control device, as defined in §63.981, including applicable monitoring, recordkeeping, and reporting.
(iii) The requirements of Table 5 to this subpart and §63.2475 for transfer operations, including applicable monitoring, recordkeeping, and reporting.
(iv) The requirements of Table 7 to this subpart and §63.2485 for emissions from waste management

units that are used to manage and treat Group 1 wastewater streams and residuals from Group 1 wastewater streams, including applicable monitoring, recordkeeping, and reporting.
(v) The requirements of Table 4 to this subpart and §63.2470 for control of emissions from storage tanks, including applicable monitoring, recordkeeping, and reporting.
(vi) The requirements of Table 1 to this subpart and §63.2455 for continuous process vents after a recovery device including applicable monitoring, recordkeeping, and reporting.
(d) [Reserved]
(e) *Requirements for control devices.* (1) Except when complying with §63.2485, if you reduce organic HAP emissions by venting emissions through a closed-vent system to any combination of control devices (except a flare) or recovery devices, you must meet the requirements of §63.982(c) and the requirements referenced therein.
(2) Except when complying with §63.2485, if you reduce organic HAP emissions by venting emissions through a closed-vent system to a flare, you must meet the requirements of §63.982(b) and the requirements referenced therein.
(3) If you use a halogen reduction device to reduce hydrogen halide and halogen HAP emissions from halogenated vent streams, you must meet the requirements of §63.994 and the requirements referenced therein. If you use a halogen reduction device before a combustion device, you must determine the halogen atom emission rate prior to the combustion device according to the procedures in §63.115(d)(2)(v).
(f) *Requirements for flare compliance assessments.* (1) As part of a flare compliance assessment required in §63.987(b), you have the option of demonstrating compliance with the requirements of §63.11(b) by complying with the requirements in either §63.11(b)(6)(i) or §63.987(b)(3)(ii).
(2) If you elect to meet the requirements in §63.11(b)(6)(i), you must keep flare compliance assessment records as specified in paragraphs (f)(2)(i) and (ii) of this section.
(i) Keep records as specified in §63.998(a)(1)(i), except that a record of the heat content determination is not required.
(ii) Keep records of the flare diameter, hydrogen content, exit velocity, and maximum permitted velocity. Include these records in the flare compliance report required in §63.999(a)(2).
(g) *Requirements for performance tests.* The requirements specified in paragraphs (g)(1) through (5) of this section apply instead of or in addition to the requirements specified in subpart SS of this part 63.
(1) Conduct gas molecular weight analysis using Method 3, 3A, or 3B in appendix A to part 60 of this chapter.
(2) Measure moisture content of the stack gas using Method 4 in appendix A to part 60 of this chapter.
(3) If the uncontrolled or inlet gas stream to the control device contains carbon disulfide, you must conduct emissions testing according to paragraph (g)(3)(i) or (ii) of this section.
(i) If you elect to comply with the percent reduction emission limits in Tables 1 through 7 to this subpart, and carbon disulfide is the principal organic HAP component (i.e*.,* greater than 50 percent of the HAP in the stream by volume), then you must use Method 18, or Method 15 (40 CFR part 60, appendix A) to measure carbon disulfide at the inlet and outlet of the control device. Use the percent reduction in carbon disulfide as a surrogate for the percent reduction in total organic HAP emissions.
(ii) If you elect to comply with the outlet total organic compound (TOC) concentration emission limits in Tables 1 through 7 to this subpart, and the uncontrolled or inlet gas stream to the control device contains greater than 10 percent (volume concentration) carbon disulfide, you must use Method 18 or Method 15 to separately determine the carbon disulfide concentration. Calculate the total HAP or TOC emissions by totaling the carbon disulfide emissions measured using Method 18 or 15 and the other HAP emissions measured using Method 18 or 25A.
(4) As an alternative to using Method 18, Method 25/25A, or Method 26/26A of 40 CFR part 60, appendix A, to comply with any of the emission limits specified in Tables 1 through 7 to this subpart, you may use Method 320 of 40 CFR part 60, appendix A. When using Method 320, you must follow the analyte spiking procedures of section 13 of Method 320, unless you demonstrate that the complete spiking procedure has been conducted at a similar source.
(5) Section 63.997(c)(1) does not apply. For the purposes of this subpart, results of all initial compliance demonstrations must be included in the notification of compliance status report, which is due 150 days after the compliance date, as specified in §63.2520(d)(1).
(h) *Design evaluation.* To determine the percent reduction of a small control device that is used to comply with an emission limit specified in Table 1, 2, 3, or 5 to this subpart, you may elect to conduct a design evaluation as specified in §63.1257(a)(1) instead of a performance test as specified in subpart SS of this

part 63. You must establish the value(s) and basis for the operating limits as part of the design evaluation. For continuous process vents, the design evaluation must be conducted at maximum representative operating conditions for the process, unless the Administrator specifies or approves alternate operating conditions. For transfer racks, the design evaluation must demonstrate that the control device achieves the required control efficiency during the reasonably expected maximum transfer loading rate.
(i) *Outlet concentration correction for combustion devices.* When §63.997(e)(2)(iii)(C) requires you to correct the measured concentration at the outlet of a combustion device to 3 percent oxygen if you add supplemental combustion air, the requirements in either paragraph (i)(1) or (2) of this section apply for the purposes of this subpart.
(1) You must correct the concentration in the gas stream at the outlet of the combustion device to 3 percent oxygen if you add supplemental gases, as defined in §63.2550, to the vent stream, or;
(2) You must correct the measured concentration for supplemental gases using Equation 1 of §63.2460; you may use process knowledge and representative operating data to determine the fraction of the total flow due to supplemental gas.
(j) *Continuous emissions monitoring systems.* Each continuous emissions monitoring system (CEMS) must be installed, operated, and maintained according to the requirements in §63.8 and paragraphs (j)(1) through (5) of this section.
(1) Each CEMS must be installed, operated, and maintained according to the applicable Performance Specification of 40 CFR part 60, appendix B, and according to paragraph (j)(2) of this section, except as specified in paragraph (j)(1)(i) of this section. For any CEMS meeting Performance Specification 8, you must also comply with appendix F, procedure 1 of 40 CFR part 60.
(i) If you wish to use a CEMS other than an Fourier Transform Infrared Spectroscopy (FTIR) meeting the requirements of Performance Specification 15 to measure hydrogen halide and halogen HAP before we promulgate a Performance Specification for such CEMS, you must prepare a monitoring plan and submit it for approval in accordance with the procedures specified in §63.8.
(ii) [Reserved]
(2) You must determine the calibration gases and reporting units for TOC CEMS in accordance with paragraph (j)(2)(i), (ii), or (iii) of this section.
(i) For CEMS meeting Performance Specification 9 or 15 requirements, determine the target analyte(s) for calibration using either process knowledge of the control device inlet stream or the screening procedures of Method 18 on the control device inlet stream.
(ii) For CEMS meeting Performance Specification 8 used to monitor performance of a combustion device, calibrate the instrument on the predominant organic HAP and report the results as carbon (C1), and use Method 25A or any approved alternative as the reference method for the relative accuracy tests.
(iii) For CEMS meeting Performance Specification 8 used to monitor performance of a noncombustion device, determine the predominant organic HAP using either process knowledge or the screening procedures of Method 18 on the control device inlet stream, calibrate the monitor on the predominant organic HAP, and report the results as C_1. Use Method 18, ASTM D6420–99, or any approved alternative as the reference method for the relative accuracy tests, and report the results as C_1.
(3) You must conduct a performance evaluation of each CEMS according to the requirements in 40 CFR 63.8 and according to the applicable Performance Specification of 40 CFR part 60, appendix B, except that the schedule in §63.8(e)(4) does not apply, and the results of the performance evaluation must be included in the notification of compliance status report.
(4) The CEMS data must be reduced to operating day or operating block averages computed using valid data consistent with the data availability requirements specified in §63.999(c)(6)(i)(B) through (D), except monitoring data also are sufficient to constitute a valid hour of data if measured values are available for at least two of the 15-minute periods during an hour when calibration, quality assurance, or maintenance activities are being performed. An operating block is a period of time from the beginning to end of batch operations within a process. Operating block averages may be used only for batch process vent data.
(5) If you add supplemental gases, you must correct the measured concentrations in accordance with paragraph (i) of this section and §63.2460(c)(6).
(k) *Continuous parameter monitoring.* The provisions in paragraphs (k)(1) through (6) of this section apply in addition to the requirements for continuous parameter monitoring system (CPMS) in subpart SS of this part 63.
(1) You must record the results of each calibration check and all maintenance performed on the CPMS as specified in §63.998(c)(1)(ii)(A).
(2) When subpart SS of this part 63 uses the term “a range” or “operating range” of a monitored

parameter, it means an “operating limit” for a monitored parameter for the purposes of this subpart.
(3) As an alternative to continuously measuring and recording pH as specified in §§63.994(c)(1)(i) and 63.998(a)(2)(ii)(D), you may elect to continuously monitor and record the caustic strength of the effluent. For halogen scrubbers used to control only batch process vents you may elect to monitor and record either the pH or the caustic strength of the scrubber effluent at least once per day.
(4) As an alternative to the inlet and outlet temperature monitoring requirements for catalytic incinerators as specified in §63.988(c)(2) and the related recordkeeping requirements specified in §63.998(a)(2)(ii)(B)(*2*) and (c)(2)(ii), you may elect to comply with the requirements specified in paragraphs (k)(4)(i) through (iv) of this section.
(i) Monitor and record the inlet temperature as specified in subpart SS of this part 63.
(ii) Check the activity level of the catalyst at least every 12 months and take any necessary corrective action, such as replacing the catalyst to ensure that the catalyst is performing as designed.
(iii) Maintain records of the annual checks of catalyst activity levels and the subsequent corrective actions.
(iv) Recording the downstream temperature and temperature difference across the catalyst bed as specified in §63.998(a)(2)(ii)(B)(*2*) and (b)(2)(ii) is not required.
(5) For absorbers that control organic compounds and use water as the scrubbing fluid, you must conduct monitoring and recordkeeping as specified in paragraphs (k)(5)(i) through (iii) of this section instead of the monitoring and recordkeeping requirements specified in §§63.990(c)(1), 63.993(c)(1), and 63.998(a)(2)(ii)(C).
(i) You must use a flow meter capable of providing a continuous record of the absorber influent liquid flow.
(ii) You must determine gas stream flow using one of the procedures specified in §63.994(c)(1)(ii)(A) through (D).
(iii) You must record the absorber liquid-to-gas ratio averaged over the time period of any performance test.
(6) For a control device with total inlet HAP emissions less than 1 tpy, you must establish an operating limit(s) for a parameter(s) that you will measure and record at least once per averaging period (i.e., daily or block) to verify that the control device is operating properly. You may elect to measure the same parameter(s) that is required for control devices that control inlet HAP emissions equal to or greater than 1 tpy. If the parameter will not be measured continuously, you must request approval of your proposed procedure in the precompliance report. You must identify the operating limit(s) and the measurement frequency, and you must provide rationale to support how these measurements demonstrate the control device is operating properly.
(l) *Startup, shutdown, and malfunction.* Sections 63.152(f)(7)(ii) through (iv) and 63.998(b)(2)(iii) and (b)(6)(i)(A), which apply to the exclusion of monitoring data collected during periods of SSM from daily averages, do not apply for the purposes of this subpart.
(m) *Reporting.* (1) When §§63.2455 through 63.2490 reference other subparts in this part 63 that use the term “periodic report,” it means “compliance report” for the purposes of this subpart. The compliance report must include the information specified in §63.2520(e), as well as the information specified in referenced subparts.
(2) When there are conflicts between this subpart and referenced subparts for the due dates of reports required by this subpart, reports must be submitted according to the due dates presented in this subpart.
(3) Excused excursions, as defined in subparts G and SS of this part 63, are not allowed.
(n) [Reserved]
(o) You may not use a flare to control halogenated vent streams or hydrogen halide and halogen HAP emissions.
(p) Opening a safety device, as defined in §63.2550, is allowed at any time conditions require it to avoid unsafe conditions.
(q) If an emission stream contains energetics or organic peroxides that, for safety reasons, cannot meet an applicable emission limit specified in Tables 1 through 7 to this subpart, then you must submit documentation in your precompliance report explaining why an undue safety hazard would be created if the air emission controls were installed, and you must describe the procedures that you will implement to minimize HAP emissions from these vent streams.
(r) *Surge control vessels and bottoms receivers.* For each surge control vessel or bottoms receiver that meets the capacity and vapor pressure thresholds for a Group 1 storage tank, you must meet emission limits and work practice standards specified in Table 4 to this subpart.
(s) For the purposes of determining Group status for continuous process vents, batch process vents, and storage tanks in §§63.2455, 63.2460, and 63.2470, hydrazine is to be considered an organic HAP.

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38559, July 1, 2005; 71 FR 40332, July 14, 2006]

§ 63.2455 What requirements must I meet for continuous process vents?

(a) You must meet each emission limit in Table 1 to this subpart that applies to your continuous process vents, and you must meet each applicable requirement specified in paragraphs (b) through (c) of this section.
(b) For each continuous process vent, you must either designate the vent as a Group 1 continuous process vent or determine the total resource effectiveness (TRE) index value as specified in §63.115(d), except as specified in paragraphs (b)(1) through (3) of this section.
(1) You are not required to determine the Group status or the TRE index value for any continuous process vent that is combined with Group 1 batch process vents before a control device or recovery device because the requirements of §63.2450(c)(2)(i) apply to the combined stream.
(2) When a TRE index value of 4.0 is referred to in §63.115(d), TRE index values of 5.0 for existing affected sources and 8.0 for new and reconstructed affected sources apply for the purposes of this subpart.
(3) When §63.115(d) refers to “emission reductions specified in §63.113(a),” the reductions specified in Table 1 to this subpart apply for the purposes of this subpart.
(c) If you use a recovery device to maintain the TRE above a specified threshold, you must meet the requirements of §63.982(e) and the requirements referenced therein, except as specified in §63.2450 and paragraph (c)(1) of this section.
(1) When §63.993 uses the phrase “the TRE index value is between the level specified in a referencing subpart and 4.0,” the phrase “the TRE index value is >1.9 but ≤5.0” applies for an existing affected source, and the phrase “the TRE index value is >5.0 but ≤8.0” applies for a new and reconstructed affected source, for the purposes of this subpart.
(2) [Reserved]

§ 63.2460 What requirements must I meet for batch process vents?

(a) You must meet each emission limit in Table 2 to this subpart that applies to you, and you must meet each applicable requirement specified in paragraphs (b) and (c) of this section.
(b) *Group status.* If a process has batch process vents, as defined in §63.2550, you must determine the group status of the batch process vents by determining and summing the uncontrolled organic HAP emissions from each of the batch process vents within the process using the procedures specified in §63.1257(d)(2)(i) and (ii), except as specified in paragraphs (b)(1) through (7) of this section.
(1) To calculate emissions caused by the heating of a vessel without a process condenser to a temperature lower than the boiling point, you must use the procedures in §63.1257(d)(2)(i)(C)(*3*).
(2) To calculate emissions from depressurization of a vessel without a process condenser, you must use the procedures in §63.1257(d)(2)(i)(D)(*10*).
(3) To calculate emissions from vacuum systems for the purposes of this subpart, the receiving vessel is part of the vacuum system, and terms used in Equation 33 to 40 CFR part 63, subpart GGG, are defined as follows:
P_{system}= absolute pressure of the receiving vessel;
P_i= partial pressure of the HAP determined at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver;
P_j= partial pressure of condensables (including HAP) determined at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver;
MW_{HAP}= molecular weight of the HAP determined at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver.
(4) To calculate uncontrolled emissions when a vessel is equipped with a process condenser, you must use the procedures in §63.1257(d)(3)(i)(B), except as specified in paragraphs (b)(4)(i) through (vii) of this section.
(i) You must determine the flowrate of gas (or volume of gas), partial pressures of condensables, temperature (T), and HAP molecular weight (MW_{HAP}) at the exit temperature and exit pressure conditions of the condenser or at the conditions of the dedicated receiver.
(ii) You must assume that all of the components contained in the condenser exit vent stream are in equilibrium with the same components in the exit condensate stream (except for noncondensables).
(iii) You must perform a material balance for each component.

(iv) For the emissions from gas evolution, the term for time, t, must be used in Equation 12 to 40 CFR part 63, subpart GGG.
(v) Emissions from empty vessel purging shall be calculated using Equation 36 to 40 CFR part 63, subpart GGG and the exit temperature and exit pressure conditions of the condenser or the conditions of the dedicated receiver.
(vi) You must conduct an engineering assessment as specified in §63.1257(d)(2)(ii) for each emission episode that is not due to vapor displacement, purging, heating, depressurization, vacuum operations, gas evolution, air drying, or empty vessel purging. The requirements of paragraphs (b)(3) through (4) of this section shall apply.
(vii) You may elect to conduct an engineering assessment if you can demonstrate to the Administrator that the methods in §63.1257(d)(3)(i)(B) are not appropriate.
(5) You may elect to designate the batch process vents within a process as Group 1 and not calculate uncontrolled emissions under either of the situations in paragraph (b)(5)(i), (ii), or (iii) of this section.
(i) If you comply with the alternative standard specified in §63.2505.
(ii) If all Group 1 batch process vents within a process are controlled; you conduct the performance test under hypothetical worst case conditions, as defined in §63.1257(b)(8)(i)(B); and the emission profile is based on capture and control system limitations as specified in §63.1257(b)(8)(ii)(C).
(iii) If you comply with an emission limit using a flare that meets the requirements specified in §63.987.
(6) You may change from Group 2 to Group 1 in accordance with either paragraph (b)(6)(i) or (ii) of this section. You must comply with the requirements of this section and submit the test report in the next Compliance report.
(i) You may switch at any time after operating as Group 2 for at least 1 year so that you can show compliance with the 10,000 pounds per year (lb/yr) threshold for Group 2 batch process vents for at least 365 days before the switch. You may elect to start keeping records of emissions from Group 2 batch process vents before the compliance date. Report a switch based on this provision in your next compliance report in accordance with §63.2520(e)(10)(i).
(ii) If the conditions in paragraph (b)(6)(i) of this section are not applicable, you must provide a 60-day advance notice in accordance with §63.2520(e)(10)(ii) before switching.
(7) As an alternative to determining the uncontrolled organic HAP emissions as specified in §63.1257(d)(2)(i) and (ii), you may elect to demonstrate that non-reactive organic HAP are the only HAP used in the process and non-reactive HAP usage in the process is less than 10,000 lb/yr. You must provide data and supporting rationale in your notification of compliance status report explaining why the non-reactive organic HAP usage will be less than 10,000 lb/yr. You must keep records of the non-reactive organic HAP usage as specified in §63.2525(e)(2) and include information in compliance reports as specified in §63.2520(e)(5)(iv).
(c) Exceptions to the requirements in subparts SS and WW of this part 63 are specified in paragraphs (c)(1) through (9) of this section.
(1) *Process condensers.* Process condensers, as defined in §63.2550(i), are not considered to be control devices for batch process vents. You must determine whether a condenser is a control device for a batch process vent or a process condenser from which the uncontrolled HAP emissions are evaluated as part of the initial compliance demonstration for each MCPU and report the results with supporting rationale in your notification of compliance status report.
(2) *Initial compliance.* (i) To demonstrate initial compliance with a percent reduction emission limit in Table 2 to this subpart FFFF, you must compare the sums of the controlled and uncontrolled emissions for the applicable Group 1 batch process vents within the process, and show that the specified reduction is met. This requirement does not apply if you comply with the emission limits of Table 2 to this subpart FFFF by using a flare that meets the requirements of §63.987.
(ii) When you conduct a performance test or design evaluation for a non-flare control device used to control emissions from batch process vents, you must establish emission profiles and conduct the test under worst-case conditions according to §63.1257(b)(8) instead of under normal operating conditions as specified in §63.7(e)(1). The requirements in §63.997(e)(1)(i) and (iii) also do not apply for performance tests conducted to determine compliance with the emission limits for batch process vents. For purposes of this subpart FFFF, references in §63.997(b)(1) to “methods specified in §63.997(e)” include the methods specified in §63.1257(b)(8).
(iii) As an alternative to conducting a performance test or design evaluation to demonstrate initial compliance with a percent reduction requirement for a condenser, you may determine controlled emissions using the procedures specified in §63.1257(d)(3)(i)(B) and paragraphs (b)(3) through (4) of this

section.
(iv) When §63.1257(d)(3)(i)(B)(*7*) specifies that condenser-controlled emissions from an air dryer must be calculated using Equation 11 of 40 CFR part 63, subpart GGG, with "V equal to the air flow rate," it means "V equal to the dryer outlet gas flow rate," for the purposes of this subpart. Alternatively, you may use Equation 12 of 40 CFR part 63, subpart GGG, with V equal to the dryer inlet air flow rate. Account for time as appropriate in either equation.
(v) If a process condenser is used for any boiling operations, you must demonstrate that it is properly operated according to the procedures specified in §63.1257(d)(2)(i)(C)(*4*)(*ii*) and (d)(3)(iii)(B), and the demonstration must occur only during the boiling operation. The reference in §63.1257(d)(3)(iii)(B) to the alternative standard in §63.1254(c) means §63.2505 for the purposes of this subpart. As an alternative to measuring the exhaust gas temperature, as required by §63.1257(d)(3)(iii)(B), you may elect to measure the liquid temperature in the receiver.
(vi) You must conduct a subsequent performance test or compliance demonstration equivalent to an initial compliance demonstration within 180 days of a change in the worst-case conditions.
(3) *Establishing operating limits.* You must establish operating limits under the conditions required for your initial compliance demonstration, except you may elect to establish operating limit(s) for conditions other than those under which a performance test was conducted as specified in paragraph (c)(3)(i) of this section and, if applicable, paragraph (c)(3)(ii) of this section.
(i) The operating limits may be based on the results of the performance test and supplementary information such as engineering assessments and manufacturer's recommendations. These limits may be established for conditions as unique as individual emission episodes for a batch process. You must provide rationale in the precompliance report for the specific level for each operating limit, including any data and calculations used to develop the limit and a description of why the limit indicates proper operation of the control device. The procedures provided in this paragraph (c)(3)(i) have not been approved by the Administrator and determination of the operating limit using these procedures is subject to review and approval by the Administrator.
(ii) If you elect to establish separate monitoring levels for different emission episodes within a batch process, you must maintain records in your daily schedule or log of processes indicating each point at which you change from one operating limit to another, even if the duration of the monitoring for an operating limit is less than 15 minutes. You must maintain a daily schedule or log of processes according to §63.2525(c).
(4) *Averaging periods.* As an alternative to the requirement for daily averages in §63.998(b)(3), you may determine averages for operating blocks. An operating block is a period of time that is equal to the time from the beginning to end of batch process operations within a process.
(5) [Reserved]
(6) *Outlet concentration correction for supplemental gases.* If you use a control device other than a combustion device to comply with a TOC, organic HAP, or hydrogen halide and halogen HAP outlet concentration emission limit for batch process vents, you must correct the actual concentration for supplemental gases using Equation 1 of this section; you may use process knowledge and representative operating data to determine the fraction of the total flow due to supplemental gas.

$$C_a = C_m \left(\frac{Q_s + Q_a}{Q_a} \right) \qquad (Eq.\ 1)$$

Where:
C_a= corrected outlet TOC, organic HAP, or hydrogen halide and halogen HAP concentration, dry basis, ppmv;
C_m= actual TOC, organic HAP, or hydrogen halide and halogen HAP concentration measured at control device outlet, dry basis, ppmv;
Q_a= total volumetric flowrate of all gas streams vented to the control device, except supplemental gases;
Q_s= total volumetric flowrate of supplemental gases.
(7) If flow to a control device could be intermittent, you must install, calibrate, and operate a flow indicator at the inlet or outlet of the control device to identify periods of no flow. Periods of no flow may not be used in daily or block averages, and it may not be used in fulfilling a minimum data availability requirement.
(8) *Terminology.* When the term "storage vessel" is used in subpart WW of this part 63, the term "process tank," as defined in §63.2550(i), applies for the purposes of this section.
(9) *Requirements for a biofilter.* If you use a biofilter to meet either the 95 percent reduction requirement or outlet concentration requirement specified in Table 2 to this subpart, you must meet the requirements

specified in paragraphs (c)(9)(i) through (iv) of this section.
(i) *Operational requirements.* The biofilter must be operated at all times when emissions are vented to it.
(ii) *Performance tests.* To demonstrate initial compliance, you must conduct a performance test according to the procedures in §63.997 and paragraphs (c)(9)(ii)(A) through (D) of this section. The design evaluation option for small control devices is not applicable if you use a biofilter.
(A) Keep up-to-date, readily accessible continuous records of either the biofilter bed temperature averaged over the full period of the performance test or the outlet total organic HAP or TOC concentration averaged over the full period of the performance test. Include these data in your notification of compliance status report as required by §63.999(b)(3)(ii).
(B) Record either the percent reduction of total organic HAP achieved by the biofilter determined as specified in §63.997(e)(2)(iv) or the concentration of TOC or total organic HAP determined as specified in §63.997(e)(2)(iii) at the outlet of the biofilter, as applicable.
(C) If you monitor the biofilter bed temperature, you may elect to use multiple thermocouples in representative locations throughout the biofilter bed and calculate the average biofilter bed temperature across these thermocouples prior to reducing the temperature data to 15 minute (or shorter) averages for purposes of establishing operating limits for the biofilter. If you use multiple thermocouples, include your rationale for their site selection in your notification of compliance status report.
(D) Submit a performance test report as specified in §63.999(a)(2)(i) and (ii). Include the records from paragraph (c)(9)(ii)(B) of this section in your performance test report.
(iii) *Monitoring requirements.* Use either a biofilter bed temperature monitoring device (or multiple devices) capable of providing a continuous record or an organic monitoring device capable of providing a continuous record. Keep records of temperature or other parameter monitoring results as specified in §63.998(b) and (c), as applicable. General requirements for monitoring are contained in §63.996. If you monitor temperature, the operating temperature range must be based on only the temperatures measured during the performance test; these data may not be supplemented by engineering assessments or manufacturer's recommendations as otherwise allowed in §63.999(b)(3)(ii)(A). If you establish the operating range (minimum and maximum temperatures) using data from previous performance tests in accordance with §63.996(c)(6), replacement of the biofilter media with the same type of media is not considered a process change under §63.997(b)(1). You may expand your biofilter bed temperature operating range by conducting a repeat performance test that demonstrates compliance with the 95 percent reduction requirement or outlet concentration limit, as applicable.
(iv) *Repeat performance tests.* You must conduct a repeat performance test using the applicable methods specified in §63.997 within 2 years following the previous performance test and within 150 days after each replacement of any portion of the biofilter bed media with a different type of media or each replacement of more than 50 percent (by volume) of the biofilter bed media with the same type of media.
[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38559, July 1, 2005; 71 FR 40333, July 14, 2006]

§ 63.2465 What requirements must I meet for process vents that emit hydrogen halide and halogen HAP or HAP metals?

(a) You must meet each emission limit in Table 3 to this subpart that applies to you, and you must meet each applicable requirement in paragraphs (b) through (d) of this section.
(b) If any process vents within a process emit hydrogen halide and halogen HAP, you must determine and sum the uncontrolled hydrogen halide and halogen HAP emissions from each of the process vents within the process using the procedures specified in §63.1257(d)(2)(i) and/or (ii), as appropriate. When §63.1257(d)(2)(ii)(E) requires documentation to be submitted in the precompliance report, it means the notification of compliance status report for the purposes of this paragraph.
(c) If collective uncontrolled hydrogen halide and halogen HAP emissions from the process vents within a process are greater than or equal to 1,000 pounds per year (lb/yr), you must comply with §63.994 and the requirements referenced therein, except as specified in paragraphs (c)(1) through (3) of this section.
(1) When §63.994(b)(1) requires a performance test, you may elect to conduct a design evaluation in accordance with §63.1257(a)(1).
(2) When §63.994(b)(1) refers to “a combustion device followed by a halogen scrubber or other halogen reduction device,” it means any combination of control devices used to meet the emission limits specified in Table 3 to this subpart.
(3) Section 63.994(b)(2) does not apply for the purposes of this section.
(d) To demonstrate compliance with the emission limit in Table 3 to this subpart for HAP metals at a new

source, you must comply with paragraphs (d)(1) through (3) of this section.
(1) Determine the mass emission rate of HAP metals based on process knowledge, engineering assessment, or test data.
(2) Conduct an initial performance test of each control device that is used to comply with the emission limit for HAP metals specified in Table 3 to this subpart. Conduct the performance test according to the procedures in §63.997. Use Method 29 of appendix A of 40 CFR part 60 to determine the HAP metals at the inlet and outlet of each control device, or use Method 5 of appendix A of 40 CFR part 60 to determine the total particulate matter (PM) at the inlet and outlet of each control device. You have demonstrated initial compliance if the overall reduction of either HAP metals or total PM from the process is greater than or equal to 97 percent by weight.
(3) Comply with the monitoring requirements specified in §63.1366(b)(1)(xi) for each fabric filter used to control HAP metals.
[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40333, July 14, 2006]

§ 63.2470 What requirements must I meet for storage tanks?

(a) You must meet each emission limit in Table 4 to this subpart that applies to your storage tanks, and you must meet each applicable requirement specified in paragraphs (b) through (e) of this section.
(b) [Reserved]
(c) *Exceptions to subparts SS and WW of this part 63.* (1) If you conduct a performance test or design evaluation for a control device used to control emissions only from storage tanks, you must establish operating limits, conduct monitoring, and keep records using the same procedures as required in subpart SS of this part 63 for control devices used to reduce emissions from process vents instead of the procedures specified in §§63.985(c), 63.998(d)(2)(i), and 63.999(b)(2).
(2) When the term “storage vessel” is used in subparts SS and WW of this part 63, the term “storage tank,” as defined in §63.2550 applies for the purposes of this subpart.
(d) *Planned routine maintenance.* The emission limits in Table 4 to this subpart for control devices used to control emissions from storage tanks do not apply during periods of planned routine maintenance. Periods of planned routine maintenance of each control device, during which the control device does not meet the emission limit specified in Table 4 to this subpart, must not exceed 240 hours per year (hr/yr). You may submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr. The application must explain why the extension is needed, it must indicate that no material will be added to the storage tank between the time the 240-hr limit is exceeded and the control device is again operational, and it must be submitted at least 60 days before the 240-hr limit will be exceeded.
(e) *Vapor balancing alternative.* As an alternative to the emission limits specified in Table 4 to this subpart, you may elect to implement vapor balancing in accordance with §63.1253(f), except as specified in paragraphs (e)(1) through (3) of this section.
(1) When §63.1253(f)(6)(i) refers to a 90 percent reduction, 95 percent applies for the purposes of this subpart.
(2) To comply with §63.1253(f)(6)(i), the owner or operator of an offsite cleaning or reloading facility must comply with §§63.2445 through 63.2550 instead of complying with §63.1253(f)(7)(ii), except as specified in paragraph (e)(2)(i) or (ii) of this section.
(i) The reporting requirements in §63.2520 do not apply to the owner or operator of the offsite cleaning or reloading facility.
(ii) As an alternative to complying with the monitoring, recordkeeping, and reporting provisions in §§63.2445 through 63.2550, the owner or operator of an offsite cleaning or reloading facility may comply as specified in §63.2535(a)(2) with any other subpart of this part 63 which has monitoring, recordkeeping, and reporting provisions as specified in §63.2535(a)(2).
(3) You may elect to set a pressure relief device to a value less than the 2.5 pounds per square inch gage pressure (psig) required in §63.1253(f)(5) if you provide rationale in your notification of compliance status report explaining why the alternative value is sufficient to prevent breathing losses at all times.
(4) You may comply with the vapor balancing alternative in §63.1253(f) when your storage tank is filled from a barge. All requirements for tank trucks and railcars specified in §63.1253(f) also apply to barges, except as specified in §63.2470(e)(4)(i).
(i) When §63.1253(f)(2) refers to pressure testing certifications, the requirements in 40 CFR 61.304(f) apply for barges.
(ii) [Reserved]

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38559, July 1, 2005; 71 FR 40335, July 14, 2006]

§ 63.2475 What requirements must I meet for transfer racks?

(a) You must comply with each emission limit and work practice standard in Table 5 to this subpart that applies to your transfer racks, and you must meet each applicable requirement in paragraphs (b) and (c) of this section.
(b) When the term “high throughput transfer rack” is used in subpart SS of this part 63, the term “Group 1 transfer rack,” as defined in §63.2550, applies for the purposes of this subpart.
[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40335, July 14, 2006]

§ 63.2480 What requirements must I meet for equipment leaks?

(a) You must meet each requirement in Table 6 to this subpart that applies to your equipment leaks, except as specified in paragraphs (b) through (d) of this section.
(b) If you comply with either subpart H or subpart UU of this part 63, you may elect to comply with the provisions in paragraphs (b)(1) through (5) of this section as an alternative to the referenced provisions in subpart H or subpart UU of this part.
(1) The requirements for pressure testing in §63.179(b) or §63.1036(b) may be applied to all processes, not just batch processes.
(2) For the purposes of this subpart, pressure testing for leaks in accordance with §63.179(b) or §63.1036(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.
(3) For an existing source, you are not required to develop an initial list of identification numbers for connectors as would otherwise be required under §63.1022(b)(1) or §63.181(b)(1)(i).
(4) For connectors in gas/vapor and light liquid service at an existing source, you may elect to comply with the requirements in §63.169 or §63.1029 for connectors in heavy liquid service, including all associated recordkeeping and reporting requirements, rather than the requirements of §63.174 or §63.1027.
(5) For pumps in light liquid service in an MCPU that has no continuous process vents and is part of an existing source, you may elect to consider the leak definition that defines a leak to be 10,000 parts per million (ppm) or greater as an alternative to the values specified in §63.1026(b)(2)(i) through (iii) or §63.163(b)(2).
(c) If you comply with 40 CFR part 65, subpart F, you may elect to comply with the provisions in paragraphs (c)(1) through (9) of this section as an alternative to the referenced provisions in 40 CFR part 65, subpart F.
(1) The requirements for pressure testing in §65.117(b) may be applied to all processes, not just batch processes.
(2) For the purposes of this subpart, pressure testing for leaks in accordance with §65.117(b) is not required after reconfiguration of an equipment train if flexible hose connections are the only disturbed equipment.
(3) For an existing source, you are not required to develop an initial list of identification numbers for connectors as would otherwise be required under §65.103(b)(1).
(4) You may elect to comply with the monitoring and repair requirements specified in §65.108(e)(3) as an alternative to the requirements specified in §65.108(a) through (d) for any connectors at your affected source.
(5) For pumps in light liquid service in an MCPU that has no continuous process vents and is part of an existing source, you may elect to consider the leak definition that defines a leak to be 10,000 ppm or greater as an alternative to the values specified in §65.107(b)(2)(i) through (iii).
(6) When 40 CFR part 65, subpart F refers to the implementation date specified in §65.1(f), it means the compliance date specified in §63.2445.
(7) When §§65.105(f) and 65.117(d)(3) refer to §65.4, it means §63.2525.
(8) When §65.120(a) refers to §65.5(d), it means §63.2515.
(9) When §65.120(b) refers to §65.5(e), it means §63.2520.
(d) The provisions of this section do not apply to bench-scale processes, regardless of whether the processes are located at the same plant site as a process subject to the provisions of this subpart.
[71 FR 40335, July 14, 2006]

§ 63.2485 What requirements must I meet for wastewater streams and liquid streams in open systems within an MCPU?

(a) You must meet each requirement in Table 7 to this subpart that applies to your wastewater streams and liquid streams in open systems within an MCPU, except as specified in paragraphs (b) through (o) of this section.
(b) *Wastewater HAP.* Where §63.105 and §§63.132 through 63.148 refer to compounds in Table 9 of subpart G of this part 63, the compounds in Tables 8 and 9 to this subpart apply for the purposes of this subpart.
(c) *Group 1 wastewater.* Section 63.132(c)(1) (i) and (ii) do not apply. For the purposes of this subpart, a process wastewater stream is Group 1 for compounds in Tables 8 and 9 to this subpart if any of the conditions specified in paragraphs (c) (1) through (3) of this section are met.
(1) The total annual average concentration of compounds in Table 8 to this subpart is greater than or equal to 10,000 ppmw at any flowrate, and the total annual load of compounds in Table 8 to this subpart is greater than or equal to 200 lb/yr.
(2) The total annual average concentration of compounds in Table 8 to this subpart is greater than or equal to 1,000 ppmw, and the annual average flowrate is greater than or equal to 1 l/min.
(3) The combined total annual average concentration of compounds in Tables 8 and 9 to this subpart is greater than or equal to 30,000 ppmw, and the combined total annual load of compounds in Tables 8 and 9 to this subpart is greater than or equal to 1 tpy.
(d) *Wastewater tank requirements.* (1) When §§63.133 and 63.147 reference floating roof requirements in §§63.119 and 63.120, the corresponding requirements in subpart WW of this part 63 may be applied for the purposes of this subpart.
(2) When §63.133(a) refers to Table 10 of subpart G of this part 63, the maximum true vapor pressure in the table shall be limited to the HAP listed in Tables 8 and 9 of this subpart FFFF.
(3) For the purposes of this subpart, the requirements of §63.133(a)(2) are satisfied by operating and maintaining a fixed roof if you demonstrate that the total soluble and partially soluble HAP emissions from the wastewater tank are no more than 5 percent higher than the emissions would be if the contents of the wastewater tank were not heated, treated by an exothermic reaction, or sparged.
(4) The emission limits specified in §§63.133(b)(2) and 63.139 for control devices used to control emissions from wastewater tanks do not apply during periods of planned routine maintenance of the control device(s) of no more than 240 hr/yr. You may request an extension to a total of 360 hr/yr in accordance with the procedures specified in §63.2470(d).
(e) *Individual drain systems.* The provisions of §63.136(e)(3) apply except as specified in paragraph (e)(1) of this section.
(1) A sewer line connected to drains that are in compliance with §63.136(e)(1) may be vented to the atmosphere, provided that the sewer line entrance to the first downstream junction box is water sealed and the sewer line vent pipe is designed as specified in §63.136(e)(2)(ii)(A).
(2) [Reserved]
(f) *Closed-vent system requirements.* When §63.148(k) refers to closed vent systems that are subject to the requirements of §63.172, the requirements of either §63.172 or §63.1034 apply for the purposes of this subpart.
(g) *Halogenated vent stream requirements.* For each halogenated vent stream from a Group 1 wastewater stream or residual removed from a Group 1 wastewater stream that is vented through a closed-vent system to a combustion device to reduce organic HAP emissions, you must meet the same emission limits as specified for batch process vents in item 2 of Table 2 to this subpart.
(h) *Alternative test methods.* (1) As an alternative to the test methods specified in §63.144(b)(5)(i), you may use Method 8260 or 8270 as specified in §63.1257(b)(10)(iii).
(2) As an alternative to using the methods specified in §63.144(b)(5)(i), you may conduct wastewater analyses using Method 1666 or 1671 of 40 CFR part 136 and comply with the sampling protocol requirements specified in §63.144(b)(5)(ii). The validation requirements specified in §63.144(b)(5)(iii) do not apply if you use Method 1666 or 1671 of 40 CFR part 136.
(3) As an alternative to using Method 18 of 40 CFR part 60, as specified in §§63.139(c)(1)(ii) and 63.145(i)(2), you may elect to use Method 25A of 40 CFR part 60 as specified in §63.997.
(i) *Offsite management and treatment option.* (1) If you ship wastewater to an offsite treatment facility that meets the requirements of §63.138(h), you may elect to document in your notification of compliance status report that the wastewater will be treated as hazardous waste at a facility that meets the requirements of

§63.138(h) as an alternative to having the offsite facility submit the certification specified in §63.132(g)(2).
(2) As an alternative to the management and treatment options specified in §63.132(g)(2), any affected wastewater stream (or residual removed from an affected wastewater stream) with a total annual average concentration of compounds in Table 8 to this subpart less than 50 ppmw may be transferred offsite in accordance with paragraphs (i)(2) (i) and (ii) of this section.
(i) The transferee (or you) must demonstrate that less than 5 percent of the HAP in Table 9 to this subpart is emitted from the waste management units up to the activated sludge unit.
(ii) The transferee must treat the wastewater stream or residual in a biological treatment unit in accordance with §§63.138 and 63.145 and the requirements referenced therein.
(j) You must determine the annual average concentration and annual average flowrate for wastewater streams for each MCPU. The procedures for flexible operation units specified in §63.144 (b) and (c) do not apply for the purposes of this subpart.
(k) The requirement to correct outlet concentrations from combustion devices to 3 percent oxygen in §§63.139(c)(1)(ii) and 63.146(i)(6) applies only if supplemental gases are combined with a vent stream from a Group 1 wastewater stream. If emissions are controlled with a vapor recovery system as specified in §63.139(c)(2), you must correct for supplemental gases as specified in §63.2460(c)(6).
(l) *Requirements for liquid streams in open systems.* (1) References in §63.149 to §63.100(b) mean §63.2435(b) for the purposes of this subpart.
(2) When §63.149(e) refers to 40 CFR 63.100(l) (1) or (2), §63.2445(a) applies for the purposes of this subpart.
(3) When §63.149 uses the term “chemical manufacturing process unit,” the term “MCPU” applies for the purposes of this subpart.
(4) When §63.149(e)(1) refers to characteristics of water that contain compounds in Table 9 to 40 CFR part 63, subpart G, the characteristics specified in paragraphs (c) (1) through (3) of this section apply for the purposes of this subpart.
(5) When §63.149(e)(2) refers to characteristics of water that contain compounds in Table 9 to 40 CFR part 63, subpart G, the characteristics specified in paragraph (c)(2) of this section apply for the purposes of this subpart.
(m) When §63.132(f) refers to “a concentration of greater than 10,000 ppmw of Table 9 compounds,” the phrase “a concentration of greater than 30,000 ppmw of total partially soluble HAP (PSHAP) and soluble HAP (SHAP) or greater than 10,000 ppmw of PSHAP” shall apply for the purposes of this subpart.
(n) *Alternative requirements for wastewater that is Group 1 for soluble HAP only.* The option specified in this paragraph (n) applies to wastewater that is Group 1 for soluble HAP in accordance with paragraph (c)(3) of this section and is discharged to biological treatment. Except as provided in paragraph (n)(4) of this section, this option does not apply to wastewater that is Group 1 for partially soluble HAP in accordance with paragraph (c)(1), (c)(2), or (c)(4) of this section. For wastewater that is Group 1 for SHAP, you need not comply with §§63.133 through 63.137 for any equalization unit, neutralization unit, and/or clarifier prior to the activated sludge unit, and you need not comply with the venting requirements in §63.136(e)(2)(ii)(A) for lift stations with a volume larger than 10,000 gal, provided you comply with the requirements specified in paragraphs (n)(1) through (3) of this section and all otherwise applicable requirements specified in Table 7 to this subpart. For this option, the treatment requirements in §63.138 and the performance testing requirements in §63.145 do not apply to the biological treatment unit, except as specified in paragraphs (n)(2)(i) through (iv) of this section.
(1) Wastewater must be hard-piped between the equalization unit, clarifier, and activated sludge unit. This requirement does not apply to the transfer between any of these types of units that are part of the same structure and one unit overflows into the next.
(2) Calculate the destruction efficiency of the biological treatment unit using Equation 1 of this section in accordance with the procedures described in paragraphs (n)(2)(i) through (vi) of this section. You have demonstrated initial compliance if E is greater than or equal to 90 percent.

$$E = \frac{(QMW_a - QMG_b - QMG_n - QMG_c)(F_{bio})}{QMW_a} \times 100 \qquad \text{(Eq. 1)}$$

Where:
E = destruction efficiency of total PSHAP and SHAP for the biological treatment unit including the equalization unit, neutralization unit, and/or clarifier, percent;
QMW_a= mass flow rate of total PSHAP and SHAP compounds entering the equalization unit (or whichever of the three types of units is first), kilograms per hour (kg/hr);

QMG_e= mass flow rate of total PSHAP and SHAP compounds emitted from the equalization unit, kg/hr;
QMG_n= mass flow rate of total PSHAP and SHAP compounds emitted from the neutralization unit, kg/hr;
QMG_c= mass flow rate of total PSHAP and SHAP compounds emitted from the clarifier, kg/hr
F_{bio}= site-specific fraction of PSHAP and SHAP compounds biodegraded in the biological treatment unit.
(i) Include all PSHAP and SHAP compounds in both Group 1 and Group 2 wastewater streams from all MCPU, except you may exclude any compounds that meet the criteria specified in §63.145(a)(6)(ii) or (iii).
(ii) Conduct the demonstration under representative process unit and treatment unit operating conditions in accordance with §63.145(a)(3) and (4).
(iii) Determine PSHAP and SHAP concentrations and the total wastewater flow rate at the inlet to the equalization unit in accordance with §63.145(f)(1) and (2). References in §63.145(f)(1) and (2) to required mass removal and actual mass removal do not apply for the purposes of this section.
(iv) Determine $F_{bio}$for the activated sludge unit as specified in §63.145(h), except as specified in paragraph (n)(2)(iv)(A) or paragraph (n)(2)(iv)(B) of this section.
(A) If the biological treatment process meets both of the requirements specified in §63.145(h)(1)(i) and (ii), you may elect to replace the F_{bio}term in Equation 1 of this section with the numeral “1.”
(B) You may elect to assume $f_{bio}$is zero for any compounds on List 2 of Table 36 in subpart G.
(v) Determine QMG_e, QMG_n, and QMG_c using EPA's WATER9 model or the most recent update to this model, and conduct testing or use other procedures to validate the modeling results.
(vi) Submit the data and results of your demonstration, including both a description of and the results of your WATER9 modeling validation procedures, in your notification of compliance status report as specified in §63.2520(d)(2)(ii).
(3) As an alternative to the venting requirements in §63.136(e)(2)(ii)(A), a lift station with a volume larger than 10,000 gal may have openings necessary for proper venting of the lift station. The size and other design characteristics of these openings may be established based on manufacturer recommendations or engineering judgment for venting under normal operating conditions. You must describe the design of such openings and your supporting calculations and other rationale in your notification of compliance status report.
(4) For any wastewater streams that are Group 1 for both PSHAP and SHAP, you may elect to meet the requirements specified in Table 7 to this subpart for the PSHAP and then comply with paragraphs (n)(1) through (3) of this section for the SHAP in the wastewater system. You may determine the SHAP mass removal rate, in kg/hr, in treatment units that are used to meet the requirements for PSHAP and add this amount to both the numerator and denominator in Equation 1 of this section.
(o) *Compliance records.* For each CPMS used to monitor a nonflare control device for wastewater emissions, you must keep records as specified in §63.998(c)(1) in addition to the records required in §63.147(d).
[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38559, July 1, 2005; 71 FR 40335, July 14, 2006]

§ 63.2490 What requirements must I meet for heat exchange systems?

(a) You must comply with each requirement in Table 10 to this subpart that applies to your heat exchange systems, except as specified in paragraphs (b) and (c) of this section.
(b) The phrase “a chemical manufacturing process unit meeting the conditions of §63.100 (b)(1) through (b)(3) of this section” in §63.104(a) means “an MCPU meeting the conditions of §63.2435” for the purposes of this subpart.
(c) The reference to §63.100(c) in §63.104(a) does not apply for the purposes of this subpart.

Alternative Means of Compliance

§ 63.2495 How do I comply with the pollution prevention standard?

(a) You may elect to comply with the pollution prevention alternative requirements specified in paragraphs (a) (1) and (2) of this section in lieu of the emission limitations and work practice standards contained in Tables 1 through 7 to this subpart for any MCPU for which initial startup occurred before April 4, 2002.
(1) You must reduce the production-indexed HAP consumption factor (HAP factor) by at least 65 percent from a 3-year average baseline beginning no earlier than the 1994 through 1996 calendar years. For any reduction in the HAP factor that you achieve by reducing HAP that are also volatile organic compounds (VOC), you must demonstrate an equivalent reduction in the production-indexed VOC consumption factor (VOC factor) on a mass basis. For any reduction in the HAP factor that you achieve by reducing a HAP

that is not a VOC, you may not increase the VOC factor.
(2) Any MCPU for which you seek to comply by using the pollution prevention alternative must begin with the same starting material(s) and end with the same product(s). You may not comply by eliminating any steps of a process by transferring the step offsite (to another manufacturing location). You may also not merge a solvent recovery step conducted offsite to onsite and as part of an existing process as a method of reducing consumption.
(3) You may comply with the requirements of paragraph (a)(1) of this section for a series of processes, including situations where multiple processes are merged, if you demonstrate to the satisfaction of the Administrator that the multiple processes were merged after the baseline period into an existing process or processes.
(b) *Exclusions.* (1) You must comply with the emission limitations and work practice standards contained in Tables 1 through 7 of this subpart for all HAP that are generated in the MCPU and that are not included in consumption, as defined in §63.2550. If any vent stream routed to the combustion control is a halogenated vent stream, as defined in §63.2550, then hydrogen halides that are generated as a result of combustion control must be controlled according to the requirements of §63.994 and the requirements referenced therein.
(2) You may not merge nondedicated formulation or nondedicated solvent recovery processes with any other processes.
(c) *Initial compliance procedures.* To demonstrate initial compliance with paragraph (a) of this section, you must prepare a demonstration summary in accordance with paragraph (c) (1) of this section and calculate baseline and target annual HAP and VOC factors in accordance with paragraphs (c) (2) and (3) of this section.
(1) *Demonstration plan.* You must prepare a pollution prevention demonstration plan that contains, at a minimum, the information in paragraphs (c)(1) (i) through (iii) of this section for each MCPU for which you comply with paragraph (a) of this section.
(i) Descriptions of the methodologies and forms used to measure and record consumption of HAP and VOC compounds.
(ii) Descriptions of the methodologies and forms used to measure and record production of the product(s).
(iii) Supporting documentation for the descriptions provided in accordance with paragraphs (c)(1) (i) and (ii) of this section including, but not limited to, samples of operator log sheets and daily, monthly, and/or annual inventories of materials and products. You must describe how this documentation will be used to calculate the annual factors required in paragraph (d) of this section.
(2) *Baseline factors.* You must calculate baseline HAP and VOC factors by dividing the consumption of total HAP and total VOC by the production rate, per process, for the first 3-year period in which the process was operational, beginning no earlier than the period consisting of the 1994 through 1996 calendar years.
(3) *Target annual factors.* You must calculate target annual HAP and VOC factors. The target annual HAP factor must be equal to 35 percent of the baseline HAP factor. The target annual VOC factor must be lower than the baseline VOC factor by an amount equivalent to the reduction in any HAP that is also a VOC, on a mass basis. The target annual VOC factor may be the same as the baseline VOC factor if the only HAP you reduce is not a VOC.
(d) *Continuous compliance requirements.* You must calculate annual rolling average values of the HAP and VOC factors (annual factors) in accordance with the procedures specified in paragraphs (d) (1) through (3) of this section. To show continuous compliance, the annual factors must be equal to or less than the target annual factors calculated according to paragraph (c)(3) of this section.
(1) To calculate the annual factors, you must divide the consumption of both total HAP and total VOC by the production rate, per process, for 12-month periods at the frequency specified in either paragraph (d) (2) or (3) of this section, as applicable.
(2) For continuous processes, you must calculate the annual factors every 30 days for the 12-month period preceding the 30th day (i.e., annual rolling average calculated every 30 days). A process with both batch and continuous operations is considered a continuous process for the purposes of this section.
(3) For batch processes, you must calculate the annual factors every 10 batches for the 12-month period preceding the 10th batch (*i.e.,* annual rolling average calculated every 10 batches), except as specified in paragraphs (d)(3) (i) and (ii) of this section.
(i) If you produce more than 10 batches during a month, you must calculate the annual factors at least once during that month.
(ii) If you produce less than 10 batches in a 12-month period, you must calculate the annual factors for the

number of batches in the 12-month period since the previous calculations.
(e) *Records.* You must keep records of HAP and VOC consumption, production, and the rolling annual HAP and VOC factors for each MCPU for which you are complying with paragraph (a) of this section.
(f) *Reporting.* (1) You must include the pollution prevention demonstration plan in the precompliance report required by §63.2520(c).
(2) You must identify all days when the annual factors were above the target factors in the compliance reports.
[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40336, July 14, 2006]

§ 63.2500 How do I comply with emissions averaging?

(a) For an existing source, you may elect to comply with the percent reduction emission limitations in Tables 1, 2, 4, 5, and 7 to this subpart by complying with the emissions averaging provisions specified in §63.150, except as specified in paragraphs (b) through (f) of this section.
(b) The batch process vents in an MCPU collectively are considered one individual emission point for the purposes of emissions averaging, except that only individual batch process vents must be excluded to meet the requirements of §63.150(d)(5).
(c) References in §63.150 to §§63.112 through 63.130 mean the corresponding requirements in §§63.2450 through 63.2490, including applicable monitoring, recordkeeping, and reporting.
(d) References to “periodic reports” in §63.150 mean “compliance report” for the purposes of this subpart.
(e) For batch process vents, estimate uncontrolled emissions for a standard batch using the procedures in §63.1257(d)(2)(i) and (ii) instead of the procedures in §63.150(g)(2). Multiply the calculated emissions per batch by the number of batches per month when calculating the monthly emissions for use in calculating debits and credits.
(f) References to “storage vessels” in §63.150 mean “storage tank” as defined in §63.2550 for the purposes of this subpart.

§ 63.2505 How do I comply with the alternative standard?

As an alternative to complying with the emission limits and work practice standards for process vents and storage tanks in Tables 1 through 4 to this subpart and the requirements in §§63.2455 through 63.2470, you may comply with the emission limits in paragraph (a) of this section and demonstrate compliance in accordance with the requirements in paragraph (b) of this section.
(a) *Emission limits and work practice standards.* (1) You must route vent streams through a closed-vent system to a control device that reduces HAP emissions as specified in either paragraph (a)(1)(i) or (ii) of this section.
(i) If you use a combustion control device, it must reduce HAP emissions as specified in paragraphs (a)(1)(i)(A), (B), and (C) of this section.
(A) To an outlet TOC concentration of 20 parts per million by volume (ppmv) or less.
(B) To an outlet concentration of hydrogen halide and halogen HAP of 20 ppmv or less.
(C) As an alternative to paragraph (a)(1)(i)(B) of this section, if you control halogenated vent streams emitted from a combustion device followed by a scrubber, reduce the hydrogen halide and halogen HAP generated in the combustion device by greater than or equal to 95 percent by weight in the scrubber.
(ii) If you use a noncombustion control device(s), it must reduce HAP emissions to an outlet total organic HAP concentration of 50 ppmv or less, and an outlet concentration of hydrogen halide and halogen HAP of 50 ppmv or less.
(2) Any Group 1 process vents within a process that are not controlled according to this alternative standard must be controlled according to the emission limits in Tables 1 through 3 to this subpart.
(b) *Compliance requirements.* To demonstrate compliance with paragraph (a) of this section, you must meet the requirements of §63.1258(b)(5) beginning no later than the initial compliance date specified in §63.2445, except as specified in paragraphs (b)(1) through (9) of this section.
(1) You must comply with the requirements in §63.983 and the requirements referenced therein for closed-vent systems.
(2) When §63.1258(b)(5)(i) refers to §§63.1253(d) and 63.1254(c), the requirements in paragraph (a) of this section apply for the purposes of this subpart FFFF.
(3) When §63.1258(b)(5)(i)(B) refers to “HCl,” it means “total hydrogen halide and halogen HAP” for the purposes of this subpart FFFF.
(4) When §63.1258(b)(5)(ii) refers to §63.1257(a)(3), it means §63.2450(j)(5) for the purposes of this

subpart FFFF.
(5) You must submit the results of any determination of the target analytes of predominant HAP in the notification of compliance status report.
(6) If you elect to comply with the requirement to reduce hydrogen halide and halogen HAP by greater than or equal to 95 percent by weight in paragraph (a)(1)(i)(C) of this section, you must meet the requirements in paragraphs (b)(6)(i) and (ii) of this section.
(i) Demonstrate initial compliance with the 95 percent reduction by conducting a performance test and setting a site-specific operating limit(s) for the scrubber in accordance with §63.994 and the requirements referenced therein. You must submit the results of the initial compliance demonstration in the notification of compliance status report.
(ii) Install, operate, and maintain CPMS for the scrubber as specified in §§63.994(c) and 63.2450(k), instead of as specified in §63.1258(b)(5)(i)(C).
(7) If flow to the scrubber could be intermittent, you must install, calibrate, and operate a flow indicator as specified in §63.2460(c)(7).
(8) Use the operating day as the averaging period for CEMS data and scrubber parameter monitoring data.
(9) The requirements in paragraph (a) of this section do not apply to emissions from storage tanks during periods of planned routine maintenance of the control device that do not exceed 240 hr/yr. You may submit an application to the Administrator requesting an extension of this time limit to a total of 360 hr/yr in accordance with the procedures specified in §63.2470(d). You must comply with the recordkeeping and reporting specified in §§63.998(d)(2)(ii) and 63.999(c)(4) for periods of planned routine maintenance.
[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38559, July 1, 2005]

Notification, Reports, and Records

§ 63.2515 What notifications must I submit and when?

(a) You must submit all of the notifications in §§63.6(h)(4) and (5), 63.7(b) and (c), 63.8(e), (f)(4) and (6), and 63.9(b) through (h) that apply to you by the dates specified.
(b) *Initial notification.* As specified in §63.9(b)(2), if you startup your affected source before November 10, 2003, you must submit an initial notification not later than 120 calendar days after November 10, 2003.
(2) As specified in §63.9(b)(3), if you startup your new affected source on or after November 10, 2003, you must submit an initial notification not later than 120 calendar days after you become subject to this subpart.
(c) *Notification of performance test.* If you are required to conduct a performance test, you must submit a notification of intent to conduct a performance test at least 60 calendar days before the performance test is scheduled to begin as required in §63.7(b)(1). For any performance test required as part of the initial compliance procedures for batch process vents in Table 2 to this subpart, you must also submit the test plan required by §63.7(c) and the emission profile with the notification of the performance test.

§ 63.2520 What reports must I submit and when?

(a) You must submit each report in Table 11 to this subpart that applies to you.
(b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date in Table 11 to this subpart and according to paragraphs (b)(1) through (5) of this section.
(1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.2445 and ending on June 30 or December 31, whichever date is the first date following the end of the first 6 months after the compliance date that is specified for your affected source in §63.2445.
(2) The first compliance report must be postmarked or delivered no later than August 31 or February 28, whichever date is the first date following the end of the first reporting period specified in paragraph (b)(1) of this section.
(3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
(4) Each subsequent compliance report must be postmarked or delivered no later than August 31 or February 28, whichever date is the first date following the end of the semiannual reporting period.
(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40

CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.

(c) *Precompliance report.* You must submit a precompliance report to request approval for any of the items in paragraphs (c)(1) through (7) of this section. We will either approve or disapprove the report within 90 days after we receive it. If we disapprove the report, you must still be in compliance with the emission limitations and work practice standards in this subpart by the compliance date. To change any of the information submitted in the report, you must notify us 60 days before the planned change is to be implemented.

(1) Requests for approval to set operating limits for parameters other than those specified in §§63.2455 through 63.2485 and referenced therein. Alternatively, you may make these requests according to §63.8(f).

(2) Descriptions of daily or per batch demonstrations to verify that control devices subject to §63.2460(c)(5) are operating as designed.

(3) A description of the test conditions, data, calculations, and other information used to establish operating limits according to §63.2460(c)(3).

(4) Data and rationale used to support an engineering assessment to calculate uncontrolled emissions in accordance with §63.1257(d)(2)(ii). This requirement does not apply to calculations of hydrogen halide and halogen HAP emissions as specified in §63.2465(b), to determinations that the total HAP concentration is less than 50 ppmv, or if you use previous test data to establish the uncontrolled emissions.

(5) The pollution prevention demonstration plan required in §63.2495(c)(1), if you are complying with the pollution prevention alternative.

(6) Documentation of the practices that you will implement to minimize HAP emissions from streams that contain energetics and organic peroxides, and rationale for why meeting the emission limit specified in Tables 1 through 7 to this subpart would create an undue safety hazard.

(7) For fabric filters that are monitored with bag leak detectors, an operation and maintenance plan that describes proper operation and maintenance procedures, and a corrective action plan that describes corrective actions to be taken, and the timing of those actions, when the PM concentration exceeds the set point and activates the alarm.

(d) *Notification of compliance status report.* You must submit a notification of compliance status report according to the schedule in paragraph (d)(1) of this section, and the notification of compliance status report must contain the information specified in paragraph (d)(2) of this section.

(1) You must submit the notification of compliance status report no later than 150 days after the applicable compliance date specified in §63.2445.

(2) The notification of compliance status report must include the information in paragraphs (d)(2)(i) through (ix) of this section.

(i) The results of any applicability determinations, emission calculations, or analyses used to identify and quantify HAP usage or HAP emissions from the affected source.

(ii) The results of emissions profiles, performance tests, engineering analyses, design evaluations, flare compliance assessments, inspections and repairs, and calculations used to demonstrate initial compliance according to §§63.2455 through 63.2485. For performance tests, results must include descriptions of sampling and analysis procedures and quality assurance procedures.

(iii) Descriptions of monitoring devices, monitoring frequencies, and the operating limits established during the initial compliance demonstrations, including data and calculations to support the levels you establish.

(iv) All operating scenarios.

(v) Descriptions of worst-case operating and/or testing conditions for control devices.

(vi) Identification of parts of the affected source subject to overlapping requirements described in §63.2535 and the authority under which you will comply.

(vii) The information specified in §63.1039(a)(1) through (3) for each process subject to the work practice standards for equipment leaks in Table 6 to this subpart.

(viii) Identify storage tanks for which you are complying with the vapor balancing alternative in §63.2470(e).

(ix) Records as specified in §63.2535(l)(1) through (3) of process units used to create a PUG and calculations of the initial primary product of the PUG.

(e) *Compliance report.* The compliance report must contain the information specified in paragraphs (e)(1)

through (10) of this section.
(1) Company name and address.
(2) Statement by a responsible official with that official's name, title, and signature, certifying the accuracy of the content of the report.
(3) Date of report and beginning and ending dates of the reporting period.
(4) For each SSM during which excess emissions occur, the compliance report must include records that the procedures specified in your startup, shutdown, and malfunction plan (SSMP) were followed or documentation of actions taken that are not consistent with the SSMP, and include a brief description of each malfunction.
(5) The compliance report must contain the information on deviations, as defined in §63.2550, according to paragraphs (e)(5)(i), (ii), (iii), and (iv) of this section.
(i) If there are no deviations from any emission limit, operating limit or work practice standard specified in this subpart, include a statement that there were no deviations from the emission limits, operating limits, or work practice standards during the reporting period.
(ii) For each deviation from an emission limit, operating limit, and work practice standard that occurs at an affected source where you are not using a continuous monitoring system (CMS) to comply with the emission limit or work practice standard in this subpart, you must include the information in paragraphs (e)(5)(ii)(A) through (C) of this section. This includes periods of SSM.
(A) The total operating time of the affected source during the reporting period.
(B) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
(C) Operating logs of processes with batch vents from batch operations for the day(s) during which the deviation occurred, except operating logs are not required for deviations of the work practice standards for equipment leaks.
(iii) For each deviation from an emission limit or operating limit occurring at an affected source where you are using a CMS to comply with an emission limit in this subpart, you must include the information in paragraphs (e)(5)(iii)(A) through (L) of this section. This includes periods of SSM.
(A) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.
(B) The date, time, and duration that each CEMS was out-of-control, including the information in §63.8(c)(8).
(C) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.
(D) A summary of the total duration of the deviation during the reporting period, and the total duration as a percent of the total operating time of the affected source during that reporting period.
(E) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.
(F) A summary of the total duration of CMS downtime during the reporting period, and the total duration of CMS downtime as a percent of the total operating time of the affected source during that reporting period.
(G) An identification of each HAP that is known to be in the emission stream.
(H) A brief description of the process units.
(I) A brief description of the CMS.
(J) The date of the latest CMS certification or audit.
(K) Operating logs of processes with batch vents from batch operations for each day(s) during which the deviation occurred.
(L) The operating day or operating block average values of monitored parameters for each day(s) during which the deviation occurred.
(iv) If you documented in your notification of compliance status report that an MCPU has Group 2 batch process vents because the non-reactive HAP is the only HAP and usage is less than 10,000 lb/yr, the total uncontrolled organic HAP emissions from the batch process vents in an MCPU will be less than 1,000 lb/yr for the anticipated number of standard batches, or total uncontrolled hydrogen halide and halogen HAP emissions from all batch process vents and continuous process vents in a process are less than 1,000 lb/yr, include the records associated with each calculation required by §63.2525(e) that exceeds an applicable HAP usage or emissions threshold.
(6) If you use a CEMS, and there were no periods during which it was out-of-control as specified in §63.8(c)(7), include a statement that there were no periods during which the CEMS was out-of-control during the reporting period.

(7) Include each new operating scenario which has been operated since the time period covered by the last compliance report and has not been submitted in the notification of compliance status report or a previous compliance report. For each new operating scenario, you must provide verification that the operating conditions for any associated control or treatment device have not been exceeded and that any required calculations and engineering analyses have been performed. For the purposes of this paragraph, a revised operating scenario for an existing process is considered to be a new operating scenario.
(8) Records of process units added to a PUG as specified in §63.2525(i)(4) and records of primary product redeterminations as specified in §63.2525(i)(5).
(9) Applicable records and information for periodic reports as specified in referenced subparts F, G, H, SS, UU, WW, and GGG of this part and subpart F of 40 CFR part 65.
(10) *Notification of process change.* (i) Except as specified in paragraph (e)(10)(ii) of this section, whenever you make a process change, or change any of the information submitted in the notification of compliance status report or a previous compliance report, that is not within the scope of an existing operating scenario, you must document the change in your compliance report. A process change does not include moving within a range of conditions identified in the standard batch, and a nonstandard batch does not constitute a process change. The notification must include all of the information in paragraphs (e)(10)(i)(A) through (C) of this section.
(A) A description of the process change.
(B) Revisions to any of the information reported in the original notification of compliance status report under paragraph (d) of this section.
(C) Information required by the notification of compliance status report under paragraph (d) of this section for changes involving the addition of processes or equipment at the affected source.
(ii) You must submit a report 60 days before the scheduled implementation date of any of the changes identified in paragraph (e)(10)(ii)(A), (B), or (C) of this section.
(A) Any change to the information contained in the precompliance report.
(B) A change in the status of a control device from small to large.
(C) A change from Group 2 to Group 1 for any emission point except for batch process vents that meet the conditions specified in §63.2460(b)(6)(i).
[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38560, July 1, 2005; 71 FR 40336, July 14, 2006]

§ 63.2525 What records must I keep?

You must keep the records specified in paragraphs (a) through (k) of this section.
(a) Each applicable record required by subpart A of this part 63 and in referenced subparts F, G, SS, UU, WW, and GGG of this part 63 and in referenced subpart F of 40 CFR part 65.
(b) Records of each operating scenario as specified in paragraphs (b)(1) through (8) of this section.
(1) A description of the process and the type of process equipment used.
(2) An identification of related process vents, including their associated emissions episodes if not complying with the alternative standard in §63.2505; wastewater point of determination (POD); storage tanks; and transfer racks.
(3) The applicable control requirements of this subpart, including the level of required control, and for vents, the level of control for each vent.
(4) The control device or treatment process used, as applicable, including a description of operating and/or testing conditions for any associated control device.
(5) The process vents, wastewater POD, transfer racks, and storage tanks (including those from other processes) that are simultaneously routed to the control device or treatment process(s).
(6) The applicable monitoring requirements of this subpart and any parametric level that assures compliance for all emissions routed to the control device or treatment process.
(7) Calculations and engineering analyses required to demonstrate compliance.
(8) For reporting purposes, a change to any of these elements not previously reported, except for paragraph (b)(5) of this section, constitutes a new operating scenario.
(c) A schedule or log of operating scenarios for processes with batch vents from batch operations updated each time a different operating scenario is put into effect.
(d) The information specified in paragraphs (d)(1) and (2) of this section for Group 1 batch process vents in compliance with a percent reduction emission limit in Table 2 to this subpart if some of the vents are controlled to less the percent reduction requirement.
(1) Records of whether each batch operated was considered a standard batch.

(2) The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
(e) The information specified in paragraph (e)(2), (3), or (4) of this section, as applicable, for each process with Group 2 batch process vents or uncontrolled hydrogen halide and halogen HAP emissions from the sum of all batch and continuous process vents less than 1,000 lb/yr. No records are required for situations described in paragraph (e)(1) of this section.
(1) No records are required if you documented in your notification of compliance status report that the MCPU meets any of the situations described in paragraph (e)(1)(i), (ii), or (iii) of this section.
(i) The MCPU does not process, use, or generate HAP.
(ii) You control the Group 2 batch process vents using a flare that meets the requirements of §63.987.
(iii) You control the Group 2 batch process vents using a control device for which your determination of worst case for initial compliance includes the contribution of all Group 2 batch process vents.
(2) If you documented in your notification of compliance status report that an MCPU has Group 2 batch process vents because the non-reactive organic HAP is the only HAP and usage is less than 10,000 lb/yr, as specified in §63.2460(b)(7), you must keep records of the amount of HAP material used, and calculate the daily rolling annual sum of the amount used no less frequently than monthly. If a record indicates usage exceeds 10,000 lb/yr, you must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and you must begin recordkeeping as specified in paragraph (e)(4) of this section. After 1 year, you may revert to recording only usage if the usage during the year is less than 10,000 lb.
(3) If you documented in your notification of compliance status report that total uncontrolled organic HAP emissions from the batch process vents in an MCPU will be less than 1,000 lb/yr for the anticipated number of standard batches, then you must keep records of the number of batches operated and calculate a daily rolling annual sum of batches operated no less frequently than monthly. If the number of batches operated results in organic HAP emissions that exceed 1,000 lb/yr, you must estimate emissions for the preceding 12 months based on the number of batches operated and the estimated emissions for a standard batch, and you must begin recordkeeping as specified in paragraph (e)(4) of this section. After 1 year, you may revert to recording only the number of batches if the number of batches operated during the year results in less than 1,000 lb of organic HAP emissions.
(4) If you meet none of the conditions specified in paragraphs (e)(1) through (3) of this section, you must keep records of the information specified in paragraphs (e)(4)(i) through (iv) of this section.
(i) A record of the day each batch was completed and/or the operating hours per day for continuous operations with hydrogen halide and halogen emissions.
(ii) A record of whether each batch operated was considered a standard batch.
(iii) The estimated uncontrolled and controlled emissions for each batch that is considered to be a nonstandard batch.
(iv) Records of the daily 365-day rolling summations of emissions, or alternative records that correlate to the emissions (e.g., number of batches), calculated no less frequently than monthly.
(f) A record of each time a safety device is opened to avoid unsafe conditions in accordance with §63.2450(s).
(g) Records of the results of each CPMS calibration check and the maintenance performed, as specified in §63.2450(k)(1).
(h) For each CEMS, you must keep records of the date and time that each deviation started and stopped, and whether the deviation occurred during a period of startup, shutdown, or malfunction or during another period.
(i) For each PUG, you must keep records specified in paragraphs (i)(1) through (5) of this section.
(1) Descriptions of the MCPU and other process units in the initial PUG required by §63.2535(l)(1)(v).
(2) Rationale for including each MCPU and other process unit in the initial PUG (*i.e.,* identify the overlapping equipment between process units) required by §63.2535(l)(1)(v).
(3) Calculations used to determine the primary product for the initial PUG required by §63.2535(l)(2)(iv).
(4) Descriptions of process units added to the PUG after the creation date and rationale for including the additional process units in the PUG as required by §63.2535(l)(1)(v).
(5) The calculation of each primary product redetermination required by §63.2535(l)(2)(iv).
(j) In the SSMP required by §63.6(e)(3), you are not required to include Group 2 emission points, unless those emission points are used in an emissions average. For equipment leaks, the SSMP requirement is limited to control devices and is optional for other equipment.
(k) For each bag leak detector used to monitor PM HAP emissions from a fabric filter, maintain records of

any bag leak detection alarm, including the date and time, with a brief explanation of the cause of the alarm and the corrective action taken.
[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38560, July 1, 2005; 71 FR 40337, July 14, 2006]

Other Requirements and Information

§ 63.2535 What compliance options do I have if part of my plant is subject to both this subpart and another subpart?

For any equipment, emission stream, or wastewater stream subject to the provisions of both this subpart and another rule, you may elect to comply only with the provisions as specified in paragraphs (a) through (l) of this section. You also must identify the subject equipment, emission stream, or wastewater stream, and the provisions with which you will comply, in your notification of compliance status report required by §63.2520(d).
(a) *Compliance with other subparts of this part 63.* (1) If you have an MCPU that includes a batch process vent that also is part of a CMPU as defined in subparts F and G of this part 63, you must comply with the emission limits; operating limits; work practice standards; and the compliance, monitoring, reporting, and recordkeeping requirements for batch process vents in this subpart, and you must continue to comply with the requirements in subparts F, G, and H of this part 63 that are applicable to the CMPU and associated equipment.
(2) After the compliance dates specified in §63.2445, at an offsite reloading or cleaning facility subject to §63.1253(f), as referenced from §63.2470(e), compliance with the monitoring, recordkeeping, and reporting provisions of any other subpart of this part 63 constitutes compliance with the monitoring, recordkeeping, and reporting provisions of §63.1253(f)(7)(ii) or §63.1253(f)(7)(iii). You must identify in your notification of compliance status report required by §63.2520(d) the subpart of this part 63 with which the owner or operator of the offsite reloading or cleaning facility complies.
(b) *Compliance with 40 CFR parts 264 and 265, subparts AA, BB, and/or CC.* (1) After the compliance dates specified in §63.2445, if a control device that you use to comply with this subpart is also subject to monitoring, recordkeeping, and reporting requirements in 40 CFR part 264, subpart AA, BB, or CC; or the monitoring and recordkeeping requirements in 40 CFR part 265, subpart AA, BB, or CC; and you comply with the periodic reporting requirements under 40 CFR part 264, subpart AA, BB, or CC that would apply to the device if your facility had final-permitted status, you may elect to comply either with the monitoring, recordkeeping, and reporting requirements of this subpart; or with the monitoring and recordkeeping requirements in 40 CFR part 264 or 265 and the reporting requirements in 40 CFR part 264, as described in this paragraph (b)(1), which constitute compliance with the monitoring, recordkeeping, and reporting requirements of this subpart. If you elect to comply with the monitoring, recordkeeping, and reporting requirements in 40 CFR parts 264 and/or 265, you must report the information described in §63.2520(e).
(2) After the compliance dates specified in §63.2445, if you have an affected source with equipment that is also subject to 40 CFR part 264, subpart BB, or to 40 CFR part 265, subpart BB, then compliance with the recordkeeping and reporting requirements of 40 CFR parts 264 and/or 265 may be used to comply with the recordkeeping and reporting requirements of this subpart, to the extent that the requirements of 40 CFR parts 264 and/or 265 duplicate the requirements of this subpart.
(c) *Compliance with 40 CFR part 60, subpart Kb and 40 CFR part 61, subpart Y.* After the compliance dates specified in §63.2445, you are in compliance with the provisions of this subpart FFFF for any storage tank that is assigned to an MCPU and that is both controlled with a floating roof and in compliance with the provisions of either 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y. You are in compliance with this subpart FFFF if you have a storage tank with a fixed roof, closed-vent system, and control device in compliance with the provisions of either 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y, except that you must comply with the monitoring, recordkeeping, and reporting requirements in this subpart FFFF. Alternatively, if a storage tank assigned to an MCPU is subject to control under 40 CFR part 60, subpart Kb, or 40 CFR part 61, subpart Y, you may elect to comply only with the requirements for Group 1 storage tanks in this subpart FFFF.
(d) *Compliance with subpart I, GGG, or MMM of this part 63.* After the compliance dates specified in §63.2445, if you have an affected source with equipment subject to subpart I, GGG, or MMM of this part 63, you may elect to comply with the provisions of subpart H, GGG, or MMM of this part 63, respectively, for all such equipment.
(e) *Compliance with subpart GGG of this part 63 for wastewater.* After the compliance dates specified in

§63.2445, if you have an affected source subject to this subpart and you have an affected source that generates wastewater streams that meet the applicability thresholds specified in §63.1256, you may elect to comply with the provisions of this subpart FFFF for all such wastewater streams.
(f) *Compliance with subpart MMM of this part 63 for wastewater.* After the compliance dates specified in §63.2445, if you have an affected source subject to this subpart, and you have an affected source that generates wastewater streams that meet the applicability thresholds specified in §63.1362(d), you may elect to comply with the provisions of this subpart FFFF for all such wastewater streams (except that the 99 percent reduction requirement for streams subject to §63.1362(d)(10) still applies).
(g) *Compliance with other regulations for wastewater.* After the compliance dates specified in §63.2445, if you have a Group 1 wastewater stream that is also subject to provisions in 40 CFR parts 260 through 272, you may elect to determine whether this subpart or 40 CFR parts 260 through 272 contain the more stringent control requirements (*e.g.,* design, operation, and inspection requirements for waste management units; numerical treatment standards; etc.) and the more stringent testing, monitoring, recordkeeping, and reporting requirements. Compliance with provisions of 40 CFR parts 260 through 272 that are determined to be more stringent than the requirements of this subpart constitute compliance with this subpart. For example, provisions of 40 CFR parts 260 through 272 for treatment units that meet the conditions specified in §63.138(h) constitute compliance with this subpart. You must identify in the notification of compliance status report required by §63.2520(d) the information and procedures that you used to make any stringency determinations.
(h) *Compliance with 40 CFR part 60, subpart DDD, III, NNN, or RRR.* After the compliance dates specified in §63.2445, if you have an MCPU that contains equipment subject to the provisions of this subpart that are also subject to the provisions of 40 CFR part 60, subpart DDD, III, NNN, or RRR, you may elect to apply this subpart to all such equipment in the MCPU. If an MCPU subject to the provisions of this subpart has equipment to which this subpart does not apply but which is subject to a standard in 40 CFR part 60, subpart DDD, III, NNN, or RRR, you may elect to comply with the requirements for Group 1 process vents in this subpart for such equipment. If you elect any of these methods of compliance, you must consider all total organic compounds, minus methane and ethane, in such equipment for purposes of compliance with this subpart, as if they were organic HAP. Compliance with the provisions of this subpart, in the manner described in this paragraph (h), will constitute compliance with 40 CFR part 60, subpart DDD, III, NNN, or RRR, as applicable.
(i) *Compliance with 40 CFR part 61, subpart BB.* (1) After the compliance dates specified in §63.2445, a Group 1 transfer rack, as defined in §63.2550, that is also subject to the provisions of 40 CFR part 61, subpart BB, you are required to comply only with the provisions of this subpart.
(2) After the compliance dates specified in §63.2445, a Group 2 transfer rack, as defined in §63.2550, that is also subject to the provisions of 40 CFR part 61, subpart BB, is required to comply with the provisions of either paragraph (l)(2)(i) or (ii) of this section.
(i) If the transfer rack is subject to the control requirements specified in §61.302 of 40 CFR part 61, subpart BB, then you may elect to comply with either the requirements of 40 CFR part 61, subpart BB, or the requirements for Group 1 transfer racks under this subpart FFFF.
(ii) If the transfer rack is subject only to reporting and recordkeeping requirements under 40 CFR part 61, subpart BB, then you are required to comply only with the reporting and recordkeeping requirements specified in this subpart for Group 2 transfer racks, and you are exempt from the reporting and recordkeeping requirements in 40 CFR part 61, subpart BB.
(j) *Compliance with 40 CFR part 61, subpart FF.* After the compliance date specified in §63.2445, for a Group 1 or Group 2 wastewater stream that is also subject to the provisions of 40 CFR 61.342(c) through (h), and is not exempt under 40 CFR 61.342(c)(2) or (3), you may elect to comply only with the requirements for Group 1 wastewater streams in this subpart FFFF. If a Group 2 wastewater stream is exempted from 40 CFR 61.342(c)(1) under 40 CFR 61.342(c)(2) or (3), then you are required to comply only with the reporting and recordkeeping requirements specified in this subpart for Group 2 wastewater streams, and you are exempt from the requirements in 40 CFR part 61, subpart FF.
(k) *Compliance with 40 CFR part 60, subpart VV, and 40 CFR part 61, subpart V.* After the compliance date specified in §63.2445, if you have an affected source with equipment that is also subject to the requirements of 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, you may elect to apply this subpart to all such equipment. After the compliance date specified in §63.2445, if you have an affected source with equipment to which this subpart does not apply, but which is subject to the requirements of 40 CFR part 60, subpart VV, or 40 CFR part 61, subpart V, you may elect to apply this subpart to all such equipment. If you elect either of these methods of compliance, you must consider all total organic

compounds, minus methane and ethane, in such equipment for purposes of compliance with this subpart, as if they were organic HAP. Compliance with the provisions of this subpart, in the manner described in this paragraph (k), will constitute compliance with 40 CFR part 60, subpart VV and 40 CFR part 61, subpart V, as applicable.

(l) *Applicability of process units included in a process unit group.* You may elect to develop and comply with the requirements for PUG in accordance with paragraphs (l)(1) through (3) of this section.

(1) *Procedures to create process unit groups.* Develop and document changes in a PUG in accordance with the procedures specified in paragraphs (l)(1)(i) through (v) of this section.

(i) Initially, identify an MCPU that is created from nondedicated equipment that will operate on or after November 10, 2003 and identify all processing equipment that is part of this MCPU, based on descriptions in operating scenarios.

(ii) Add to the group any other nondedicated MCPU and other nondedicated process units expected to be operated in the 5 years after the date specified in paragraph (l)(1)(i) of this section, provided they satisfy the criteria specified in paragraphs (l)(1)(ii)(A) through (C) of this section. Also identify all of the processing equipment used for each process unit based on information from operating scenarios and other applicable documentation.

(A) Each process unit that is added to a group must have some processing equipment that is also part of one or more process units in the group.

(B) No process unit may be part of more than one PUG.

(C) The processing equipment used to satisfy the requirement of paragraph (l)(1)(ii)(A) of this section may not be a storage tank or control device.

(iii) The initial PUG consists of all of the processing equipment for the process units identified in paragraphs (l)(1)(i) and (ii) of this section. As an alternative to the procedures specified in paragraphs (l)(1)(i) and (ii) of this section, you may use a PUG that was developed in accordance with §63.1360(h) as your initial PUG.

(iv) Add process units developed in the future in accordance with the conditions specified in paragraphs (l)(1)(ii)(A) and (B) of this section.

(v) Maintain records that describe the process units in the initial PUG, the procedure used to create the PUG, and subsequent changes to each PUG as specified in §63.2525(i). Submit the records in reports as specified in §63.2520(d)(2)(ix) and (e)(8).

(2) *Determine primary product.* You must determine the primary product of each PUG created in paragraph (l)(1) of this section according to the procedures specified in paragraphs (l)(2)(i) through (iv) of this section.

(i) The primary product is the type of product (*e.g.,* organic chemicals subject to §63.2435(b)(1), pharmaceutical products subject to §63.1250, or pesticide active ingredients subject to §63.1360) expected to be produced for the greatest operating time in the 5-year period specified in paragraph (l)(1)(ii) of this section.

(ii) If the PUG produces multiple types of products equally based on operating time, then the primary product is the type of product with the greatest production on a mass basis over the 5-year period specified in paragraph (l)(1)(ii) of this section.

(iii) At a minimum, you must redetermine the primary product of the PUG following the procedure specified in paragraphs (l)(2)(i) and (ii) of this section every 5 years.

(iv) You must record the calculation of the initial primary product determination as specified in §63.2525(i)(3) and report the results in the notification of compliance status report as specified in §63.2520(d)(8)(ix). You must record the calculation of each redetermination of the primary product as specified in §63.2525(i)(5) and report the calculation in a compliance report submitted no later than the report covering the period for the end of the 5th year after cessation of production of the previous primary product, as specified in §63.2520(e)(8).

(3) *Compliance requirements.* (i) If the primary product of the PUG is determined according to paragraph (l)(2) of this section to be material described in §63.2435(b)(1), then you must comply with this subpart for each MCPU in the PUG. You may also elect to comply with this subpart for all other process units in the PUG, which constitutes compliance with other part 63 rules.

(ii) If the primary product of the PUG is determined according to paragraph (l)(2) of this section to be material not described in §63.2435(b)(1), then you must comply with paragraph (l)(3)(ii)(A), (B), or (C) of this section, as applicable.

(A) If the primary product is subject to subpart GGG of this part 63, then comply with the requirements of subpart GGG for each MCPU in the PUG.

(B) If the primary product is subject to subpart MMM of this part 63, then comply with the requirements of subpart MMM for each MCPU in the PUG.
(C) If the primary product is subject to any subpart in this part 63 other than subpart GGG or subpart MMM, then comply with the requirements of this subpart for each MCPU in the PUG.
(iii) The requirements for new and reconstructed sources in the alternative subpart apply to all MCPU in the PUG if and only if the affected source under the alternative subpart meets the requirements for construction or reconstruction.
[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40337, July 14, 2006]

§ 63.2540 What parts of the General Provisions apply to me?

Table 12 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.2545 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (U.S. EPA), or a delegated authority such as your State, local, or tribal agency. If the U.S. EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency also has the authority to implement and enforce this subpart. You should contact your U.S. EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.
(b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraphs (b)(1) through (4) of this section are retained by the Administrator of U.S. EPA and are not delegated to the State, local, or tribal agency.
(1) Approval of alternatives to the non-opacity emission limits and work practice standards in §63.2450(a) under §63.6(g).
(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.
(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.
(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§ 63.2550 What definitions apply to this subpart?

(a) For an affected source complying with the requirements in subpart SS of this part 63, the terms used in this subpart and in subpart SS of this part 63 have the meaning given them in §63.981, except as specified in §§63.2450(k)(2) and (m), 63.2470(c)(2), 63.2475(b), and paragraph (i) of this section.
(b) For an affected source complying with the requirements in 40 CFR part 65, subpart F, the terms used in this subpart and in 40 CFR part 65, subpart F have the meaning given to them in §65.2.
(c) For an affected source complying with the requirements in subpart UU of this part 63, the terms used in this subpart and in subpart UU of this part 63 have the meaning given them in §63.1020.
(d) For an affected source complying with the requirements in subpart WW of this part 63, the terms used in this subpart and subpart WW of this part 63 have the meaning given them in §63.1061, except as specified in §§63.2450(m), 63.2470(c)(2), and paragraph (i) of this section.
(e) For an affected source complying with the requirements in §§63.132 through 63.149, the terms used in this subpart and §§63.132 through 63.149 have the meaning given them in §§63.101 and 63.111, except as specified in §63.2450(m) and paragraph (i) of this section.
(f) For an affected source complying with the requirements in §§63.104 and 63.105, the terms used in this subpart and in §§63.104 and 63.105 of this subpart have the meaning given them in §63.101, except as specified in §§63.2450(m), 63.2490(b), and paragraph (i) of this section.
(g) For an affected source complying with requirements in §§63.1253, 63.1257, and 63.1258, the terms used in this subpart and in §§63.1253, 63.1257, and 63.1258 have the meaning given them in §63.1251, except as specified in §63.2450(m) and paragraph (i) of this section.
(h) For an affected source complying with the requirements in 40 CFR part 65, subpart F, the terms used in this subpart and in 40 CFR part 65, subpart F, have the meaning given them in 40 CFR 65.2.
(i) All other terms used in this subpart are defined in the Clean Air Act (CAA), in 40 CFR 63.2, and in this paragraph (i). If a term is defined in §63.2, §63.101, §63.111, §63.981, §63.1020, §63.1061, §63.1251, or §65.2 and in this paragraph (i), the definition in this paragraph (i) applies for the purposes of this subpart.

Ancillary activities means boilers and incinerators (not used to comply with the emission limits in Tables 1 through 7 to this subpart), chillers and refrigeration systems, and other equipment and activities that are not directly involved (*i.e.,* they operate within a closed system and materials are not combined with process fluids) in the processing of raw materials or the manufacturing of a product or isolated intermediate.

Batch operation means a noncontinuous operation involving intermittent or discontinuous feed into equipment, and, in general, involves the emptying of the equipment after the operation ceases and prior to beginning a new operation. Addition of raw material and withdrawal of product do not occur simultaneously in a batch operation.

Batch process vent means a vent from a unit operation or vents from multiple unit operations within a process that are manifolded together into a common header, through which a HAP-containing gas stream is, or has the potential to be, released to the atmosphere. Examples of batch process vents include, but are not limited to, vents on condensers used for product recovery, reactors, filters, centrifuges, and process tanks. The following are not batch process vents for the purposes of this subpart:

(1) Continuous process vents;

(2) Bottoms receivers;

(3) Surge control vessels;

(4) Gaseous streams routed to a fuel gas system(s);

(5) Vents on storage tanks, wastewater emission sources, or pieces of equipment subject to the emission limits and work practice standards in Tables 4, 6, and 7 to this subpart;

(6) Drums, pails, and totes;

(7) Flexible elephant trunk systems that draw ambient air (*i.e.,* the system is not ducted, piped, or otherwise connected to the unit operations) away from operators when vessels are opened; and

(8) Emission streams from emission episodes that are undiluted and uncontrolled containing less than 50 ppmv HAP are not part of any batch process vent. A vent from a unit operation, or a vent from multiple unit operations that are manifolded together, from which total uncontrolled HAP emissions are less than 200 lb/yr is not a batch process vent; emissions for all emission episodes associated with the unit operation(s) must be included in the determination of the total mass emitted. The HAP concentration or mass emission rate may be determined using any of the following: process knowledge that no HAP are present in the emission stream; an engineering assessment as discussed in §63.1257(d)(2)(ii), except that you do not need to demonstrate that the equations in §63.1257(d)(2)(i) do not apply, and the precompliance reporting requirements specified in §63.1257(d)(2)(ii)(E) do not apply for the purposes of this demonstration; equations specified in §63.1257(d)(2)(i), as applicable; test data using Method 18 of 40 CFR part 60, appendix A; or any other test method that has been validated according to the procedures in Method 301 of appendix A of this part.

Biofilter means an enclosed control system such as a tank or series of tanks with a fixed roof that contact emissions with a solid media (such as bark) and use microbiological activity to transform organic pollutants in a process vent stream to innocuous compounds such as carbon dioxide, water, and inorganic salts. Wastewater treatment processes such as aeration lagoons or activated sludge systems are not considered to be biofilters.

Bottoms receiver means a tank that collects bottoms from continuous distillation before the stream is sent for storage or for further downstream processing.

Construction means the onsite fabrication, erection, or installation of an affected source or MCPU. Addition of new equipment to an MCPU subject to existing source standards does not constitute construction, but it may constitute reconstruction of the affected source or MCPU if it satisfies the definition of reconstruction in §63.2.

Consumption means the quantity of all HAP raw materials entering a process in excess of the theoretical amount used as reactant, assuming 100 percent stoichiometric conversion. The raw materials include reactants, solvents, and any other additives. If a HAP is generated in the process as well as added as a raw material, consumption includes the quantity generated in the process.

Continuous operation means any operation that is not a batch operation.

Continuous process vent means the point of discharge to the atmosphere (or the point of entry into a control device, if any) of a gas stream if the gas stream has the characteristics specified in §63.107(b) through (h), or meets the criteria specified in §63.107(i), except:

(1) The reference in §63.107(e) to a chemical manufacturing process unit that meets the criteria of §63.100(b) means an MCPU that meets the criteria of §63.2435(b);

(2) The reference in §63.107(h)(4) to §63.113 means Table 1 to this subpart;

(3) The references in §63.107(h)(7) to §§63.119 and 63.126 mean Tables 4 and 5 to this subpart; and
(4) For the purposes of §63.2455, all references to the characteristics of a process vent (*e.g.,* flowrate, total HAP concentration, or TRE index value) mean the characteristics of the gas stream.
(5) The reference to "total organic HAP" in §63.107(d) means "total HAP" for the purposes of this subpart FFFF.
(6) The references to an "air oxidation reactor, distillation unit, or reactor" in §63.107 mean any continuous operation for the purposes of this subpart.
(7) A separate determination is required for the emissions from each MCPU, even if emission streams from two or more MCPU are combined prior to discharge to the atmosphere or to a control device.
Dedicated MCPU means an MCPU that consists of equipment that is used exclusively for one process, except that storage tanks assigned to the process according to the procedures in §63.2435(d) also may be shared by other processes.
Deviation means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:
(1) Fails to meet any requirement or obligation established by this subpart including, but not limited to, any emission limit, operating limit, or work practice standard; or
(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or
(3) Fails to meet any emission limit, operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.
Emission point means each continuous process vent, batch process vent, storage tank, transfer rack, and wastewater stream.
Energetics means propellants, explosives, and pyrotechnics and include materials listed at 49 CFR 172.101 as Hazard Class I Hazardous Materials, Divisions 1.1 through 1.6.
Equipment means each pump, compressor, agitator, pressure relief device, sampling connection system, open-ended valve or line, valve, connector, and instrumentation system in organic HAP service; and any control devices or systems used to comply with Table 6 to this subpart.
Excess emissions means emissions greater than those allowed by the emission limit.
Family of materials means a grouping of materials with the same basic composition or the same basic end use or functionality produced using the same basic feedstocks with essentially identical HAP emission profiles (primary constituent and relative magnitude on a pound per product basis) and manufacturing equipment configuration. Examples of families of materials include multiple grades of the same product or different variations of a product (*e.g.,* blue, black, and red resins).
Group 1 batch process vent means each of the batch process vents in a process for which the collective uncontrolled organic HAP emissions from all of the batch process vents are greater than or equal to 10,000 lb/yr at an existing source or greater than or equal to 3,000 lb/yr at a new source.
Group 2 batch process vent means each batch process vent that does not meet the definition of Group 1 batch process vent.
Group 1 continuous process vent means a continuous process vent for which the flow rate is greater than or equal to 0.005 standard cubic meter per minute, and the total resource effectiveness index value, calculated according to §63.2455(b), is less than or equal to 1.9 at an existing source and less than or equal to 5.0 at a new source.
Group 2 continuous process vent means a continuous process vent that does not meet the definition of a Group 1 continuous process vent.
Group 1 storage tank means a storage tank with a capacity greater than or equal to 10,000 gal storing material that has a maximum true vapor pressure of total HAP greater than or equal to 6.9 kilopascals at an existing source or greater than or equal to 0.69 kilopascals at a new source.
Group 2 storage tank means a storage tank that does not meet the definition of a Group 1 storage tank.
Group 1 transfer rack means a transfer rack that loads more than 0.65 million liters/year of liquids that contain organic HAP with a rack-weighted average partial pressure, as defined in §63.111, greater than or equal to 1.5 pound per square inch absolute.
Group 2 transfer rack means a transfer rack that does not meet the definition of a Group 1 transfer rack.
Group 1 wastewater stream means a wastewater stream consisting of process wastewater at an existing or new source that meets the criteria for Group 1 status in §63.2485(c) for compounds in Tables 8 and 9 to this subpart and/or a wastewater stream consisting of process wastewater at a new source that meets the criteria for Group 1 status in §63.132(d) for compounds in Table 8 to subpart G of this part 63.

Group 2 wastewater stream means any process wastewater stream that does not meet the definition of a Group 1 wastewater stream.
Halogenated vent stream means a vent stream determined to have a mass emission rate of halogen atoms contained in organic compounds of 0.45 kilograms per hour or greater determined by the procedures presented in §63.115(d)(2)(v).
Halogen atoms mean chlorine and fluorine.
HAP metals means the metal portion of antimony compounds, arsenic compounds, beryllium compounds, cadmium compounds, chromium compounds, cobalt compounds, lead compounds, manganese compounds, mercury compounds, nickel compounds, and selenium compounds.
Hydrogen halide and halogen HAP means hydrogen chloride, hydrogen fluoride, and chlorine.
In organic HAP service means that a piece of equipment either contains or contacts a fluid (liquid or gas) that is at least 5 percent by weight of total organic HAP as determined according to the provisions of §63.180(d). The provisions of §63.180(d) also specify how to determine that a piece of equipment is not in organic HAP service.
Isolated intermediate means a product of a process that is stored before subsequent processing. An isolated intermediate is usually a product of a chemical synthesis, fermentation, or biological extraction process. Storage of an isolated intermediate marks the end of a process. Storage occurs at any time the intermediate is placed in equipment used solely for storage. The storage equipment is part of the MCPU that produces the isolated intermediate and is not assigned as specified in §63.2435(d).
Large control device means a control device that controls total HAP emissions of greater than or equal to 10 tpy, before control.
Maintenance wastewater means wastewater generated by the draining of process fluid from components in the MCPU into an individual drain system in preparation for or during maintenance activities. Maintenance wastewater can be generated during planned and unplanned shutdowns and during periods not associated with a shutdown. Examples of activities that can generate maintenance wastewater include descaling of heat exchanger tubing bundles, cleaning of distillation column traps, draining of pumps into an individual drain system, and draining of portions of the MCPU for repair. Wastewater from routine cleaning operations occurring as part of batch operations is not considered maintenance wastewater.
Maximum true vapor pressure has the meaning given in §63.111, except that it applies to all HAP rather than only organic HAP.
Miscellaneous organic chemical manufacturing process means all equipment which collectively function to produce a product or isolated intermediate that are materials described in §63.2435(b). For the purposes of this subpart, process includes any, all or a combination of reaction, recovery, separation, purification, or other activity, operation, manufacture, or treatment which are used to produce a product or isolated intermediate. A process is also defined by the following:
(1) Routine cleaning operations conducted as part of batch operations are considered part of the process;
(2) Each nondedicated solvent recovery operation is considered a single process;
(3) Each nondedicated formulation operation is considered a single process that is used to formulate numerous materials and/or products;
(4) Quality assurance/quality control laboratories are not considered part of any process; and
(5) Ancillary activities are not considered a process or part of any process.
(6) The end of a process that produces a solid material is either up to and including the dryer or extruder, or for a polymer production process without a dryer or extruder, it is up to and including the extruder, die plate, or solid-state reactor, except in two cases. If the dryer, extruder, die plate, or solid-state reactor is followed by an operation that is designed and operated to remove HAP solvent or residual HAP monomer from the solid, then the solvent removal operation is the last step in the process. If the dried solid is diluted or mixed with a HAP-based solvent, then the solvent removal operation is the last step in the process.
Nondedicated solvent recovery operation means a distillation unit or other purification equipment that receives used solvent from more than one MCPU.
Nonstandard batch means a batch process that is operated outside of the range of operating conditions that are documented in an existing operating scenario but is still a reasonably anticipated event. For example, a nonstandard batch occurs when additional processing or processing at different operating conditions must be conducted to produce a product that is normally produced under the conditions described by the standard batch. A nonstandard batch may be necessary as a result of a malfunction, but it is not itself a malfunction.
On-site or on site means, with respect to records required to be maintained by this subpart or required by another subpart referenced by this subpart, that records are stored at a location within a major source

which encompasses the affected source. On-site includes, but is not limited to, storage at the affected source or MCPU to which the records pertain, or storage in central files elsewhere at the major source.
Operating scenario means, for the purposes of reporting and recordkeeping, any specific operation of an MCPU as described by records specified in §63.2525(b).
Organic group means structures that contain primarily carbon, hydrogen, and oxygen atoms.
Organic peroxides means organic compounds containing the bivalent -o-o-structure which may be considered to be a structural derivative of hydrogen peroxide where one or both of the hydrogen atoms has been replaced by an organic radical.
Point of determination means each point where process wastewater exits the MCPU or control device.
Note to definition for point of determination: The regulation allows determination of the characteristics of a wastewater stream: At the point of determination; or downstream of the point of determination if corrections are made for changes in flow rate and annual average concentration of soluble HAP and partially soluble HAP compounds as determined according to procedures in §63.144 of subpart G in this part 63. Such changes include losses by air emissions; reduction of annual average concentration or changes in flow rate by mixing with other water or wastewater streams; and reduction in flow rate or annual average concentration by treating or otherwise handling the wastewater stream to remove or destroy HAP.
Predominant HAP means as used in calibrating an analyzer, the single organic HAP that constitutes the largest percentage of the total organic HAP in the analyzed gas stream, by volume.
Process condenser means a condenser whose primary purpose is to recover material as an integral part of an MCPU. All condensers recovering condensate from an MCPU at or above the boiling point or all condensers in line prior to a vacuum source are considered process condensers. Typically, a primary condenser or condensers in series are considered to be integral to the MCPU if they are capable of and normally used for the purpose of recovering chemicals for fuel value (i.e., net positive heating value), use, reuse or for sale for fuel value, use, or reuse. This definition does not apply to a condenser that is used to remove materials that would hinder performance of a downstream recovery device as follows:
(1) To remove water vapor that would cause icing in a downstream condenser, or
(2) To remove water vapor that would negatively affect the adsorption capacity of carbon in a downstream carbon adsorber, or
(3) To remove high molecular weight organic compounds or other organic compounds that would be difficult to remove during regeneration of a downstream carbon adsorber.
Process tank means a tank or vessel that is used within a process to collect material discharged from a feedstock storage tank or equipment within the process before the material is transferred to other equipment within the process or a product storage tank. A process tank has emissions that are related to the characteristics of the batch cycle, and it does not accumulate product over multiple batches. Surge control vessels and bottoms receivers are not process tanks.
Production-indexed HAP consumption factor (HAP factor) means the result of dividing the annual consumption of total HAP by the annual production rate, per process.
Production-indexed VOC consumption factor (VOC factor) means the result of dividing the annual consumption of total VOC by the annual production rate, per process.
Quaternary ammonium compounds means a type of organic nitrogen compound in which the molecular structure includes a central nitrogen atom joined to four organic groups as well as an acid radical of some sort.
Recovery device means an individual unit of equipment used for the purpose of recovering chemicals from process vent streams and from wastewater streams for fuel value (i.e., net positive heating value), use, reuse, or for sale for fuel value, use, or reuse. For the purposes of meeting requirements in Table 2 to this subpart, the recovery device must not be a process condenser and must recover chemicals to be reused in a process on site. Examples of equipment that may be recovery devices include absorbers, carbon adsorbers, condensers, oil-water separators or organic-water separators, or organic removal devices such as decanters, strippers, or thin-film evaporation units. To be a recovery device for a wastewater stream, a decanter and any other equipment based on the operating principle of gravity separation must receive only multi-phase liquid streams.
Responsible official means responsible official as defined in 40 CFR 70.2.
Safety device means a closure device such as a pressure relief valve, frangible disc, fusible plug, or any other type of device which functions exclusively to prevent physical damage or permanent deformation to a unit or its air emission control equipment by venting gases or vapors directly to the atmosphere during unsafe conditions resulting from an unplanned, accidental, or emergency event. For the purposes of this

subpart, a safety device is not used for routine venting of gases or vapors from the vapor headspace underneath a cover such as during filling of the unit or to adjust the pressure in response to normal daily diurnal ambient temperature fluctuations. A safety device is designed to remain in a closed position during normal operations and open only when the internal pressure, or another relevant parameter, exceeds the device threshold setting applicable to the air emission control equipment as determined by the owner or operator based on manufacturer recommendations, applicable regulations, fire protection and prevention codes and practices, or other requirements for the safe handling of flammable, combustible, explosive, reactive, or hazardous materials.

Shutdown means the cessation of operation of a continuous operation for any purpose. Shutdown also means the cessation of a batch operation, or any related individual piece of equipment required or used to comply with this subpart, if the steps taken to cease operation differ from those described in a standard batch or nonstandard batch. Shutdown also applies to emptying and degassing storage vessels. Shutdown does not apply to cessation of batch operations at the end of a campaign or between batches within a campaign when the steps taken are routine operations.

Small control device means a control device that controls total HAP emissions of less than 10 tpy, before control.

Standard batch means a batch process operated within a range of operating conditions that are documented in an operating scenario. Emissions from a standard batch are based on the operating conditions that result in highest emissions. The standard batch defines the uncontrolled and controlled emissions for each emission episode defined under the operating scenario.

Startup means the setting in operation of a continuous operation for any purpose; the first time a new or reconstructed batch operation begins production; for new equipment added, including equipment required or used to comply with this subpart, the first time the equipment is put into operation; or for the introduction of a new product/process, the first time the product or process is run in equipment. For batch operations, startup applies to the first time the equipment is put into operation at the start of a campaign to produce a product that has been produced in the past if the steps taken to begin production differ from those specified in a standard batch or nonstandard batch. Startup does not apply when the equipment is put into operation as part of a batch within a campaign when the steps taken are routine operations.

Storage tank means a tank or other vessel that is used to store liquids that contain organic HAP and/or hydrogen halide and halogen HAP and that has been assigned to an MCPU according to the procedures in §63.2435(d). The following are not considered storage tanks for the purposes of this subpart:

(1) Vessels permanently attached to motor vehicles such as trucks, railcars, barges, or ships;

(2) Pressure vessels designed to operate in excess of 204.9 kilopascals and without emissions to the atmosphere;

(3) Vessels storing organic liquids that contain HAP only as impurities;

(4) Wastewater storage tanks;

(5) Bottoms receivers;

(6) Surge control vessels; and

(7) Process tanks.

Supplemental gases means the air that is added to a vent stream after the vent stream leaves the unit operation. Air that is part of the vent stream as a result of the nature of the unit operation is not considered supplemental gases. Air required to operate combustion device burner(s) is not considered supplemental gases.

Surge control vessel means feed drums, recycle drums, and intermediate vessels as part of any continuous operation. Surge control vessels are used within an MCPU when in-process storage, mixing, or management of flowrates or volumes is needed to introduce material into continuous operations.

Total organic compounds or (TOC) means the total gaseous organic compounds (minus methane and ethane) in a vent stream.

Transfer rack means the collection of loading arms and loading hoses, at a single loading rack, that are assigned to an MCPU according to the procedures specified in §63.2435(d) and are used to fill tank trucks and/or rail cars with organic liquids that contain one or more of the organic HAP listed in section 112(b) of the CAA of this subpart. Transfer rack includes the associated pumps, meters, shutoff valves, relief valves, and other piping and valves.

Unit operation means those processing steps that occur within distinct equipment that are used, among other things, to prepare reactants, facilitate reactions, separate and purify products, and recycle materials. Equipment used for these purposes includes, but is not limited to, reactors, distillation columns, extraction columns, absorbers, decanters, dryers, condensers, and filtration equipment.

Waste management unit means the equipment, structure(s), and/or device(s) used to convey, store, treat, or dispose of wastewater streams or residuals. Examples of waste management units include wastewater tanks, air flotation units, surface impoundments, containers, oil-water or organic-water separators, individual drain systems, biological wastewater treatment units, waste incinerators, and organic removal devices such as steam and air stripper units, and thin film evaporation units. If such equipment is being operated as a recovery device, then it is part of a miscellaneous organic chemical manufacturing process and is not a waste management unit.

Wastewater means water that is discarded from an MCPU or control device through a POD and that contains either: an annual average concentration of compounds in Tables 8 and 9 to this subpart of at least 5 ppmw and has an annual average flowrate of 0.02 liters per minute or greater; or an annual average concentration of compounds in Tables 8 and 9 to this subpart of at least 10,000 ppmw at any flowrate. Wastewater means process wastewater or maintenance wastewater. The following are not considered wastewater for the purposes of this subpart:

(1) Stormwater from segregated sewers;
(2) Water from fire-fighting and deluge systems, including testing of such systems;
(3) Spills;
(4) Water from safety showers;
(5) Samples of a size not greater than reasonably necessary for the method of analysis that is used;
(6) Equipment leaks;
(7) Wastewater drips from procedures such as disconnecting hoses after cleaning lines; and
(8) Noncontact cooling water.

Wastewater stream means a stream that contains only wastewater as defined in this paragraph (i).

Work practice standard means any design, equipment, work practice, or operational standard, or combination thereof, that is promulgated pursuant to section 112(h) of the CAA.

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38560, July 1, 2005; 71 FR 40338, July 14, 2006]

Table 1 to Subpart FFFF of Part 63—Emission Limits and Work Practice Standards for Continuous Process Vents

As required in §63.2455, you must meet each emission limit and work practice standard in the following table that applies to your continuous process vents:

For each . . .	For which . . .	Then you must . . .
1. Group 1 continuous process vent	a. Not applicable	i. Reduce emissions of total organic HAP by ≥98 percent by weight or to an outlet process concentration ≤20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except a flare); or
		ii. Reduce emissions of total organic HAP by venting emissions through a closed vent system to a flare; or
		iii. Use a recovery device to maintain the TRE above 1.9 for an existing source or above 5.0 for a new source.
2. Halogenated Group 1 continuous process vent stream	a. You use a combustion control device to control organic HAP emissions	i. Use a halogen reduction device after the combustion device to reduce emissions of hydrogen halide and halogen HAP by ≥99 percent by weight, or to ≤0.45 kg/hr, or to ≤20 ppmv; or ii. Use a halogen reduction device before the combustion device to reduce the halogen atom mass emission rate to ≤0.45 kg/hr or to a concentration ≤20 ppmv.
3. Group 2 continuous process vent at an existing source	You use a recovery device to maintain the TRE level >1.9 but ≤5.0	Comply with the requirements in §63.993 and the requirements referenced therein.
4. Group 2 continuous process vent at a new source	You use a recovery device to maintain the TRE level >5.0 but ≤8.0	Comply with the requirements in §63.993 and the requirements referenced therein.

Table 2 to Subpart FFFF of Part 63—Emission Limits and Work Practice Standards for Batch Process Vents

As required in §63.2460, you must meet each emission limit and work practice standard in the following table that applies to your batch process vents:

For each . . .	Then you must . . .	And you must . . .
1. Process with Group 1 batch process vents	a. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by ≥98 percent by weight by venting emissions from a sufficient number of the vents through one or more closed-vent systems to any combination of control devices (except a flare); or	Not applicable.
	b. Reduce collective uncontrolled organic HAP emissions from the sum of all batch process vents within the process by ≥95 percent by weight by venting emissions from a sufficient number of the vents through one or more closed-vent systems to any combination of recovery devices or a biofilter, except you may elect to comply with the	Not applicable.

For each . . .	Then you must . . .	And you must . . .
	requirements of subpart WW of this part for any process tank; or	
	c. Reduce uncontrolled organic HAP emissions from one or more batch process vents within the process by venting through a closed-vent system to a flare or by venting through one or more closed-vent systems to any combination of control devices (excluding a flare) that reduce organic HAP to an outlet concentration ≤20 ppmv as TOC or total organic HAP.	For all other batch process vents within the process, reduce collective organic HAP emissions as specified in item 1.a and/or item 1.b of this table.
2. Halogenated Group 1 batch process vent for which you use a combustion device to control organic HAP emissions	a. Use a halogen reduction device after the combustion control device; or	i. Reduce overall emissions of hydrogen halide and halogen HAP by ≥99 percent; or ii. Reduce overall emissions of hydrogen halide and halogen HAP to ≤0.45 kg/hr; or iii. Reduce overall emissions of hydrogen halide and halogen HAP to a concentration ≤20 ppmv.
	b. Use a halogen reduction device before the combustion control device	Reduce the halogen atom mass emission rate to ≤0.45 kg/hr or to a concentration ≤20 ppmv.

[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40339, July 14, 2006]

Table 3 to Subpart FFFF of Part 63—Emission Limits for Hydrogen Halide and Halogen HAP Emissions or HAP Metals Emissions From Process Vents

As required in §63.2465, you must meet each emission limit in the following table that applies to your process vents that contain hydrogen halide and halogen HAP emissions or PM HAP emissions:

For each . . .	You must . . .
1. Process with uncontrolled hydrogen halide and halogen HAP emissions from process vents ≥1,000 lb/yr	a. Reduce collective hydrogen halide and halogen HAP emissions by ≥99 percent by weight or to an outlet concentration ≤20 ppmv by venting through one or more closed-vent systems to any combination of control devices, or
	b. Reduce the halogen atom mass emission rate from the sum of all batch process vents and each individual continuous process vent to ≤0.45 kg/hr by venting through one or more closed-vent systems to a halogen reduction device.
2. Process at a new source with uncontrolled emissions from process vents ≥150 lb/yr of HAP metals	Reduce overall emissions of HAP metals by ≥97 percent by weight.

[71 FR 40340, July 14, 2006]

Table 4 to Subpart FFFF of Part 63—Emission Limits for Storage Tanks

As required in §63.2470, you must meet each emission limit in the following table that applies to your storage tanks:

For each . . .	For which . . .	Then you must . . .
1. Group 1 storage tank	a. The maximum true vapor pressure of total HAP at the storage temperature is ≥76.6 kilopascals	i. Reduce total HAP emissions by ≥95 percent by weight or to ≤20 ppmv of TOC or organic HAP and ≤20 ppmv of hydrogen halide and halogen HAP by venting emissions through a closed vent system to any combination of control devices (excluding a flare); or
		ii. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare; or
		iii. Reduce total HAP emissions by venting emissions to a fuel gas system or process in accordance with §63.982(d) and the requirements referenced therein.
	b. The maximum true vapor pressure of total HAP at the storage temperature is <76.6 kilopascals	i. Comply with the requirements of subpart WW of this part, except as specified in §63.2470; or
		ii. Reduce total HAP emissions by ≥95 percent by weight or to ≤20 ppmv of TOC or organic HAP and ≤20 ppmv of hydrogen halide and halogen HAP by venting emissions through a closed vent system to any combination of control devices (excluding a flare); or
		iii. Reduce total organic HAP emissions by venting emissions through a closed vent system to a flare; or
		iv. Reduce total HAP emissions by venting emissions to a fuel gas system or process in accordance with §63.982(d) and the requirements referenced therein.
2. Halogenated vent stream from a Group 1 storage tank	You use a combustion control device to control organic HAP emissions	Meet one of the emission limit options specified in Item 2.a.i or ii. in Table 1 to this subpart.

[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40340, July 14, 2006]

Table 5 to Subpart FFFF of Part 63—Emission Limits and Work Practice Standards for Transfer Racks

As required in §63.2475, you must meet each emission limit and work practice standard in the following table that applies to your transfer racks:

For each . . .	You must . . .
1. Group 1 transfer rack	a. Reduce emissions of total organic HAP by ≥98 percent by weight or to an outlet concentration ≤20 ppmv as organic HAP or TOC by venting emissions through a closed-vent system to any combination of control devices (except a flare); or
	b. Reduce emissions of total organic HAP by venting emissions through a closed-vent system to a flare; or
	c. Reduce emissions of total organic HAP by venting emissions to a fuel gas system or process in accordance with §63.982(d) and the requirements referenced therein; or

For each . . .	You must . . .
	d. Use a vapor balancing system designed and operated to collect organic HAP vapors displaced from tank trucks and railcars during loading and route the collected HAP vapors to the storage tank from which the liquid being loaded originated or to another storage tank connected by a common header.
2. Halogenated Group 1 transfer rack vent stream for which you use a combustion device to control organic HAP emissions	a. Use a halogen reduction device after the combustion device to reduce emissions of hydrogen halide and halogen HAP by ≥99 percent by weight, to ≤0.45 kg/hr, or to ≤20 ppmv; or b. Use a halogen reduction device before the combustion device to reduce the halogen atom mass emission rate to ≤0.45 kg/hr or to a concentration ≤20 ppmv.

[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40341, July 14, 2006]

Table 6 to Subpart FFFF of Part 63—Requirements for Equipment Leaks

As required in §63.2480, you must meet each requirement in the following table that applies to your equipment leaks:

For all . . .	And that is part of . . .	You must . . .
1. Equipment that is in organic HAP service	a. Comply with the requirements of subpart UU of this part 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d); or	
	b. Comply with the requirements of subpart H of this part 63 and the requirements referenced therein, except as specified in §63.2480(b) and (d); or	
	c. Comply with the requirements of 40 CFR part 65, subpart F and the requirements referenced therein, except as specified in §63.2480(c) and (d).	
2. Equipment that is in organic HAP service at a new source	a. Any MCPU	i. Comply with the requirements of subpart UU of this part 63 and the requirements referenced therein; or ii. Comply with the requirements of 40 CFR part 65, subpart F.

[68 FR 63888, Nov. 10, 2003, as amended at 71 FR 40341, July 14, 2006]

Table 7 to Subpart FFFF of Part 63—Requirements for Wastewater Streams and Liquid Streams in Open Systems Within an MCPU

As required in §63.2485, you must meet each requirement in the following table that applies to your wastewater streams and liquid streams in open systems within an MCPU:

For each . . .	You must . . .
1. Process wastewater stream	Comply with the requirements in §§63.132 through 63.148 and the requirements referenced therein, except as specified in §63.2485.
2. Maintenance wastewater stream	Comply with the requirements in §63.105 and the requirements referenced therein, except as specified in §63.2485.
3. Liquid streams in an open system within an MCPU	Comply with the requirements in §63.149 and the requirements referenced therein, except as specified in §63.2485.

Table 8 to Subpart FFFF of Part 63—Partially Soluble Hazardous Air Pollutants

As specified in §63.2485, the partially soluble HAP in wastewater that are subject to management and treatment requirements in this subpart FFFF are listed in the following table:

Chemical name . . .	CAS No.
1. 1,1,1–Trichloroethane (methyl chloroform)	71556
2. 1,1,2,2–Tetrachloroethane	79345
3. 1,1,2–Trichloroethane	79005
4. 1,1–Dichloroethylene (vinylidene chloride)	75354
5. 1,2–Dibromoethane	106934
6. 1,2–Dichloroethane (ethylene dichloride)	107062
7. 1,2–Dichloropropane	78875
8. 1,3–Dichloropropene	542756
9. 2,4,5–Trichlorophenol	95954
10. 1,4–Dichlorobenzene	106467
11. 2–Nitropropane	79469
12. 4–Methyl-2-pentanone (MIBK)	108101
13. Acetaldehyde	75070
14. Acrolein	107028
15. Acrylonitrile	107131
16. Allyl chloride	107051
17. Benzene	71432
18. Benzyl chloride	100447
19. Biphenyl	92524
20. Bromoform (tribromomethane)	75252
21. Bromomethane	74839
22. Butadiene	106990
23. Carbon disulfide	75150
24. Chlorobenzene	108907
25. Chloroethane (ethyl chloride)	75003
26. Chloroform	67663
27. Chloromethane	74873
28. Chloroprene	126998
29. Cumene	98828
30. Dichloroethyl ether	111444
31. Dinitrophenol	51285
32. Epichlorohydrin	106898
33. Ethyl acrylate	140885
34. Ethylbenzene	100414
35. Ethylene oxide	75218
36. Ethylidene dichloride	75343
37. Hexachlorobenzene	118741
38. Hexachlorobutadiene	87683

Chemical name . . .	CAS No.
39. Hexachloroethane	67721
40. Methyl methacrylate	80626
41. Methyl-t-butyl ether	1634044
42. Methylene chloride	75092
43. N-hexane	110543
44. N,N-dimethylaniline	121697
45. Naphthalene	91203
46. Phosgene	75445
47. Propionaldehyde	123386
48. Propylene oxide	75569
49. Styrene	100425
50. Tetrachloroethylene (perchloroethylene)	127184
51. Tetrachloromethane (carbon tetrachloride)	56235
52. Toluene	108883
53. Trichlorobenzene (1,2,4-)	120821
54. Trichloroethylene	79016
55. Trimethylpentane	540841
56. Vinyl acetate	108054
57. Vinyl chloride	75014
58. Xylene (m)	108383
59. Xylene (o)	95476
60. Xylene (p)	106423

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38560, July 1, 2005; 71 FR 40341, July 14, 2006]

Table 9 to Subpart FFFF of Part 63—Soluble Hazardous Air Pollutants

As specified in §63.2485, the soluble HAP in wastewater that are subject to management and treatment requirements of this subpart FFFF are listed in the following table:

Chemical name . . .	CAS No.
1. Acetonitrile	75058
2. Acetophenone	98862
3. Diethyl sulfate	64675
4. Dimethyl hydrazine (1,1)	57147
5. Dimethyl sulfate	77781
6. Dinitrotoluene (2,4)	121142
7. Dioxane (1,4)	123911
8. Ethylene glycol dimethyl ether	110714
9. Ethylene glycol monobutyl ether acetate	112072
10. Ethylene glycol monomethyl ether acetate	110496
11. Isophorone	78591
12. Methanol	67561
13. Nitrobenzene	98953

Chemical name . . .	CAS No.
14. Toluidine (o-)	95534
15. Triethylamine	121448

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38561, July 1, 2005]

Table 10 to Subpart FFFF of Part 63—Work Practice Standards for Heat Exchange Systems

As required in §63.2490, you must meet each requirement in the following table that applies to your heat exchange systems:

For each . . .	You must . . .
Heat exchange system, as defined in §63.101	Comply with the requirements of §63.104 and the requirements referenced therein, except as specified in §63.2490.

Table 11 to Subpart FFFF of Part 63—Requirements for Reports

As required in §63.2520(a) and (b), you must submit each report that applies to you on the schedule shown in the following table:

You must submit a(n)	The report must contain . . .	You must submit the report . . .
1. Precompliance report	The information specified in §63.2520(c)	At least 6 months prior to the compliance date; or for new sources, with the application for approval of construction or reconstruction.
2. Notification of compliance status report	The information specified in §63.2520(d)	No later than 150 days after the compliance date specified in §63.2445.
3. Compliance report	The information specified in §63.2520(e)	Semiannually according to the requirements in §63.2520(b).

Table 12 to Subpart FFFF of Part 63—Applicability of General Provisions to Subpart FFFF

As specified in §63.2540, the parts of the General Provisions that apply to you are shown in the following table:

Citation	Subject	Explanation
§63.1	Applicability	Yes.
§63.2	Definitions	Yes.
§63.3	Units and Abbreviations	Yes.
§63.4	Prohibited Activities	Yes.
§63.5	Construction/Reconstruction	Yes.
§63.6(a)	Applicability	Yes.
§63.6(b)(1)–(4)	Compliance Dates for New and Reconstructed sources	Yes.
§63.6(b)(5)	Notification	Yes.
§63.6(b)(6)	[Reserved]	
§63.6(b)(7)	Compliance Dates for New and Reconstructed Area Sources That	Yes.

Citation	Subject	Explanation
	Become Major	
§63.6(c)(1)–(2)	Compliance Dates for Existing Sources	Yes.
§63.6(c)(3)–(4)	[Reserved]	
§63.6(c)(5)	Compliance Dates for Existing Area Sources That Become Major	Yes
§63.6(d)	[Reserved]	
§63.6(e)(1)–(2)	Operation & Maintenance	Yes.
§63.6(e)(3)(i), (ii), and (v) through (viii)	Startup, Shutdown, Malfunction Plan (SSMP)	Yes, except information regarding Group 2 emission points and equipment leaks is not required in the SSMP, as specified in §63.2525(j).
§63.6(e)(3)(iii) and (iv)	Recordkeeping and Reporting During SSM	No, §63.998(d)(3) and 63.998(c)(1)(ii)(D) through (G) specify the recordkeeping requirement for SSM events, and §63.2520(e)(4) specifies reporting requirements.
§63.6(e)(3)(ix)	SSMP incorporation into title V permit	Yes.
§63.6(f)(1)	Compliance Except During SSM	Yes.
§63.6(f)(2)–(3)	Methods for Determining Compliance	Yes.
§63.6(g)(1)–(3)	Alternative Standard	Yes.
§63.6(h)	Opacity/Visible Emission (VE) Standards	Only for flares for which Method 22 observations are required as part of a flare compliance assessment.
§63.6(i)(1)–(14)	Compliance Extension	Yes.
§63.6(j)	Presidential Compliance Exemption	Yes.
§63.7(a)(1)–(2)	Performance Test Dates	Yes, except substitute 150 days for 180 days.
§63.7(a)(3)	Section 114 Authority	Yes, and this paragraph also applies to flare compliance assessments as specified under §63.997(b)(2).
§63.7(b)(1)	Notification of Performance Test	Yes.
§63.7(b)(2)	Notification of Rescheduling	Yes.
§63.7(c)	Quality Assurance/Test Plan	Yes, except the test plan must be submitted with the notification of the performance test if the control device controls batch process vents.
§63.7(d)	Testing Facilities	Yes.
§63.7(e)(1)	Conditions for Conducting Performance Tests	Yes, except that performance tests for batch process vents must be conducted under worst-case conditions as specified in §63.2460.
§63.7(e)(2)	Conditions for Conducting Performance Tests	Yes.
§63.7(e)(3)	Test Run Duration	Yes.
§63.7(f)	Alternative Test Method	Yes.
§63.7(g)	Performance Test Data Analysis	Yes.
§63.7(h)	Waiver of Tests	Yes.

Citation	Subject	Explanation
§63.8(a)(1)	Applicability of Monitoring Requirements	Yes.
§63.8(a)(2)	Performance Specifications	Yes.
§63.8(a)(3)	[Reserved]	
§63.8(a)(4)	Monitoring with Flares	Yes.
§63.8(b)(1)	Monitoring	Yes.
§63.8(b)(2)–(3)	Multiple Effluents and Multiple Monitoring Systems	Yes.
§63.8(c)(1)	Monitoring System Operation and Maintenance	Yes.
§63.8(c)(1)(i)	Routine and Predictable SSM	Yes.
§63.8(c)(1)(ii)	SSM not in SSMP	Yes.
§63.8(c)(1)(iii)	Compliance with Operation and Maintenance Requirements	Yes.
§63.8(c)(2)–(3)	Monitoring System Installation	Yes.
§63.8(c)(4)	CMS Requirements	Only for CEMS. Requirements for CPMS are specified in referenced subparts G and SS of part 63. Requirements for COMS do not apply because subpart FFFF does not require continuous opacity monitoring systems (COMS).
§63.8(c)(4)(i)	COMS Measurement and Recording Frequency	No; subpart FFFF does not require COMS.
§63.8(c)(4)(ii)	CEMS Measurement and Recording Frequency	Yes.
§63.8(c)(5)	COMS Minimum Procedures	No. Subpart FFFF does not contain opacity or VE limits.
§63.8(c)(6)	CMS Requirements	Only for CEMS; requirements for CPMS are specified in referenced subparts G and SS of this part 63. Requirements for COMS do not apply because subpart FFFF does not require COMS.
§63.8(c)(7)–(8)	CMS Requirements	Only for CEMS. Requirements for CPMS are specified in referenced subparts G and SS of part 63. Requirements for COMS do not apply because subpart FFFF does not require COMS.
§63.8(d)	CMS Quality Control	Only for CEMS.
§63.8(e)	CMS Performance Evaluation	Only for CEMS. Section 63.8(e)(5)(ii) does not apply because subpart FFFF does not require COMS.
§63.8(f)(1)–(5)	Alternative Monitoring Method	Yes, except you may also request approval using the precompliance report.
§63.8(f)(6)	Alternative to Relative Accuracy Test	Only applicable when using CEMS to demonstrate compliance, including the alternative standard in §63.2505.
§63.8(g)(1)–(4)	Data Reduction	Only when using CEMS, including for the alternative standard in §63.2505, except that the requirements for COMS do not apply because subpart FFFF has no opacity or VE limits, and §63.8(g)(2) does not apply because data

Citation	Subject	Explanation
		reduction requirements for CEMS are specified in §63.2450(j).
§63.8(g)(5)	Data Reduction	No. Requirements for CEMS are specified in §63.2450(j). Requirements for CPMS are specified in referenced subparts G and SS of this part 63.
§63.9(a)	Notification Requirements	Yes.
§63.9(b)(1)–(5)	Initial Notifications	Yes.
§63.9(c)	Request for Compliance Extension	Yes.
§63.9(d)	Notification of Special Compliance Requirements for New Source	Yes.
§63.9(e)	Notification of Performance Test	Yes.
§63.9(f)	Notification of VE/Opacity Test	No. Subpart FFFF does not contain opacity or VE limits.
§63.9(g)	Additional Notifications When Using CMS	Only for CEMS. Section 63.9(g)(2) does not apply because subpart FFFF does not require COMS.
63.9(h)(1)–(6)	Notification of Compliance Status	Yes, except subpart FFFF has no opacity or VE limits, and 63.9(h)(2)(i)(A) through (G) and (ii) do not apply because 63.2520(d) specifies the required contents and due date of the notification of compliance status report.
§63.9(i)	Adjustment of Submittal Deadlines	Yes.
§63.9(j)	Change in Previous Information	No, §63.2520(e) specifies reporting requirements for process changes.
§63.10(a)	Recordkeeping/Reporting	Yes.
§63.10(b)(1)	Recordkeeping/Reporting	Yes.
§63.10(b)(2)(i)–(ii), (iv), (v)	Records related to SSM	No, §§63.998(d)(3) and 63.998(c)(1)(ii)(D) through (G) specify recordkeeping requirements for periods of SSM.
§63.10(b)(2)(iii)	Records related to maintenance of air pollution control equipment	Yes.
§63.10(b)(2)(vi), (x), and (xi)	CMS Records	Only for CEMS; requirements for CPMS are specified in referenced subparts G and SS of this part 63.
§63.10(b)(2)(vii)–(ix)	Records	Yes.
§63.10(b)(2)(xii)	Records	Yes.
§63.10(b)(2)(xiii)	Records	Only for CEMS.
§63.10(b)(2)(xiv)	Records	Yes.
§63.10(b)(3)	Records	Yes.
§63.10(c)(1)–(6),(9)–(15)	Records	Only for CEMS. Recordkeeping requirements for CPMS are specified in referenced subparts G and SS of this part 63.
§63.10(c)(7)–(8)	Records	No. Recordkeeping requirements are specified in §63.2525.
§63.10(d)(1)	General Reporting Requirements	Yes.

Citation	Subject	Explanation
§63.10(d)(2)	Report of Performance Test Results	Yes.
§63.10(d)(3)	Reporting Opacity or VE Observations	No. Subpart FFFF does not contain opacity or VE limits.
§63.10(d)(4)	Progress Reports	Yes.
§63.10(d)(5)(i)	Periodic Startup, Shutdown, and Malfunction Reports	No, §63.2520(e)(4) and (5) specify the SSM reporting requirements.
§63.10(d)(5)(ii)	Immediate SSM Reports	No.
§63.10(e)(1)	Additional CEMS Reports	Yes.
§63.10(e)(2)(i)	Additional CMS Reports	Only for CEMS.
§63.10(e)(2)(ii)	Additional COMS Reports	No. Subpart FFFF does not require COMS.
§63.10(e)(3)	Reports	No. Reporting requirements are specified in §63.2520.
§63.10(e)(3)(i)–(iii)	Reports	No. Reporting requirements are specified in §63.2520.
§63.10(e)(3)(iv)–(v)	Excess Emissions Reports	No. Reporting requirements are specified in §63.2520.
§63.10(e)(3)(iv)–(v)	Excess Emissions Reports	No. Reporting requirements are specified in §63.2520.
§63.10(e)(3)(vi)–(viii)	Excess Emissions Report and Summary Report	No. Reporting requirements are specified in §63.2520.
§63.10(e)(4)	Reporting COMS data	No. Subpart FFFF does not contain opacity or VE limits.
§63.10(f)	Waiver for Recordkeeping/Reporting	Yes.
§63.11	Flares	Yes.
§63.12	Delegation	Yes.
§63.13	Addresses	Yes.
§63.14	Incorporation by Reference	Yes.
§63.15	Availability of Information	Yes.

[68 FR 63888, Nov. 10, 2003, as amended at 70 FR 38561, July 1, 2005; 71 FR 20463, Apr. 20, 2006; 71 FR 40341, July 14, 2006]

G.1.3 One-Time Deadlines Relating to Miscellaneous Organic Chemical Manufacturing Notifications [40 CFR Part 63, Subpart FFFF]

The Permittee shall comply with the following notification requirements by the dates listed:

Requirement	Rule Cite	Affected Facility	Deadline
Initial Notification	40 CFR 63.2515(b)	EU-04, EU-05, EU-06, EU-08, EU-09, EU-10, and EU-13	March 10, 2004
Pre Compliance Report Date	40 CFR 63.2520(c)	EU-04, EU-05, EU-06, EU-08, EU-09, EU-10, and EU-13	November 10, 2007
Initial Compliance Date	40 CFR 63.2505(b) 40 CFR 63.2445(b)	EU-04, EU-05, EU-06, EU-08, EU-09, EU-10, and EU-13	May 10, 2008
Notification of Compliance Status Report	40 CFR 63.2450(g)(5)	EU-04, EU-05, EU-06, EU-08, EU-09, EU-10, and EU-13	October 8, 2008
1st Compliance Report	40 CFR 63.2520(b)(2)	EU-04, EU-05, EU-06, EU-08, EU-09, EU-10, and EU-13	August 31, 2008
Compliance Reports	40 CFR 63.2520(b)(4)	EU-04, EU-05, EU-06, EU-08, EU-09, EU-10, and EU-13	Semi-annual on August 31 and February 28

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: New Energy Corp.
Source Address: 3201 West Calvert Street, South Bend, Indiana 46613
Mailing Address: P.O. Box 2289, South Bend, Indiana 46680
Part 70 Permit No.: T 141-6956-00033

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:

Phone:

Date:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

COMPLIANCE BRANCH
100 North Senate Avenue
MC61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: 317-233-0178
Fax: 317-233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: New Energy Corp.
Source Address: 3201 West Calvert Street, South Bend, Indiana 46613
Mailing Address: P.O. Box 2289, South Bend, Indiana 46680
Part 70 Permit No.: T 141-6956-00033

This form consists of 2 pages **Page 1 of 2**

☐ 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**) working 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 Describe:
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: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT
SEMI-ANNUAL NATURAL GAS-FIRED BOILER CERTIFICATION

Source Name: New Energy Corp.
Source Address: 3201 West Calvert Street, South Bend, Indiana 46613
Mailing Address: P.O. Box 2289, South Bend, Indiana 46680
Part 70 Permit No.: T 141-6956-00033

☐ Natural Gas Only ☐ Alternate Fuel burned From _____ To: _____

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:
Phone:
Date:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: New Energy Corp.
Source Address: 3201 West Calvert Street, South Bend, Indiana 46613
Mailing Address: P.O. Box 2289, South Bend, Indiana 46680
Part 70 Permit No.: T 141-6956-00033
Facilities: Coal-fired boiler (EU-14) and two (2) package boilers (EU-15)
Parameter: SO_2 emissions
Limit: A total of 1,630 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	SO_2 Emissions (tons/month)	SO_2 Emissions (tons/month)	SO_2 Emissions (tons/month)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
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

Part 70 Quarterly Report

Source Name: New Energy Corp.
Source Address: 3201 West Calvert Street, South Bend, Indiana 46613
Mailing Address: P.O. Box 2289, South Bend, Indiana 46680
Part 70 Permit No.: T 141-6956-00033
Facilities: Coal-fired boiler (EU-14) and two (2) package boilers (EU-15)
Parameter: NO_X emissions
Limit: A total of 960 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	NO_X Emissions (tons/month)	NO_X Emissions (tons/month)	NO_X Emissions (tons/month)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
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

Part 70 Quarterly Report

Source Name: New Energy Corp.
Source Address: 3201 West Calvert Street, South Bend, Indiana 46613
Mailing Address: P.O. Box 2289, South Bend, Indiana 46680
Part 70 Permit No.: T 141-6956-00033
Facilities: Coal-fired boiler (EU-14) and two (2) package boilers (EU-15)
Parameter: CO emissions
Limit: A total of 93.55 tons per twelve (12) consecutive month period with compliance determined at the end of each month (as calculated by Condition D.1.6).

YEAR: _____

Month	CO Emissions (tons/month)	CO Emissions (tons/month)	CO Emissions (tons/month)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
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

Part 70 Quarterly Report

Source Name: New Energy Corp.
Source Address: 3201 West Calvert Street, South Bend, Indiana 46613
Mailing Address: P.O. Box 2289, South Bend, Indiana 46680
Part 70 Permit No.: T 141-6956-00033
Facilities: Corn receiving (EU-01), corn handling (EU-02), corn milling (EU-03) Five (5) DDGS dryers (EU-10), DDGS handling (EU-11), alcohol load-out (EU-13), coal-fired boiler (EU-14) and two (2) package boilers (EU-15)
Parameter: PM emissions
Limit: A total of 70 tons per twelve (12) consecutive month period with compliance determined at the end of each month (as calculated by Condition D.1.2(c).

YEAR: _____

Month	PM Emissions (tons/month)	PM Emissions (tons/month)	PM Emissions (tons/month)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
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

Part 70 Quarterly Report

Source Name: New Energy Corp.
Source Address: 3201 West Calvert Street, South Bend, Indiana 46613
Mailing Address: P.O. Box 2289, South Bend, Indiana 46680
Part 70 Permit No.: T 141-6956-00033
Facilities: Alternative Operating Scenario for the DDGS cooler system (EU-18)
[VOC emissions from the DDGS cooler system (EU-18) routed to the two (2) thermal oxidizers controlling VOC emissions from the DDGS dryers (EU-10), the evaporation process (EU-09), and the recovery column vent condenser, identified as E-409 (part of EU-08), in addition to one of the five (5) DDGS dryers, identified as D-511 through D-515, taken out of service]
Parameter: Hours of operation
Limit: 750 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Hours of Operation for the Alternative Operating Scenario	Hours of Operation for the Alternative Operating Scenario	Hours of Operation for the Alternative Operating Scenario
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
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

PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: New Energy Corp.
Source Address: 3201 West Calvert Street, South Bend, Indiana 46613
Mailing Address: P.O. Box 2289, South Bend, Indiana 46680
Part 70 Permit No.: T 141-6956-00033

Months: _____ **to** _____ **Year:** _____

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. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does 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.

NEW ENERGY CORP.

FUGITIVE DUST CONTROL PLAN

New Energy Corp.
3201 West Calvert Street
South Bend, Indiana 46613

Operation Permit No: T141-6956-00033

Date of Plan: Oct. 15, 1996
Date of Update: May 6, 2011

FUGITIVE DUST CONTROL PLAN

NEW ENERGY CORP. ETHANOL PLANT

Operation Permit No: T141-6956-00033

REGULATORY DRIVERS:

Provided below is a summary of the Indiana regulations that define the requirements for a fugitive dust control plan.

326 IAC Article 6, Rule 5. Fugitive Particulate Matter Emission Limitations

- **326 IAC 6-5-1 Applicability**

  (b) Any new source of fugitive particulate matter emissions, located anywhere in the state, requiring a permit as set forth in 326 IAC 2, which has not received all the necessary preconstruction approvals before December 13, 1985.

  (c) Any source or facility of fugitive particulate matter emissions subject to the requirements of this rule shall be subject to 326 IAC 6-4-6.

  - **326 IAC 6-4-6 Exceptions**

    (b) Fugitive dust from a source caused by adverse meteorological conditions.

- **326 IAC 6-5-3 Submission of Control Plan**

  (b) A control plan or request for an exemption from the control plan shall be included in all permit applications and submitted to the commissioner by those sources specified in 326 IAC 6-5-1(b).

- **326 IAC 6-5-4 Control Measures**

  All control measures specified in this section shall be considered reasonably available control measures (RCM). The frequency of application for all control measures shall be detailed in each control plan.

- **326 IAC 6-5-5 Contents of Control Plans**

  (a) The fugitive particulate matter emission control plan shall be in writing and shall include, at a minimum, the following information:

  (1) Name and address of the source.

  (2) Name and address of the owner or operator responsible for the execution of the control plan.

(3) Identification of all processes, operations, and areas which have the potential to emit fugitive particulate matter in accordance with 326 IAC 6-5-4.

(4) A map of the source showing aggregate pile areas, access areas around the aggregate pile, unpaved roads, paved roads, parking lots and location of conveyor and transfer points, etc.

(5) The number and mix of vehicular activity occurring on paved roads, unpaved roads, and parking lots.

(6) Type and quantity of material handled.

(7) Equipment used to maintain aggregate piles.

(8) A description of the measures to be implemented to control fugitive particulate matter emissions resulting from emission points identified in subdivision (3).

(9) A specification of the dust suppressant material, such as oil or chemical including the estimated frequency of application rates and concentrations.

(10) A specification of the particulate matter collection equipment used as a fugitive particulate matter emission control measure.

(11) A schedule of compliance with the provisions of the control plan. Such schedule shall specify the amount of time the source requires to award any necessary contracts, commence and complete construction, installation, or modification of the fugitive particulate matter emission control measures.

(12) Other relevant data that may be requested by the commissioner, to evaluate the effectiveness of the control plan.

(b) Records shall be kept and maintained which document all control measures and activities to be implemented in accordance with the approved control plan. Said records shall be available upon the request of the commissioner, and shall be retained for three (3) years.

1) NAME AND ADDRESS OF SOURCE:

New Energy Corp.
3201 W Calvert Street
South Bend, Indiana 46613

2) NAME AND ADDRESS OF OWNER:

New Energy Corp.
3201 W Calvert Street
South Bend, Indiana 46613

3) IDENTIFICATION OF PROCESSES, OPERATIONS, AND AREAS WHICH HAVE THE POTENTIAL TO EMIT FUGITIVE PARTICULATE MATTER:

- Paved Roads
- Unpaved Roads
- Parking Lots
- Loadout/Receiving Areas
- Aggregate Pile Areas

4) SOURCE MAP IDENTIFYING LOCATION OF FUGITIVE SOURCES:

Refer to attachment for identification of the locations of the potential fugitive emissions sources within New Energy Corp.'s South Bend, Indiana Fuel Grade Ethanol Plant.

5) DESCRIPTION OF VEHICULAR ACTIVITY OCCURRING ON PAVED ROADS, UNPAVED ROADS AND PARKING LOTS:

- Daily delivery vehicles (i.e., trucks) to support plant operations – utilize paved roadways
- Daily vehicle traffic from company owned vehicles on paved and unpaved roadways
- Daily vehicles, including company vehicles and visitors vehicles, on paved roadways and parking lots

6) TYPE AND QUANTITY OF MATERIALS HANDLED:

Material Handled	Quantity Handled			
	Tons/Day	Tons/Year	Trucks/yr	Comments
Coal	340	120,000	0	Coal Received by rail in covered unloading shed
Corn	2,800	950,000	25,000	Corn received by truck (70%) and rail (30%)
DDGS	840	290,000	3,600	DDG Shipped by truck (30%) and rail (70%)
Ash	5	1,750	1,050	

7) EQUIPMENT USED TO MAINTAIN AGGREGATE PILES:

Type of Equipment	Aggregate Material
Front end Loader	Coal and DDGs

8) DESCRIPTION OF CONTROL MEASURES FOR FUGITIVE PARTICULATE MATTER EMISSIONS:

- Paved Roadways/Parking Lot Areas

- Promptly remove mud, dirt, or similar debris from the paved road.
- Water paved roadways on an as needed basis.
- Limit vehicle speeds on the paved roadways within the facility.
- Require trucks to be tarped except during loading/unloading operations.

- Unpaved Roadways
  - Spray with water on an as needed basis.

- Loadout and Receiving Areas
  - Total or partial enclosure of material loading/unloading areas.
  - Minimize the vehicular distance between transfer points.
  - Enclosed conveyors where technically feasible.
  - Limit drop heights of materials.

- Wind Erosion of Aggregate Pile Areas
  - Telescopic chute for aggregate material loading to storage areas.
  - Limit the height of the aggregate piles.
  - Limit the disturbance of the aggregate piles.
  - Apply water to the surface of the aggregate piles on an as needed basis.

9) SPECIFICATION OF DUST SUPPRESSANT MATERIALS

Water will be the primary dust suppressant used to control fugitive dust from the roadways, parking lots and aggregate piles on an as needed basis.

10) SPECIFICATION OF PARTICULATE MATTER COLLECTION EQUIPMENT:

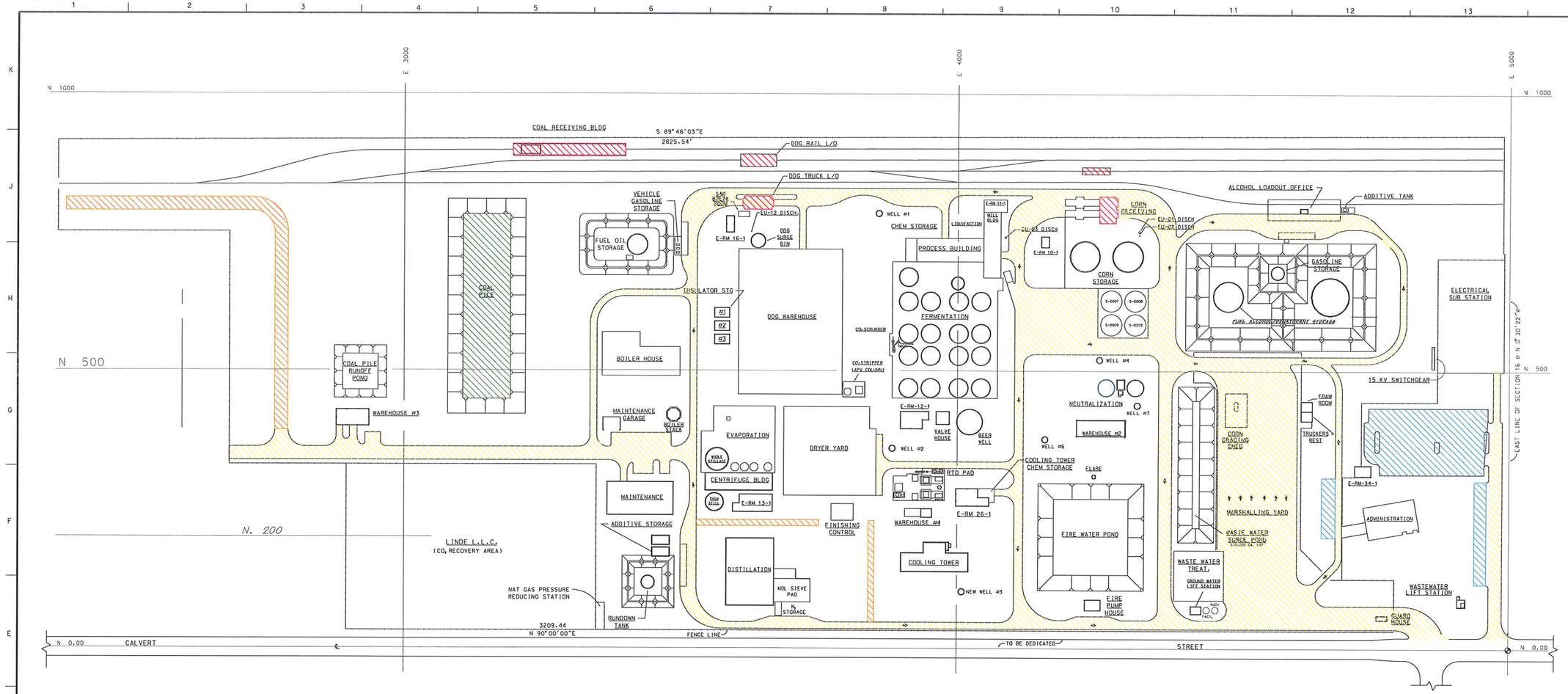
Best Management Practices, including air pollution control technologies, will be utilized to control fugitive particulate matter emissions. No collection equipment is currently being utilized to control fugitive particulate matter.

11) SCHEDULE OF COMPLIANCE:

Best Management Practices, including air pollution control technologies, will be utilized on an as needed basis during facility operations.

12) UPDATES TO PLAN:

Last Update to Plan: May 6, 2011



REV	DESCRIPTION	CHK'D BY	DATE

Scale: 200′ = 1″

EQUIPMENT MANUFACTURERS', SUPPLIERS' AND SUBCONTRACTORS COMPLIANCE WITH REQUIREMENTS OF OCCUPATIONAL SAFETY AND HEALTH ACT RULES AND REGULATIONS HAVING JURISDICTION ON THE WORK BY FEDERAL, STATE AND LOCAL AUTHORITIES IS A MANDATORY CONTRACTUAL REQUIREMENT.

ISSUED FOR CONSTRUCTION
BY PROJ. ENGR. DATE

New Energy Corp

NEW ENERGY CORP.
SOUTH BEND, INDIANA
100 MM GPY FUEL ALCOHOL PLANT
FUGITIVE DUST PLAN

DRAWN BY: _____ DATE: _____
CHECKED BY: _____ DATE: _____
APPROVED BY: _____ DATE: _____
SCALE _____
CONTRACT NO. GC-6010

E-G-0C-00-001B | 0

Indiana Department of Environmental Management
Office of Air Quality

Addendum to the Technical Support Document (ATSD) for a Prevention of Significant Deterioration Significant Source Modification to a Part 70 Source and a Part 70 Significant Permit Modification

Source Background and Description

Source Name:	New Energy Corp.
Source Location:	3201 W. Calvert Street, South Bend, IN 46613
County:	St. Joseph
SIC Code:	2869
Operation Permit No.:	T141-6956-00033
Operation Permit Issuance Date:	March 17, 2008
PSD/Significant Source Modification No.:	141-30226-00033
Significant Permit Modification No.:	141-30242-00033
Permit Reviewer:	John Haney

On November 23, 2011, and January 26, 2012, the Office of Air Quality (OAQ) had notices published in the South Bend Tribune, South Bend, Indiana, stating that New Energy Corp. had applied for a significant source modification and significant permit modification for the addition of a thermal oxidizer for VOC control and the modification of the VOC emission limits for the DDGS cooler system, identified as EU-18, per a Best Available Control Technology (BACT) analysis for a facility subject to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) and 326 IAC 2-2 (PSD). The notices also stated that the OAQ proposed to issue a significant source modification and significant permit modification for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notices informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Comments and Responses

On February 29, 2012, Barnes & Thornburg, LLP submitted comments to IDEM, OAQ on the draft significant source modification and significant permit modification.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

IDEM has no authority from which it can require both a 98% control efficiency and 0.55 lb/hr emission rate or a 10 ppm concentration limit as stated in Condition D.7.4(a). There are no other comparable sources with add-on controls identified in IDEM's "Existing VOC BACT Determinations - DDGS Cooler Operations" spreadsheet in its BACT analysis (see Appendix B to the TSD, page 9 of 11) that are subject to the following three limits provided in Condition D.7.4(a):

- A lb/hr limit as low as 0.55 lb/hr; and
- A control efficiency limit of 98%; and
- An outlet concentration limit of 10 ppm.

Any claim that a lb/hr limit is necessary in addition to a limit on control efficiency and concentration to render the requirements "enforceability as a practical matter" is baseless. Adding a lb/hr mass limit to limits on control efficiency and outlet concentration does not increase the permit's "enforceability as a practical matter" because each of these limits can only be verified by stack test. In other words, the addition of a redundant and unnecessary lb/hr mass limit does no more to assure "continual compliance" than a simple control efficiency requirement or concentration limit because neither can be verified except for stack testing. To the extent conditions are needed to verify continual compliance, these are satisfied by the thermal oxidizer temperature requirements in Condition D.7.11 and the parametric monitoring requirements in Condition D.7.12. For the reasons stated above, the lb/hr emission limit in Condition D.7.4(a) is arbitrary and capricious and should be removed.

Response to Comment 1:

Under the CAA and applicable regulations, a PSD permit must contain emissions limitations based on application of BACT for each regulated pollutant. CAA $169(3) defines BACT as an emissions limitation (including a visible emission standard) based on the maximum degree of reduction for each pollutant subject to the regulation under the Clean Air Act which would be emitted from any proposed major stationary source or major modification which the Administrator, on a case by case basis, taking into account energy, environment, and economic impacts and other costs, determines is achievable for such facility through application of production processes and available methods, systems, techniques, including fuel cleaning, clean fuel, or treatment or innovative fuel combustion techniques for control of each such pollutant…..

Based on the above, the permitting Authority must establish a numeric emissions limitation that reflects the maximum degree of reduction achievable for each pollutant subject to BACT through the application of the selected technology or technique.

A review of USEPA's RACT/BACT/LAER Clearinghouse identified lists Ace Ethanol, LLC of Stanley, Wisconsin (RBLC ID: WI-0207) as having an existing VOC BACT determination for a DDGS cooling operation. Upon further review of this source's construction permit (Permit No. 03-DCF-184, page 16 of 53), BACT had been determined to be the following:

"(a) BACT is determined to be use of a Regenerative Thermal Oxidizer (RTO). This shall provide 96% overall control of VOC emissions or emissions shall not have a VOC concentration in excess of 5 ppm (as propane).
(b) The processes may not emit more than 2.7 pounds of VOC per hour (aggregate)."

Consequently, there is a comparable source with add-on controls identified in IDEM's "Existing VOC BACT Determinations - DDGS Cooler Operations" spreadsheet in the BACT analysis that is subject to a combination of a lb/hr limit, a control efficiency limit, and an outlet concentration limit.

Therefore, the lb/hr emission limit in Condition D.7.4(a) is not arbitrary and capricious. No changes were made as a result of this comment.

Comment 2:

New Energy Corp. requests that IDEM clarify that the VOC concentration limit in Condition D.7.4(a)(2) is a volume limit and whether it is based on dry volume or wet volume.

Response to Comment 2:

IDEM agrees to clarify the limit as based on wet volume. This clarifies the original BACT determination as indicated in the Appendix B of the Technical Support Document. The permit has been revised as follows:

D.7.4 BACT Requirements (VOC) [326 IAC 8-1-6] [326 IAC 2-2-3]

Pursuant to 326 IAC 8-1-6, 326 IAC 2-2-3, and PSD/SSM 141-30226-00033, BACT has been determined to be the following for the distillers dried grains and solubles (DDGS) cooler system, identified as EU-18:

For the DDGS cooler system, the BACT for VOC is the use of a thermal oxidizer; and:

*(a) Whenever the thermal oxidizer RTO-503 is ~~operating properly~~ **in service**:*

(1) The thermal oxidizer RTO-503 shall have an overall VOC control efficiency of not less than 98%, and the maximum VOC emission rate shall be less than 0.55 lb/hr; or

*(2) The thermal oxidizer RTO-503 shall have an outlet VOC concentration of not more than 10 ~~ppm~~ **ppmvw**.*

(b) Whenever the thermal oxidizer RTO-503 is out of service due to maintenance or malfunction:

(1) The two (2) thermal oxidizers controlling VOC emissions from the DDGS dryers (EU-10), the evaporation process (EU-09), and the recovery column vent condenser, identified as E-409 (part of EU-08), shall control the DDGS cooler system (EU-18) and shall have an overall VOC control efficiency of not less than 95%; and

(2) The use of this Alternative Operating Scenario shall not exceed 750 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.

Comment 3:

Condition D.7.8(c) requires notification and stack testing of the Alternate Operating Scenario (AOS) in Condition D.7.7(b) within 60 days of the initial use of the AOS. The use of the AOS during maintenance or malfunction of the thermal oxidizer should only occur for short periods of time. It would be impossible to schedule and perform a compliance test on such short notice, let alone provide IDEM with advance notice.

New Energy Corp. proposes the following language for Condition D.7.8(c):

D.7.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

* * * * *

(c) Not later than ~~sixty (60)~~ **one hundred and eighty (180)** days after initial use of the Alternative Operating Scenario as stated in Condition D.7.7(b), in order to demonstrate compliance with Condition D.7.4(b), the Permittee shall perform VOC testing of the DDGS cooler system utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration **if the Permittee has used the Alternative Operating Scenario in prior five (5) year period**. **If the initial VOC testing of the DDGS cooler system using the Alternate Operating Scenario described in D.7.7(b) demonstrates compliance with D.7.4(b), the requirement for additional periodic VOC testing of the DDGS cooler system while using the Alternate Operating Scenario as described D.7.7(b) shall not apply.** Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Response to Comment 3:

IDEM agrees to extend the timeframe for the initial testing of the Alternative Operating Scenario from sixty days to ninety days because of the cited scheduling issues. IDEM also agrees to remove the periodic testing requirement since the Alternative Operating Scenario will be used on a limited basis. The permit has been revised as follows:

D.7.8 Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

* * * * *

*(c) Not later than ~~sixty (60)~~ **ninety (90)** days after initial use of the Alternative Operating Scenario as stated in Condition D.7.7(b), in order to demonstrate compliance with Condition D.7.4(b), the Permittee shall perform VOC testing of the DDGS cooler system utilizing methods as approved by the Commissioner ~~at least once every five (5) years from the date of the most recent valid compliance demonstration~~. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.*

Comment 4:

Condition D.7.12 requires that New Energy Corp. determines the appropriate duct pressure or fan amperage for the thermal oxidizer from the most recent valid stack test and that the monitored duct pressure or fan amperage must remain within the normal range established. The duct pressure or fan amperage measured during a compliance test does not define a range, only one data point. During normal operation, these parameters may be above or below the levels indicated during a compliance test. Therefore, New Energy Corp. requests that Condition D.7.12(b) be revised as follows:

D.7.12 Thermal Oxidizer Parametric Monitoring

(a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates the compliance status with the limits in Condition D.7.4.

(b) The three (3) hour average duct pressure or fan amperage, as measured by a continuous parameter monitoring system, must be within **plus or minus twenty-five percent (25%) of** the normal range established during the most recent compliance demonstration.

(c) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer (DC-TO1) is in operation.

Response to Comment 4:

Condition D.7.12 was revised as part of the second public notice and published on January 26, 2012 as follows:

D.7.12 Thermal Oxidizer Parametric Monitoring

(a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates the compliance status with the limits in Condition D.7.4.

(b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer (RTO-503) 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 the most recent compliant stack test.

IDEM agrees to clarify the parametric monitoring range for the thermal oxidizer since it should parallel the temperature monitoring requirements in Condition D.7.11(c). The permit has been revised as follows:

D.7.12 Thermal Oxidizer Parametric Monitoring

(a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates the compliance status with the limits in Condition D.7.4.

(b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer (RTO-503) 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~~ ***at or above the duct pressure or fan amperage*** *as established in the most recent compliant stack test.*

Comment 5:

The following language should be deleted under the heading "Enforcement Issues" on page 4 of the TSD for Significant Source Modification No. 141-30226-00033 and Significant Permit Modification No. 141-30242-00033:

> "IDEM is also aware that equipment has been constructed and operated without an accurate account of its capacity prior to receipt of the proper permit. The DDGS cooler system (EU-18) was originally listed as having a capacity of 77,967 pounds (i.e., 38.98 tons) of DDGS per hour. Stack testing documentation has indicated a capacity of 42.3 tons of DDGS per hour."

This language is improper because it implies that VOC emissions from the DDGS Cooler are the result of the nominal difference between the per hour capacity of the DDGS Cooler at design and that measured during stack testing, which they are not.

Response to Comment 5:

IDEM, OAQ agrees that the original TSD should have been worded to state that equipment may have been constructed and operated prior to receipt of the proper permit. With the purpose of resolving this, the updated TSD that was submitted as part of the second public notice and published on January 26, 2012 was revised with the phrase "may have been".

The Permits Branch informed the Compliance and Enforcement Branch of a possible enforcement issue, and the Compliance and Enforcement Branch shall determine whether or not the equipment had received construction and operation approval. However, the TSD is used by IDEM, OAQ for historical purposes, and IDEM, OAQ does not make any changes to the original TSD. Therefore, IDEM, OAQ is clarifying the intent of the TSD, but cannot revise the TSD as requested.

Additional Changes

IDEM, OAQ has decided to make additional revisions to the permit as described below, with deleted language as ~~strikeouts~~ and new language **bolded**.

(a) BOC Gases was issued Administrative Amendment No. 141-27513-00548 on March 17, 2009 in order to reflect a change in its facility name. These changes have been incorporated into the source definition in Condition A.2.

The permit has been revised as follows:

A.2 Part 70 Source Definition [326 IAC 2-7-1(22)]

This fuel-grade ethanol production source consists of two (2) plants:

(a) New Energy Corp. (NEC) located at 3201 West Calvert Street, South Bend, Indiana, and

(b) ~~BOC Gases~~ **Linde LLC** located at 3809 West Calvert Street, South Bend, Indiana.

Although the two (2) plants do not share common ownership or management, IDEM, OAQ has determined that since the two (2) plants are located on contiguous property that is owned by NEC and if it were not for the existence of NEC, the ~~BOC~~ **Linde LLC** plant would not be there, the two (2) plants are considered one (1) source. ~~BOC Gases~~ **Linde LLC** is totally dependent on NEC for its feedstock of CO_2 gas. Therefore, the term "source" in the Part 70 documents refers to both New Energy Corp and ~~BOC Gases~~ **Linde LLC** as one (1) major source.

Separate Part 70 Operating Permits have been issued to New Energy Corp. with Permit No.: T141-6956-00033 and ~~BOC Gases~~ **Linde LLC** with Permit No.: T141-17344-00548 solely for administrative purposes.

IDEM Contact

(a) Questions regarding this proposed significant source modification and significant permit modification can be directed to John Haney at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5328 or toll free at 1-800-451-6027 extension 4-5328.

(b) A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Prevention of Significant Deterioration Significant Source Modification to a Part 70 Source and a Part 70 Significant Permit Modification

Source Description and Location

Source Name:	New Energy Corp.
Source Location:	3201 W. Calvert Street, South Bend, IN 46613
County:	St. Joseph
SIC Code:	2869
Operation Permit No.:	T141-6956-00033
Operation Permit Issuance Date:	March 17, 2008
PSD/Significant Source Modification No.:	141-30226-00033
Significant Permit Modification No.:	141-30242-00033
Permit Reviewer:	John Haney

Source Definition

This fuel-grade ethanol production source consists of two (2) plants:

(a) New Energy Corp. (NEC) located at 3201 West Calvert Street, South Bend, Indiana, and

(b) BOC Gases located at 3809 West Calvert Street, South Bend, Indiana.

Although the two (2) plants do not share common ownership or management, IDEM, OAQ has determined that since the two (2) plants are located on contiguous property that is owned by NEC and if it were not for the existence of NEC, the BOC plant would not be there, the two (2) plants are considered one (1) source. BOC Gases is totally dependent on NEC for its feedstock of CO_2 gas. Therefore, the term "source" in the Part 70 documents refers to both New Energy Corp. and BOC Gases as one (1) major source. This conclusion was initially determined under Part 70 Operating Permit T141-6956-00033 on March 17, 2008.

Separate Part 70 Operating Permits have been issued to New Energy Corp. and BOC Gases solely for administrative purposes.

Existing Approvals

The source was issued Part 70 Operating Permit No. T141-6956-00033 on March 17, 2008. The source has since received the following approvals:

(a) Minor Source Modification No. 141-25655-00033, issued on April 7, 2008;

(b) Significant Source Modification No. 141-25654-00033, issued on May 23, 2008;

(c) Significant Permit Modification No. 141-26231-00033, issued on July 22, 2008; and

(d) Significant Permit Modification No. 141-27774-00033, issued on July 30, 2009.

County Attainment Status

The source is located in St. Joseph County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Attainment effective July 19, 2007, for the 8-hour ozone standard.[1]
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Not designated.

[1]Attainment effective October 18, 2000, for the 1-hour ozone standard for the South Bend-Elkhart area, including St. Joseph County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour standard was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for $PM_{2.5}$.

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) 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 NO_x emissions are considered when evaluating the rule applicability relating to ozone. St. Joseph County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
St. Joseph County has been classified as attainment for $PM_{2.5}$. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct $PM_{2.5}$ significant level at ten (10) tons per year. This rule became effective on June 28, 2011. Therefore, direct $PM_{2.5}$ and SO_2 emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants
St. Jospeh County has been classified as attainment or unclassifiable in Indiana for all regulated pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

The proposed source includes a coal-fired boiler, a gasoline storage tank, an ethanol storage tank, an ethanol production operation, and boilers with a total heat input rating of greater than 250 million British thermal units per hour (MMBtu/hr) which support the fuel-grade ethanol production plant.

(a) EPA published a final rule in the Federal Register on May 1, 2007, that excluded ethanol production facilities that produce ethanol through natural fermentation from the major source category "Chemical Process Plants". Therefore, their fugitive emissions are no longer counted toward determination of PSD applicability.

(b) The Riley-Stoker coal-fired boiler, identified as EU-14, has an applicable New Source Performance Standard that was in effect on August 7, 1980. Therefore, its fugitive emissions are counted toward the determination of PSD applicability.

(c) The gasoline storage tank, identified as T-601, has an applicable New Source Performance Standard that was in effect on August 7, 1980. Therefore, its fugitive emissions are counted toward the determination of PSD applicability.

(d) The fugitive emissions from the ethanol storage tank, identified as T-611, are not counted toward PSD applicability because the applicable NSPS, Kb was in effect after August 7, 1980.

(e) The fugitive emissions from equipment leaks are not counted toward PSD applicability because the applicable NSPS, VV was in effect after August 7, 1980.

(f) The boilers with a total heat input rating of greater than 250 MMBtu/hr are considered one of the 28 listed source categories, based on the EPA guidance for "nested activities". Therefore, any fugitive emissions from these boilers are counted toward PSD applicability.

Source Status

The table below summarizes the potential to emit of the entire source, prior to the proposed modification, after consideration of all enforceable limits established in the effective permits:

Pollutant	**Emissions** (tons/yr)
PM	greater than 100, less than 250
PM_{10}	greater than 100, less than 250
$PM_{2.5}$	greater than 100, less than 250
SO_2	greater than 250
VOC	greater than 100, less than 250
CO	less than 100
NO_X	greater than 250
GHGs	greater than 100,000
Single HAP	greater than 10
Total HAPs	greater than 25

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 250 tons per year or more, emissions of GHGs are equal to or greater than one hundred thousand (100,000) tons of CO_2 equivalent emissions (CO_2e) per year, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

(c) These emissions are based upon the Technical Support Document for Part 70 Operating Permit No. T141-6956-00033, issued on March 17, 2008, and the Technical Support Document for Significant Permit Modification No. 141-26231-00033, issued on July 22, 2008.

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by New Energy Corp. on February 15, 2011, relating to the addition of a thermal oxidizer for VOC control and the modification of the VOC emission limits for the DDGS cooler system, identified as EU-18, per a Best Available Control Technology (BACT) analysis for a facility subject to 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) and 326 IAC 2-2 (PSD). The following is a list of the modified emission unit and pollution control device:

(q) One (1) distillers dried grains and solubles (DDGS) cooler system, identified as EU-18, equipped with a baghouse, identified as DC-503, installed in March 2000, exhausting through Stack DC-0503, consisting of one (1) fan, identified as BL-502, one (1) cooling coil, identified as CC-500, one (1) cooler inlet rotary valve, identified as RV-502, one (1) cooler, identified as RC-502, and four (4) conveyors, identified as CV-522, CV-530, CV-531 and CV-532, DDGS capacity: 42.3 tons of DDGS per hour based on monthly production. Baghouse DC-503 exhausts through a regenerative thermal oxidizer system, approved in 2012 for construction, consisting of knockout pot KO-503, fan BL-503, oxidizer RTO-503, and outlet stack ST-503.

Enforcement Issues

IDEM is aware that there is a pending enforcement action for exceeding the 326 IAC 8-1-6 minor limit as well as for exceeding the 326 IAC 2-2 minor limit.

IDEM is also aware that equipment may have been constructed and operated without an accurate account of its capacity prior to receipt of the proper permit. The DDGS cooler system (EU-18) was originally listed as having a capacity of 77,967 pounds (i.e., 38.98 tons) of DDGS per hour. Stack testing documentation has indicated a capacity of 42.3 tons of DDGS per hour.

IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the construction permit rules.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit 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, IDEM, or the appropriate local air pollution control agency.”

This source modification is subject to 326 IAC 2-7-10.5(f)(2) because the modification is subject to 326 IAC 8-1-6; this source modification is also subject to 326 IAC 2-7-10.5(f)(1) because the modification is subject to 326 IAC 2-2. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d) because the modification requires a case-by-case determination of an emission limitation.

Permit Level Determination – PSD

The table below summarizes the potential to emit, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this Part 70 source modification and permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential to Emit (tons/yr)							
Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$***	**SO_2**	**VOC**	**CO**	**NO_X**	**GHGs**
DDGS Cooler System	0.01	0.03	0.03	<0.01	1.27	0.36	0.43	518
Total for Modification	0.01	0.03	0.03	<0.01	1.27	0.36	0.43	518
Significant Level	25	15	10	40	40	100	40	75,000 CO_2e

*$PM_{2.5}$ listed is direct $PM_{2.5}$.

This modification to an existing major stationary source would not have been major because the emissions increase is less than the PSD significant levels, and consequently the PSD requirements would not have applied to this modification (the addition of a thermal oxidizer). However, according to the August, 2008 and March, 2010 stack test results and actual DDGS production for calendar year 2010, actual emissions of VOC for the DDGS cooler system have exceeded 40 tons per year. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do apply to the DDGS cooler.

IDEM, OAQ has performed a BACT analysis, which was based on the Draft "Top Down Approach: BACT Guidance" by USEPA, Office of Air Quality Planning Standards, March 15, 1990. IDEM, OAQ has determined that the following requirements represent BACT for the DDGS cooler system at the source:

For the DDGS cooler system, the BACT for VOC is the use of a thermal oxidizer; and:

(a) Whenever the thermal oxidizer RTO-503 is operating properly:

(1) The thermal oxidizer RTO-503 shall have an overall VOC control efficiency of not less than 98%, and the maximum VOC emission rate shall be less than 0.55 lb/hr; or

(2) The thermal oxidizer RTO-503 shall have an outlet VOC concentration of not more than 10 ppm.

(b) Whenever the thermal oxidizer RTO-503 is out of service due to maintenance or malfunction:

(1) The two (2) thermal oxidizers controlling VOC emissions from the DDGS dryers (EU-10), the evaporation process (EU-09), and the recovery column vent condenser, identified as E-409 (part of EU-08), shall control the DDGS cooler system (EU-18) and shall have an overall VOC control efficiency of not less than 95%; and

(2) The hours of operation of the DDGS cooler system (EU-18) when using this Alternative Operating Scenario shall not exceed 750 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.

See Appendix B of this Technical Support Document for the detailed BACT Analysis.

Federal Rule Applicability Determination

NSPS:

(a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

NESHAP:

(b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20, and 40 CFR Part 63) applicable to this proposed modification.

CAM:

(c) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:

(1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

CAM Applicability Analysis

Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/yr)	Controlled PTE (tons/yr)	Part 70 Major Source Threshold (tons/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
DDGS Cooler System (EU-18)	Thermal Oxidizer RTO-503	Y	120.27	2.41	100	Y	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the DDGS Cooler System (EU-18) for VOC upon issuance of the Title V Renewal. A CAM plan must be submitted as part of the Renewal application.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-2 (PSD)

This modification to an existing major stationary source would not have been major because the emissions increase is less than the PSD significant levels, and consequently the PSD requirements would not have applied to this modification. However, according to the August, 2008 and March, 2010 stack test results and actual DDGS production for calendar year 2010, actual emissions of VOC for the DDGS cooler system have exceeded 40 tons per year. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do apply.

IDEM, OAQ has performed a BACT analysis, which was based on the Draft "Top Down Approach: BACT Guidance" by USEPA, Office of Air Quality Planning Standards, March 15, 1990. IDEM, OAQ has determined that the following requirements represent BACT for the DDGS cooler system at the source:

For the DDGS cooler system, the BACT for VOC is the use of a thermal oxidizer; and:

(a) Whenever the thermal oxidizer RTO-503 is operating properly:

(1) The thermal oxidizer RTO-503 shall have an overall VOC control efficiency of not less than 98%, and the maximum VOC emission rate shall be less than 0.55 lb/hr; or

(2) The thermal oxidizer RTO-503 shall have an outlet VOC concentration of not more than 10 ppm.

(b) Whenever the thermal oxidizer RTO-503 is out of service due to maintenance or malfunction:

(1) The two (2) thermal oxidizers controlling VOC emissions from the DDGS dryers (EU-10), the evaporation process (EU-09), and the recovery column vent condenser, identified as E-409 (part of EU-08), shall control the DDGS cooler system (EU-18) and shall have an overall VOC control efficiency of not less than 95%; and

(2) The hours of operation of the DDGS cooler system (EU-18) when using this Alternative Operating Scenario shall not exceed 750 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.

See Appendix B of this Technical Support Document for the detailed BACT Analysis.

326 IAC 2-3 (Emission Offset)
St. Jospeh County has been classified as attainment or unclassifiable in Indiana for all regulated pollutants. Therefore, 326 IAC 2-3 does not apply to his source.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of the DDGS cooler system, identified as EU-18, will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply to this modification.

326 IAC 2-6 (Emission Reporting)
This source, not located in Lake, Porter, or LaPorte County, is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7 (Part 70). The potential to emit of VOC and PM_{10} is less than 250 tons per year; and the potential to emit of CO, NO_x, and SO_2 is less than 2,500 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(2), triennial reporting is required. An emission statement shall be submitted in accordance with the compliance schedule in 326 IAC 2-6-3 by July 1, 2004, and every three (3) years thereafter. The next statement shall be submitted by July 1, 2013. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)
The DDGS cooler system is subject to 326 IAC 8-1-6 because it exceeded the 326 IAC 8-1-6 minor limit of 5.70 pounds per hour, which was made federally enforceable pursuant to Part 70 Operating Permit No.141-6956-00033, issued March 17, 2008. Therefore, IDEM, OAQ has performed a BACT analysis, which was based on the Draft "Top Down Approach: BACT Guidance" by USEPA, Office of Air Quality Planning Standards, March 15, 1990.

IDEM, OAQ has determined that the following requirements represent BACT for the DDGS cooler system at the source:

For the DDGS cooler system, the BACT for VOC is the use of a thermal oxidizer; and:

(a) Whenever the thermal oxidizer RTO-503 is operating properly:

(1) The thermal oxidizer RTO-503 shall have an overall VOC control efficiency of not less than 98%, and the maximum VOC emission rate shall be less than 0.55 lb/hr; or

(2) The thermal oxidizer RTO-503 shall have an outlet VOC concentration of not more than 10 ppm.

(b) Whenever the thermal oxidizer RTO-503 is out of service due to maintenance or malfunction:

(1) The two (2) thermal oxidizers controlling VOC emissions from the DDGS dryers (EU-10), the evaporation process (EU-09), and the recovery column vent condenser, identified as E-409 (part of EU-08), shall control the DDGS cooler system (EU-18) and shall have an overall VOC control efficiency of not less than 95%; and

(2) The hours of operation of the DDGS cooler system (EU-18) when using this Alternative Operating Scenario shall not exceed 750 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.

See Appendix B of this Technical Support Document for the detailed BACT Analysis.

326 IAC 8-5-6 (Fuel Grade Ethanol Production at Dry Mills)
The DDGS cooler system was constructed prior to April 1, 2007, and is not one of the ethanol production processes specified in 326 IAC 8-5-6(a)(3). Therefore, the requirements of 326 IAC 8-5-6 are not applicable to this modification.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in 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 determination requirements applicable to this modification are as follows:

(a) Emission Controls Operation

(1) The thermal oxidizer, RTO-503, for VOC emissions control shall be in operation and control VOC emissions whenever the DDGS cooler system (EU-18) is in operation.

(2) Whenever the thermal oxidizer, RTO-503, is out of service due to maintenance or malfunction, VOC emissions from the DDGS cooler system (EU-18) shall be routed to the two (2) thermal oxidizers controlling VOC emissions from the DDGS dryers (EU-10), the evaporation process (EU-09), and the recovery column vent condenser, identified as E-409 (part of EU-08), until thermal oxidizer, RTO-503, is brought back into operation. One of the five (5) DDGS dryers, identified as D-511 through D-515, shall be taken out of service in order to provide the additional capacity necessary for the DDGS dryer operation (EU-10) to accept the exhaust.

(b) Testing Requirements

(1) In order to demonstrate compliance with Condition D.7.4(a), the Permittee shall perform VOC testing of the DDGS cooler system utilizing methods as approved by the Commissioner not later than 60 days after achieving the maximum production rate, but no later than 180 days after start-up of the control device.

(2) In order to demonstrate compliance with Condition D.7.4(b), the Permittee shall perform VOC testing of the DDGS cooler system utilizing methods as approved by the Commissioner not later than 60 days upon the initial use of the Alternative Operating Scenario, as stated in Condition D.7.7(b).

These requirements are required to ensure compliance with 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) and 326 IAC 2-2-3 (PSD Control Technology Review; Requirements).

The compliance monitoring requirements applicable to this modification are as follows:

(a) Thermal Oxidizer Temperature

(1) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer (RTO-503) for measuring operating temperature. For the purpose of this condition, continuous means no less often than once per fifteen (15) minutes. The output of this system shall be recorded as a 3-hour average. From the date of issuance of this permit until the stack test results are available, the Permittee shall operate the thermal oxidizer (RTO-503) at or above the 3-hour average temperature of 1550°F. The Permittee shall take appropriate response steps whenever the three (3) hour average temperature of the thermal oxidizer (RTO-503) is below 1550°F. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A three (3) hour average temperature that is below 1550°F is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(2) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with the limits in Condition D.7.4.

(3) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizer (RTO-503) at or above the 3-hour average temperature as observed during the compliant stack test.

(b) Thermal Oxidizer Paramteric Monitoring

(1) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates the compliance status with the limits in Condition D.7.4.

(2) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer (RTO-503) 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 the most recent compliant stack test.

These monitoring conditions are necessary because the control devices must operate properly to ensure compliance with 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 8-1-6 (New Facilities; General Reduction Requirements).

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T141-6956-00033. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Upon further review, IDEM, OAQ has made the following changes:

(a) St. Jospeh County has been classified as attainment or unclassifiable in Indiana for all regulated pollutants. The source status in Condition A.1 has been revised to remove the reference to Emission Offset.

(b) The descriptive language for the DDGS cooler system in Conditions A.3(q) and D.7 have been revised to include the added control device and to clarify the unit's capacity.

(c) Section D.1 has been revised to reference the DDGS cooler (EU-18) as an emission unit subject to 326 IAC 2-2 (PSD).

(d) VOC BACT requirements have replaced the VOC minor limit for the DDGS cooler system in order to ensure compliance with 326 IAC 8-1-6 and 326 IAC 2-2-3. Condition D.7.4 has been revised.

(e) Operational control requirements have been added for the control device in Condition D.7.7.

(f) Since the emissions from the baghouse will be controlled by a thermal oxidizer, the thermal oxidizer will destroy any particulate emissions that the baghouse does not capture, making the requirement to take visible emission notations unnecessary. Condition D.7.8 and the corresponding recordkeeping requirement in Condition D.7.14(a) have been removed. These are Title I changes.

(g) The testing requirements for the DDGS cooler system have been revised to account for the added control device. Renumbered Condition D.7.8 has been revised.

(h) Temperature monitoring and parametric monitoring requirements have been added for the control device in Conditions D.7.11 and D.7.12, and the subsequent conditions have been renumbered accordingly. The Table of Contents has also been revised.

(i) Recordkeeping requirements have been added for the control device in renumbered Condition D.7.13.

(j) Reporting requirements have been added for the Alternative Operating Scenario in Condition D.7.14. The corresponding Reporting Form has also been added.

The permit has been revised as follows:

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a fuel-grade ethanol production plant.

* * * * *

Source Status:	Part 70 Operating Permit Program Major Source, under PSD ~~and Emission Offset~~ Rules Major Source, **under** Section 112 of the Clean Air Act Ethanol plant is not 1 of 28 listed source categories; source subject to pre-August 7, 1980 NSPS; boilers are considered 1 of 28 listed source categories

* * * * *

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

* * * * *

(q) One (1) distillers dried grains and solubles (DDGS) cooler system, identified as EU-18, equipped with a baghouse, identified as DC-503, installed in March 2000, exhausting through Stack DC-0503, **and equipped with a thermal oxidizer, identified as DC-TO1, approved in 2011 for construction, exhausting through Stack DC-TO1,** consisting of one (1) fan, identified as BL-502, one (1) cooling coil, identified as CC-500, one (1) cooler inlet rotary valve, identified as RV-502, one (1) cooler, identified as RC-502, and four (4) conveyors, identified as CV-522, CV-530, CV-531 and CV-532, capacity: ~~77,967 pounds~~ **42.3 tons** of DDGS per hour.

* * * * *

SECTION D.1 FACILITY OPERATION CONDITIONS

Emissions Unit Description: PSD Emission Units

* * * * *

(q) One (1) distillers dried grains and solubles (DDGS) cooler system, identified as EU-18, equipped with a baghouse, identified as DC-503, installed in March 2000, exhausting through Stack DC-0503, and equipped with a thermal oxidizer, identified as DC-TO1, approved in 2011 for construction, exhausting through Stack DC-TO1, consisting of one (1) fan, identified as BL-502, one (1) cooling coil, identified as CC-500, one (1) cooler inlet rotary valve, identified as RV-502, one (1) cooler, identified as RC-502, and four (4) conveyors, identified as CV-522, CV-530, CV-531 and CV-532, capacity: 42.3 tons of DDGS per hour.

* * * * *

* * * * *

SECTION D.7 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: DDGS Cooler System

(q) One (1) distillers dried grains and solubles (DDGS) cooler system, identified as EU-18, equipped with a baghouse, identified as DC-503, installed in March 2000, exhausting through Stack DC-0503, **and equipped with a thermal oxidizer, identified as DC-TO1, approved in 2011 for construction, exhausting through Stack DC-TO1,** consisting of one (1) fan, identified as BL-502, one (1) cooling coil, identified as CC-500, one (1) cooler inlet rotary valve, identified as RV-502, one (1) cooler, identified as RC-502, and four (4) conveyors, identified as CV-522, CV-530, CV-531 and CV-532, capacity: ~~77,967 pounds~~ **42.3 tons** of DDGS per hour.

(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 2-7-5(1)]

* * * * *

~~D.7.4 VOC PSD Minor Limit [326 IAC 8-1-6] [326 IAC 2-2]~~

~~In order to render the requirements of 326 IAC 8-1-6 not applicable, the VOC emissions from the distillers dried grains and solubles (DDGS) cooler system (EU-18) shall be less than 5.70 pounds per hour. Compliance with this VOC emission limit also renders the requirements of 326 IAC 2-2 not applicable to the distillers dried grains and solubles (DDGS) cooler system.~~

D.7.4 BACT Requirements (VOC) [326 IAC 8-1-6] [326 IAC 2-2-3]

Pursuant to 326 IAC 8-1-6, 326 IAC 2-2-3, and PSD/SSM 141-30226-00033, BACT has been determined to be the following for the distillers dried grains and solubles (DDGS) cooler system, identified as EU-18:

For the DDGS cooler system, the BACT for VOC is the use of a thermal oxidizer; and:

(a) Whenever the thermal oxidizer RTO-503 is operating properly:

(1) The thermal oxidizer RTO-503 shall have an overall VOC control efficiency of not less than 98%, and the maximum VOC emission rate shall be less than 0.55 lb/hr; or

(2) The thermal oxidizer RTO-503 shall have an outlet VOC concentration of not more than 10 ppm.

(b) Whenever the thermal oxidizer RTO-503 is out of service due to maintenance or malfunction:

(1) The two (2) thermal oxidizers controlling VOC emissions from the DDGS dryers (EU-10), the evaporation process (EU-09), and the recovery column vent condenser, identified as E-409 (part of EU-08), shall control the DDGS cooler system (EU-18) and shall have an overall VOC control efficiency of not less than 95%; and

(2) The hours of operation of the DDGS cooler system (EU-18) when using this Alternative Operating Scenario shall not exceed 750 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.

* * * * *

D.7.7 Volatile Organic Compounds (VOC) Control

(a) In order to comply with Condition D.7.4, thermal oxidizer RTO-503 shall be in operation and control VOC emissions from emission unit EU-18 at all times when the emission unit is in operation.

(b) In order to comply with Condition D.7.4 whenever thermal oxidizer RTO-503 is out of service due to maintenance or malfunction, VOC emissions from the DDGS cooler system (EU-18) shall be routed to the two (2) thermal oxidizers controlling VOC emissions from the DDGS dryers (EU-10), the evaporation process (EU-09), and the recovery column vent condenser, identified as E-409 (part of EU-08), and the two thermal oxidizers associated with the DDGS dryer operation (EU-10) shall be in operation and control VOC emissions from the DDGS cooler system (EU-18) at all times when the DDGS cooler system (EU-18) is in operation. One of the five (5) DDGS dryers, identified as D-511 through D-515, shall be taken out of service in order to provide the additional capacity necessary for the DDGS dryer operation (EU-10) to accept the exhaust.

D.7.~~7~~**8** Testing Requirements [326 IAC 2-7-6(1),(6)] [326 IAC 2-1.1-11]

* * * * *

(b) Within **sixty (60) days after achieving maximum production levels but no later than** one hundred eighty (180) days after ~~issuance of this Part 70 Operating Permit~~ **start-up of the control device**, in order to demonstrate compliance with Condition D.7.4**(a)**, the Permittee shall perform VOC testing **of the DDGS cooler system** utilizing methods as approved by the Commissioner **at least once every five (5) years from the date of the most recent valid compliance demonstration**. Testing shall be conducted in accordance with **the provisions of 326 IAC 3-6 (Source Sampling Procedures).** Section C - Performance Testing **contains the Permittee's obligation with regard to the performance testing required by this condition**.

(c) Not later than sixty (60) days after initial use of the Alternative Operating Scenario as stated in Condition D.7.7(b), in order to demonstrate compliance with Condition D.7.4(b), the Permittee shall perform VOC testing of the DDGS cooler system utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Compliance Monitoring Requirements [326 IAC 2-7-6(1)] [326 IAC 2-7-5(1)]

~~D.7.8 Visible Emissions Notations~~

~~(a) Visible emission notations of the distillers dried grains and solubles (DDGS) cooler system (EU-18) Stack DC-0503 exhaust shall be performed once per day during normal daylight operations. 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.7.11 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizer (RTO-503) for measuring operating temperature. For the purpose of this condition, continuous means no less often than once per fifteen (15) minutes. The output of this system shall be recorded as a 3-hour average. From the date of issuance of this permit until the stack test results are available, the Permittee shall operate the thermal oxidizer (RTO-503) at or above the 3-hour average temperature of 1550°F. The Permittee shall take appropriate response steps whenever the three (3) hour average temperature of the thermal oxidizer (RTO-503) is below 1550°F. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A three (3) hour average temperature that is below 1550°F is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

(b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with the limits in Condition D.7.4.

(c) On and after the date the approved stack test results are available, the Permittee shall operate the thermal oxidizer (RTO-503) at or above the 3-hour average temperature as observed during the compliant stack test.

D.7.12 Thermal Oxidizer Parametric Monitoring

(a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates the compliance status with the limits in Condition D.7.4.

(b) The duct pressure or fan amperage shall be observed at least once per day when the thermal oxidizer (RTO-503) 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 the most recent compliant stack test.

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.7.~~11~~**13** Record Keeping Requirements

~~(a) To document compliance with Condition D.7.8, the Permittee shall maintain a daily record of visible emission notations of the distillers dried grains and solubles (DDGS) cooler system (EU-18) Stack DC-0503 exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the distillers dried grains and solubles (DDGS) cooler system did not operate that day).~~

(a) To document compliance with Condition D.7.4(b)(2), the Permittee shall maintain records of the total hours the Alternative Operating Scenario, as stated in Condition D.7.7(b), is utilized.

(b) To document compliance with Condition D.7.9, the Permittee shall maintain a daily record of the pressure drop across the baghouse (DC-503) controlling the distillers dried grains and solubles (DDGS) cooler system (EU-18). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the distillers dried grains and solubles (DDGS) cooler system did not operate that day).

(c) To document compliance with Condition D.7.11, the Permittee shall maintain continuous temperature records of thermal oxidizer RTO-503 and the 3-hour average temperature used to demonstrate compliance from the most recent valid stack test.

(d) To document compliance with Condition D.7.12, the Permittee shall maintain a daily record of the duct pressure or fan amperage for thermal oxidizer RTO-503. The Permittee shall include in its daily record when a duct pressure or fan amperage reading is not taken and the reason for the lack of a reading (e.g., the distillers dried grains and solubles (DDGS) cooler system did not operate that day).

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

D.7.14 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.7.4(b)(2) 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 the "responsible official" as defined by 326 IAC 2-7-1(34).

* * * * *

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION

Part 70 Quarterly Report

Source Name: New Energy Corp.
Source Address: 3201 West Calvert Street, South Bend, Indiana 46613
Mailing Address: P.O. Box 2289, South Bend, Indiana 46680
Part 70 Permit No.: T 141-6956-00033
Facilities: Alternative Operating Scenario
[VOC emissions from the DDGS cooler system (EU-18) routed to the two (2) thermal oxidizers controlling VOC emissions from the DDGS dryers (EU-10), the evaporation process (EU-09), and the recovery column vent condenser, identified as E-409 (part of EU-08), in addition to one of the five (5) DDGS dryers, identified as D-511 through D-515, taken out of service]
Parameter: Hours of operation
Limit: 750 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

Month	Hours of Operation for the Alternative Operating Scenario	Hours of Operation for the Alternative Operating Scenario	Hours of Operation for the Alternative Operating Scenario
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this month.

☐ Deviation/s occurred in this month.
Deviation has been reported on: _____

Submitted by: _____

Title/Position: _____

Signature: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Conclusion and Recommendation

The operation of this proposed modification shall be subject to the conditions of the attached proposed PSD/Significant Source Modification No. 141-30226-00033 and Part 70 Significant Permit Modification 141-30242-00033. The staff recommends to the Commissioner that this PSD/Significant Source Modification and Part 70 Significant Permit Modification be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to John Haney at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5328 or toll free at 1-800-451-6027 extension 4-5328.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

Appendix A: Emission Calculations
DDGS Cooler System

Company Name: New Energy Corp.
Address City IN Zip: 3201 W. Calvert St., South Bend, IN 46613
PSD / Significant Source Modification No: 141-30226-00033
Significant Permit Modification No: 141-30242-00033
Reviewer: John Haney
Date: January 20, 2012

Uncontrolled Potential to Emit:

August 27, 2008 Stack Test Run #1 Results =	4.10	lb/hr
August 27, 2008 Stack Test Run #2 Results =	7.47	lb/hr
August 27, 2008 Stack Test Run #3 Results =	7.81	lb/hr
March 30, 2010 Stack Test Run #1 Results =	17.5	lb/hr
March 30, 2010 Stack Test Run #2 Results =	25.8	lb/hr
March 30, 2010 Stack Test Run #3 Results =	22.6	lb/hr

Uncontrolled PTE [2008] = Average of 2008 Stack Test Run Results
Uncontrolled PTE [2008] = 6.46 lb/hr

Uncontrolled PTE [2010] = Average of 2010 Stack Test Run Results
Uncontrolled PTE [2010] = 21.97 lb/hr

Reasonable Factor for Process Variability = 25%

Maximum Uncontrolled PTE = 21.97 lb/hr x 8760 hr/yr ÷ 2000 lb/ton x 1.25
Maximum Uncontrolled PTE = 120.27 tons/yr

326 IAC 8-1-6 (VOC BACT) threshold = 25 tons/yr = 5.70 lb/hr

Controlled Potential to Emit:

Thermal Oxidizer Control Efficiency = 98% (minimum)

Controlled PTE (tons/yr) = Uncontrolled PTE (tons/yr) x (1 - Control Efficiency)
Controlled PTE (tons/yr) = 120.27 tons/yr x (1 - 98%)
Controlled PTE (tons/yr) = 2.41 tons/yr

Controlled PTE (lb/hr) = 2.41 tons/yr ÷ 8760 hr/yr x 2000 lb/ton
Controlled PTE (lb/hr) = 0.55 lb/hr

Actual Emissions:

2007 DDGS Production =	329,043	tons
2008 DDGS Production =	332,441	tons
2009 DDGS Production =	306,830	tons
2010 DDGS Production (estimated) =	300,000	tons

Uncontrolled PTE [2008] = Uncontrolled PTE [2008] (lb/hr) ÷ Average DDGS Cooler Capacity for 2008 Stack Test (tons/hr)
Uncontrolled PTE [2008] = 6.46 lb VOC/hr ÷ 40.00 tons DDGS/hr
Uncontrolled PTE [2008] = 0.162 lb VOC/ton DDGS

Uncontrolled PTE [2010] = Uncontrolled PTE [2010] (lb/hr) ÷ Average DDGS Cooler Capacity for 2010 Stack Test (tons/hr)
Uncontrolled PTE [2010] = 21.97 lb VOC/hr 38.47 tons DDGS/hr
Uncontrolled PTE [2010] = 0.571 lb VOC/ton DDGS

2007 Actual VOC Emissions =	329,043	tons x	0.162	lb VOC/ton DDGS ÷	2000	lb/ton =	26.57	tons/yr
2008 Actual VOC Emissions =	332,441	tons x	0.162	lb VOC/ton DDGS ÷	2000	lb/ton =	26.84	tons/yr
2009 Actual VOC Emissions =	306,830	tons x	0.162	lb VOC/ton DDGS ÷	2000	lb/ton =	24.78	tons/yr
2010 Actual VOC Emissions (estimated) =	300,000	tons x	0.571	lb VOC/ton DDGS ÷	2000	lb/ton =	85.65	tons/yr

327 IAC 2-2 (PSD) significant level threshold = 40 tons/yr

Appendix A: Emissions Calculations
Natural Gas Combustion, MMBtu/hr <100
Thermal Oxidizer

Company Name: New Energy Corp.
Address City IN Zip: 3201 W. Calvert St., South Bend, IN 46613
Significant Source Modification No: 141-30226-00033
Significant Permit Modification No: 141-30242-00033
Reviewer: John Haney
Date: January 20, 2012

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
0.9804	1000	8.588

	Pollutant						
	PM*	PM_{10}*	direct $PM_{2.5}$*	SO_2	NO_x	VOC	CO
Emission Factor (lb/MMCF)	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emissions (tons/yr)	0.01	0.03	0.03	0.003	0.43	0.02	0.36

* PM emission factor is filterable PM only. PM_{10} emission factor is filterable and condensable PM_{10} combined.
$PM_{2.5}$ emission factor is filterable and condensable $PM_{2.5}$ combined.
** Emission Factors for NO_x: Uncontrolled = 100, Low NO_x Burner = 50, Low NO_x Burners/Flue gas recirculation = 32

Notes
The exhaust air flow of the DDGS Cooler System is 9,500 acfm.
The thermal oxidizer requires 0.00172 scfm of natural gas per acfm of exhaust.

Methodology
All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.
Potential Throughput (MMCF/yr) = 0.00172 cfm Nat Gas/acfm exhaust * 9500 acfm exhaust * 60 min/hr * 8,760 hr/yr * 1 MMCF/1,000,000 CF
Heat Input Capacity (MMBtu/hr) = Potential Throughput (MMCF/yr) ÷ 8,760 hrs/yr * 1,000 MMBtu/MMCF
Potential Emissions (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF) ÷ 2,000 lb/ton

See page 2 for HAPs emissions calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion, MMBtu/hr <100
Thermal Oxidizer
HAPs Emissions

Company Name: New Energy Corp.
Address City IN Zip: 3201 W. Calvert St., South Bend, IN 46613
Significant Source Modification No: 141-30226-00033
Significant Permit Modification No: 141-30242-00033
Reviewer: John Haney
Date: January 20, 2012

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor (lb/MMCF)	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emissions (tons/yr)	9.018E-06	5.153E-06	3.221E-04	7.729E-03	1.460E-05

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor (lb/MMCF)	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emissions (tons/yr)	2.147E-06	4.724E-06	6.012E-06	1.632E-06	9.018E-06

Methodology
Methodology is the same as page 1.
The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.
See Page 3 for Greenhouse Gas calculations.

Appendix A: Emissions Calculations
Natural Gas Combustion, MMBtu/hr <100
Thermal Oxidizer
Greenhouse Gas Emissions

Company Name: New Energy Corp.
Address City IN Zip: 3201 W. Calvert St., South Bend, IN 46613
Significant Source Modification No: 141-30226-00033
Significant Permit Modification No: 141-30242-00033
Reviewer: John Haney
Date: January 20, 2012

	Greenhouse Gas		
	CO_2	CH_4	N_2O
Emission Factor (lb/MMCF)	120,000	2.3	2.2
Potential Emissions (tons/yr)	515.30	0.01	0.01
Summed Potential Emissions (tons/yr)	515.32		
CO_2e Total (tons/yr)	518.43		

Methodology

The N_2O Emission Factor for uncontrolled is 2.2. The N_2O Emission Factor for low NO_x burner is 0.64.

Emission factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Potential Emissions (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF) ÷ 2,000 lb/ton

CO_2e (tons/yr) = [CO_2 Potential Emissions (tons/yr) x CO_2 GWP (1)] + [CH_4 Potential Emissions (tons/yr) x CH_4 GWP (21)] + [N_2O Potential Emissions (tons/yr) x N_2O GWP (310)]

Appendix B

CONTROL TECHNOLOGY / VOC BACT ANALYSIS

New Energy Corp.

Source Background and Description

Source Location:	**3201 West Calvert Street, South Bend, Indiana 46613**
County:	**St. Joseph**
SIC Code:	**2869**
Part 70 Operating Permit No.:	**T141-6956-00033**
PSD / Significant Source Modification No.:	**141-30226-00033**
Significant Permit Modification No.:	**141-30242-00033**
Permit Reviewer:	**John Haney**

New Energy Corp. (New Energy) submitted a permit application for the modification of the VOC emission limit for the following emission unit to its fuel-grade ethanol production source:

(q) One (1) distillers dried grains and solubles (DDGS) cooler system, identified as EU-18, equipped with a baghouse, identified as DC-503, installed in March 2000, exhausting through Stack DC-0503, consisting of one (1) fan, identified as BL-502, one (1) cooling coil, identified as CC-500, one (1) cooler inlet rotary valve, identified as RV-502, one (1) cooler, identified as RC-502, and four (4) conveyors, identified as CV-522, CV-530, CV-531 and CV-532, DDGS capacity: 42.3 tons of DDGS per hour based on monthly DDGS production. Baghouse DC-503 exhausts through a regenerative thermal oxidizer system, approved in 2012 for construction, consisting of knockout pot KO-503, fan BL-503, oxidizer RTO-503, and outlet stack ST-503.

The proposed modification is subject to review for VOC because VOC is emitted at greater than 25 tons per year. Therefore, VOC BACT analysis is required, under 326 IAC 8-1-6 (General Facility Requirements), for this pollutant.

The proposed modification is also subject to review for VOC because actual emissions of VOC for the DDGS cooler system have exceeded 40 tons per year. Therefore, VOC BACT analysis is required, under 326 IAC 2-2 (Prevention of Significant Deterioration), for this pollutant.

The BACT analysis submitted by New Energy, which has been reviewed and analyzed by IDEM, OAQ, is based on the draft "Top-Down approach: BACT Guidance" published by USEPA, Office of Air Quality Planning Standards, March 15, 1990. The BACT analysis has been based on the following sources of information which have been reviewed or contacted:

(a) Downloadable USEPA RACT/BACT/LAER Clearinghouse (RBLC) System;
(b) USEPA/State/Local Air Quality Permits;
(c) Federal/State/Local Permit Engineers;
(d) Control Technology Vendors;
(e) Inspection/Performance Test Reports; and
(f) OAQPS Control Cost Manual.

BACT Definition and Applicability

Federal guidance on BACT requires an evaluation that follows a "top down" process. In this approach, the applicant identifies the best-controlled similar source on the basis of controls required by the regulation or the permit, or the controls achieved in practice. The highest level of the control is then evaluated for technical feasibility.

The five basic steps of a top-down BACT analysis are listed below:

Step 1: Identify Potential Control Technologies

The first step is to identify potentially "available" control options for each emission unit and for each pollutant under review. Available options should consist of a comprehensive list of those technologies with a potentially practical application to the emissions unit in question. The list should include lowest achievable emission rate (LAER) technologies, innovative technologies, and controls applied to similar source categories.

Step 2: Eliminate Technically Infeasible Options

The second step is to eliminate technically infeasible options from further consideration. To be considered feasible, a technology must be both available and applicable. It is important in this step that any presentation of a technical argument for eliminating a technology from further consideration be clearly documented based on physical, chemical, engineering, and source-specific factors related to safe and successful use of the controls.

Step 3: Rank the Remaining Control Technologies by Control Effectiveness

The third step is to rank the technologies not eliminated in Step 2 in order of descending control effectiveness for each pollutant of concern. If the highest ranked technology is proposed as BACT, it is not necessary to perform any further technical or economic evaluation, except for the environmental analyses.

Step 4: Evaluate the Most Effective Controls and Document the Results

The fourth step entails an evaluation of energy, environmental, and economic impacts for determining a final level of control. The evaluation begins with the most stringent control option and continues until a technology under consideration cannot be eliminated based on adverse energy, environmental, or economic impacts.

Step 5: Select BACT

The fifth and final step is to select as BACT the most effective of the remaining technologies under consideration for each pollutant of concern. BACT must, at a minimum, be no less stringent than the level of control required by any applicable New Source Performance Standard (NSPS) and National Emissions Standard for Hazardous Air Pollutants (NESHAP) or state regulatory standards applicable to the emission units included in the permits.

BACT for Volatile Organic Compound (VOC)

Since the DDGS cooler system was constructed after the January 1, 1980, has potential emissions of VOC greater than twenty-five (25) tons per year, and is not regulated by any other rule in 326 IAC 8, the Permittee is required to control VOC emissions from the DDGS cooler system pursuant to the provisions of 326 IAC 8-1-6 (BACT).

Step 1 – Identify Control Options

The following control technologies were identified and evaluated to control VOC emissions from the DDGS cooler system:

(a) Condensation;

(b) Carbon Adsorption;

(c) Volume/Rotary Concentrator;

(d) Flare;

(e) Biofiltration;

(f) Membrane Separation Technology;

(g) Catalytic Oxidization;

(h) Wet Scrubber;

(i) Cloud Chamber System; and

(j) Thermal Oxidation.

Step 2 – Eliminate Technically Infeasible Control Options

The test for technical feasibility of any control option is whether it is both available and applicable to reducing VOC emissions from the existing DDGS cooler system. The previously listed information resources were consulted to determine the extent of applicability of each identified control alternative.

(a) Condensation - This system utilizes a refrigerant-filled condenser to cool the exhaust stream, effect a phase change from gas to liquid for a target volatile constituent with ascertainable phase-change conditions, collect the liquid, and thereby lower the concentration in the gas phase. The liquid is then recycled. This technology is also utilized in the chemical sector for solvent recovery from process operations with low volumes of exhaust air and the presence of organic compounds.

However, this technology is only effective under high concentration gradients in excess of 100 ppmv and lower volumes of exhaust gas air. The exhaust stream associated with the DDGS cooler system is dilute, consisting of many compounds, and has a volumetric flow rate of approximately 9,500 cubic feet per minute, which would preclude any effective technical applicability of a condensation system. Consequently, this control alternative is considered technically infeasible for this application and will not be considered any further in this BACT analysis.

(b) Carbon Adsorption - Activated carbon beds have a track record of successful application for adsorbing specific VOC emissions.

However, whenever an exhaust stream contains other contaminants such as particulates and moisture, the technology loses its efficiency. The presence of moisture in the stream of the DDGS cooler will require significant gas pre-conditioning since its interference is deleterious to the efficiency of the carbon bed. In effect, it induces a masking phenomenon, reducing the available adsorption surface area. In addition, the exhaust from

the DDGS cooler would contain a variable complex of volatile compounds, which would limit the effectiveness of carbon adsorption due to the interaction between chemical components, preferential adsorption of certain compounds, and premature breakthrough. The desorption cycle would involve re-entrainment of the VOCs unless they were further controlled by some form of an oxidation scheme. Consequently, this control alternative is considered technically infeasible for this application and will not be considered any further in this BACT analysis.

(c) Volume/Rotary Concentrator – This twin part system serves to concentrate the VOCs in the inlet stream prior to an adsorption or oxidation scheme. The first section consists of a slowly rotating concentrator wheel that uses zeolites or carbon deposited on a substrate, which adsorbs the organics as they are exhausted from the original process and passed through the wheel. A sector of the concentrator wheel is partitioned off from the main section of the rotor, and heated clean air is passed through this section to desorb the organics, resulting in higher VOC concentration in a smaller gas flow.

However, volume/rotary concentrators are usually installed upstream to an adsorption or oxidization configuration for ultimate VOC destruction. Since the fundamental mechanism of VOC removal from the air stream is adsorption, the presence of moisture in the stream of the DDGS cooler induces a masking phenomenon and reduces the available adsorption surface area, resulting in questionable effective technical applicability. Consequently, this control alternative is considered technically infeasible for this application and will not be considered any further in this BACT analysis.

(d) Flare – This is a VOC combustion control process in which the VOCs are burned in an open flame in the open air using a specially designed burner tip, auxiliary fuel, and air to promote mixing for destruction. Completeness of combustion in a flare is governed by flame temperature, residence time in the combustion zone, turbulent mixing of the gas stream components to complete the oxidation reaction, and available oxygen for free radical formation. Combustion is complete if all VOC emissions are converted to carbon dioxide and water. Flares are typically used in the chemical sector to control variable flow gas streams with volatile organics.

However, moisture in the exhaust stream can extinguish the flare or cause irregular combustion and smoking. Incomplete combustion results in some of the VOCs being unaltered and converted to other organic compounds such as aldehydes or acids. The moisture content in the DDGS cooler's exhaust gas would require pretreatment beyond that of a baghouse prior to flaring. Nevertheless, because some degree of combustion is achievable, VOC removal can be obtained. Consequently, this control option is technically feasible. Further consideration of this technology in conjunction is provided in this BACT analysis. The economic, energy, and environmental impacts associated with this technology are further discussed in the BACT analysis.

(e) Biofiltration – This is an air pollution control technology in which off-gases containing biodegradable organic compounds are vented, under controlled temperature and humidity, through a biologically active material. The microorganisms contained in the bed of compost-like material digest or biodegrade the organic to carbon dioxide and water. This technology has been largely utilized for control of odorous emissions with a clearly speciated air stream. The process of biofiltration utilizes a biofilm containing a population of microorganisms immobilized on a porous substrate such as peat, soil, sand, wood, compost, or numerous synthetic media. As an air stream passes through the biofilter, the contaminants in the air stream partition from the air phases to the liquid phase of the biofilm. Once the contaminants pass into the liquid phase, they become bio-available for complex oxidative process by the microorganisms inhabiting the biofilm. The advantages of biofiltration are as follows: (1) no gas conditioning or humidification required; (2) process

suitable for neutralizing acids formed in-situ during treatment; and (3) lesser interference from particulates.

However, the disadvantages of a biofiltration system include complex feeding and neutralizing systems and the handling of toxic chemicals to control biomass growth. Most biofiltration unts are maintenance intensive, operate in narrow bands of temperature and pressure, and have primarily been used in clearly speciated air streams. The exhaust gas stream associated with the DDGS cooler will have a variety of organic compounds, based on the DDGS drying process and the composition of the DDGS material. Consequently, this control alternative is considered technically infeasible for this application and will not be considered any further in this BACT analysis.

(f) Membrane Separation Technology – This organic vapor/air separation technology involves the preferential transport of organic vapors through a non-porous gas separation membrane via a diffusion process analogous to pumping saline water through a reverse osmosis membrane. In this system, the feed stream is compressed to approximately 150 psig and sent to a condenser where the liquid solvent is recovered. The condenser bleed stream is sent to the membrane module comprised of spirally-wound modules of thin film membranes separated by plastic mesh spacers. The concentrated stream from the membrane module is returned to the compressor for further recovery in the condenser.

However, membrane separation technology has difficulty handling fluctuations in VOC concentrations, and the technology is not cost effective when dealing with several different contaminants at once. Also, since the fundamental mechanism of VOC removal from the air stream is a form of adsorption, the presence of moisture in the stream of the DDGS cooler induces a masking phenomenon and reduces the available adsorption surface area, resulting in questionable effective technical applicability. Consequently, this control alternative is considered technically infeasible for this application and will not be considered any further in this BACT analysis.

(g) Catalytic Oxidizer - In a catalytic oxidizer, a catalyst is used to lower the activation energy for oxidization. When a preheated gas stream is passed through a catalytic oxidizer, the catalyst bed initiates and promotes the oxidation of VOCs without being permanently altered itself. In catalytic oxidization, combustion occurs at significantly lower temperatures than that of direct flame units and can also achieve a destruction efficiency of 95%. However, steps must be taken to ensure complete combustion. The types of catalysts used include platinum, platinum alloys, copper chromate, copper oxide, chromium, manganese and nickel. These catalysts are deposited in thin layers on an inert substrate, usually a honeycomb shaped ceramic. The optimal working temperature range for VOC oxidation catalysts is approximately 850°F - 1,100°F with a minimum exhaust gas stream temperature of 500°F for minimally acceptable VOC control.

However, the exhaust gases from the DDGS cooler will be far below the minimum 500°F threshold for effective operation of the oxidation catalyst system. Additionally, the particulate loading in the exhaust gas stream is anticipated to be too high for efficient operation of a VOC oxidation catalyst. Masking effects such as plugging and coating of the catalyst surface would almost certainly result in impractical maintenance requirements and would significantly degrade the performance of the catalyst. Consequently, this control alternative is considered technically infeasible for this application and will not be considered any further in this BACT analysis.

(h) Wet Scrubber – Wet scrubbers designed for VOC control are designed primarily for creating intimate contact to promote absorption of soluble compounds. Absorption scrubbers typically consist of a contact tower with high surface area material in the middle. A scrubbing liquid is sprayed down the tower covering the mass transfer material as waste

gas is blown in the bottom of the tower. The soluble gaseous compounds dissolve in the scrubbing liquid, and the scrubbing liquid is removed from the bottom of the tower and treated. The two predominant types of absorption scrubbers are packed and plate towers. Packed towers are vertical vessels that are filled with a packing material such as Raschig rings or saddle-shaped pieces of material. This packing creates significant surface area for the liquid and gas to contact. Plate towers are vertical vessels with horizontal sieve plates in the middle. The scrubbing liquid is sent down the tower filling the plate, and the gas passes through the plate holes generating contact with the scrubbing liquid. Typical pollutant loading concentrations range from 250 to 10,000 ppmv, and control efficiency varies based on the solubility of the pollutants.

The use of this control technique for organic vapors is subject to the availability of a suitable solvent. The exhaust gas stream associated with the DDGS cooler will have a variety of organic compounds ranging from a fraction of a percent by weight (such as acrolein at less than 0.1%) to several percent by weight (such as acetaldehyde at greater than 7.0%) in addition to the primary constituent, ethanol vapors. The concentrations of these organic compounds are variable, based on the DDGS drying process and the composition of the DDGS material, as well as the water solubility of these various organic materials. Because of the variability in water solubility, a high VOC removal efficiency of 95% or greater will typically not be achievable; however, because ethanol is highly miscible with water, VOC removal can be obtained. Consequently, this control option is technically feasible. Further consideration of this technology in conjunction is provided in this BACT analysis. The economic, energy, and environmental impacts associated with this technology are further discussed in the BACT analysis.

(i) Cloud Chamber System

Cloud Chamber System (CCS) technology works by passing the dirty gas stream through a chamber that contains a carefully generated “scrubbing cloud” of high-density, charged water droplets. Inside the CCS, billions of charged droplets rapidly interact with the particles in the process stream. When a particle and a droplet pass within 20 microns, electrical forces cause mutual attraction and the particle (being less massive by orders of magnitude) is pulled into the droplet. The droplets collect particles as they interact with the process gas stream and then fall into the sump at the bottom of the system. Captured particles agglomerate within the sump, settle out, and are removed as slurry from the bottom. Relatively clean water from the top of the sump is re-circulated by pump to the charging grid, where it is recharged, completing the cycle.

However, this technology will have little effect on non-ionic organic molecules. Furthermore, the organics would not agglomerate in the sump and would require a large blowdown stream. Consequently, this control alternative is considered technically infeasible for this application and will not be considered any further in this BACT analysis.

(j) Thermal Oxidizer

Thermal oxidizers are control devices in which the solvent laden air is preheated and the organic HAPs are ignited and combusted to carbon dioxide and water. Dilute gas streams require auxiliary fuel (generally natural gas) to sustain combustion. Various incinerator designs are used by different manufacturers. The combustion chamber designs must provide high turbulence to mix the fuel and solvent laden air. The other requirement is enough residence time to ensure essentially complete combustion. Thermal oxidizers can be operated to achieve a wide range of control device efficiencies. Efficiencies of 98 percent or greater are possible.

Consequently, this control option is technically feasible. Further consideration of this technology is provided in this BACT analysis. The economic, energy, and environmental impacts associated with this technology are further discussed in the BACT analysis.

Step 3 – Rank Remaining Control Technologies by Control Effectiveness

(a) Thermal Oxidizer: 98%
(b) Wet Scrubber: 90%
(c) Flare: <90%

These control options were determined to be technically feasible in removing VOC emissions from the DDGS cooler system.

Step 4 – Evaluate the Most Effective Controls and Document Results

The following sources of information were reviewed to evaluate the most stringent control option for controlling VOC emissions from the DDGS cooler system:

(a) New Energy obtained a permit in 1999 to construct the DDGS cooler system (EU-18). At the time the DDGS cooler system was permitted and constructed, information available at the time including design information and information obtained from DDGS coolers at other facilities indicated the DDGS cooler system would have no appreciable VOC emissions because the DDGS dryer would drive off all VOC emissions prior to the cooling process. As a result, IDEM, OAQ only required a baghouse to control particulate emissions from the DDGS cooler system.

(b) Before 2008, New Energy was not required to test VOC emissions from the DDGS cooler system. However, after issuance of Part 70 Operating Permit No. T141-6956-00033 on March 17, 2008, a VOC minor limit was established to avoid the requirements of 326 IAC 8-1-6, and New Energy was required to test VOC emissions from the DDGS cooler system. Testing performed in 2008 showed VOC emissions in excess of the permitted emission rate, thereby requiring a VOC BACT analysis to be submitted per 326 IAC 8-1-6.

(c) This modification to an existing major stationary source would not have been major for PSD because the limited emissions increase was less than the PSD significant levels as proposed, and consequently the PSD requirements would not have applied to this modification. However, according to the August 2008 and March 2010 stack test results and actual DDGS production for calendar year 2010, actual emissions of VOC for the DDGS cooler system have exceeded 40 tons per year. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do apply, and the VOC BACT pursuant to 326 IAC 8-1-6 is also VOC BACT pursuant to 326 IAC 2-2.

(d) New Energy provided IDEM, OAQ with an economic analysis of the most stringent control option, a thermal oxidizer. The analysis estimated the cost of the VOC control equipment, including the initial capital cost of the various components intrinsic to the complete system and the estimated annual operating costs. The analysis assumed an interest rate of 7% and an equipment life of 10 years. The basis of cost effectiveness, used to evaluate the control options, is the ratio of the annualized cost to the amount of VOC (tons) removed per year. A summary of the cost figures determined in the analysis is provided below.

ITEMIZED COSTS FOR THERMAL OXIDIZER	FACTOR	COSTS
CAPITAL COSTS		
DIRECT CAPITAL COSTS (DC)		
Purchased Equipment (PE) and Direct Installation (DI) Costs		
Regenerative Thermal Oxidizer System (vendor quote): Incinerator system with 98% regenerative heat exchanger, housing and frame, inlet and outlet ductwork	A	$ 750.000
Installation and Freight (vendor quote)	B	$ 750.000
Sales Tax	C = 0.07A	$ 52,500
DC Total	D = A+B+C	$ 1,552,500
INDIRECT CAPITAL COSTS (IC)		
Engineering and Supervision	E = 0.10D	$ 155.250
Construction and Field Expenses	F = 0.05D	$ 77.625
Contractor Fees	G = 0.10D	$ 155,250
Start-up + Performance	H = 0.03D	$ 46.575
Overall Contingencies	J = 0.03D	$ 46,575
IC Total	K = E+F+G+H+J	$ 481,275
TOTAL CAPITAL INVESTMENT (TCI) = DC + IC	L = D+K	$ 2,033,775
OPERATION & MAINTENANCE (O & M)	Exhaust Air Flow	9,500 acfm
DIRECT ANNUAL COSTS (DA)		
Operating Labor		
Operator: 1 hr/day, 365 days/yr, $20/hr	M	$ 7.300
Supervisor: 15% of operator	N = 0.15M	$ 1,095
Maintenance		
Labor: 1 hr/day, 365 days/yr, $20/hr	P	$ 7.300
Materials: 100% of maintenance labor	Q = 1.00P	$ 7,300
Maintenance Parts and Labor Total	R = M+N+P+Q	$ 22,995
Utilities		
Natural Gas: 0.00172 scfm gas/acfm exhaust air flow @ $5.12/1000 ft3	S	$ 43,972
Electricity: 0.003705 kW/acfm exhaust air flow @ $0.049/kW-hr	T	$ 15,108
DA Total	U = R+S+T	$ 82,075
INDIRECT ANNUAL COST (IA)		
Overhead: 60% of maintenance parts and labor	V = 0.60R	$ 13,797
Administrative Charges, Property Taxes, Insurance	W = 0.04L	$ 81,351
IA Total	X = V+W	$ 95,148
O & M TOTAL = DA + IA	Y = U+X	$ 177,223
CAPITAL RECOVERY		
Capital Recovery Factor (CRF) = $i * (1+i)^n / [(1+i)^n - 1]$ @ 7% interest over 10 years	Z	0.1424
Capital Recovery	AA = Z * L	$ 289,610
TOTAL ANNUAL CAPITAL AND O & M COSTS (including capital recovery)	BB = Y+AA	$ 466,833
Proposed Permitted VOC Emissions from DDGS Cooler (tons)	CC	120.27
Annual VOC Removal Assuming 98% Removal Efficiency (tons)	DD = 0.98CC	117.86
Annual Cost Effectiveness ($/ton of VOC removed)	EE = BB / DD	$ 3,961

(e) A review of USEPA's RACT/BACT/LAER Clearinghouse, Indiana air permits, and sources permitted by other states agencies identified the following with respect to the DDGS cooler system:

Existing VOC BACT Determinations – DDGS Cooling Operations					
Facility: County, State	**RBLC ID/ Permit # (Issuance Date)**	**Process**	**Pollutant: Control, Emission Limits**	**Control Efficiency**	**Basis**
New Energy Proposed BACT		DDGS Cooler: EU-18	VOC: No Control, 39.9 tons/yr, Good Operating Practices	NI	BACT-PSD
IDEM Determined BACT		**DDGS Cooler: EU-18 (42.3 tons/hr)**	**VOC: Thermal Oxidizer, 98% control and 0.55 lb/hr, or 10 ppm VOC outlet concentration; or Thermal Oxidizer, 95% control and 750 hours per year**	**98% CE or 10 ppm VOC**	**BACT-PSD**
New Energy: South Bend, IN	IN PROJECT T141-6956-00033 (3/18/2008)	DDGS Cooler System (77,967 lb/hr)	VOC: No Control, 5.70 lb/hr	NI	Other Case-by-Case
Homeland Energy Solutions: New Hampton, IA	IA-0089/ 07-A-978P (8/8/2007)	DDGS Cooler (plant DDGS capacity: 63 tons/hr calculated)	VOC: Dryer System, 1.35 lb/hr	NI	BACT-PSD
ADM Corn Processing: Cedar Rapids, IA	IA-0088/ 07-A-543P thru 07-A-545P (6/29/2007)	DDGS Cooler (140 tons/hr each, all three coolers have identical limits)	VOC: No Control, 0.092 lb/ton (per cooler), 64.47 tons/yr (total facility)	NI	BACT-PSD
Sunnyside Ethanol, LLC: Curwensville, PA	PA-0257/ 17-313-001 (5/7/2007)	DDGS Processing System	VOC: Scrubber, 0.93 lb/hr	NI	Other Case-by-Case
Southwest Iowa Renewable Energy: Council Bluffs, IA	IA-0092/ 06-A-578P (4/19/2007)	DDGS Cooler (50 tons/hr)	VOC: No Control, 3.0 lb/hr	NI	BACT-PSD
United Wisconsin Grain Producers: Friesland, WI	WI PROJECT 06-DCF-184 (12/15/2006)	DDGS Cooler and Transport (162,462 tons/yr)	VOC: No Control, 2.76 lb/hr	NI	Other Case-by-Case
Heartland Corn Products: Winthrop, MN	MN-0062/ 14300014-005 (12/22/2005)	DDGS Cooling Cyclone (13 tons/hr)	VOC: No Control, 3.50 lb/hr, 0.269 lb/ton	95% CE or 10 ppmv VOC	BACT-PSD
Aventine Renewable Energy: Pekin, IL	IL-0102/ 05010062 (11/1/2005)	Feed Cooling and Transport System (56,500 tons/month, 565,000 tons/yr)	VOC: No Control, 0.1 lb/ton	NI	BACT-PSD
Ace Ethanol: Stanley, WI	WI-0207/ 03-DCF-184 (1/21/2004)	DDGS Dryer and Cooling Cyclone (14,000 lb/hr)	VOC: Thermal Oxidizer (Regenerative), 5 ppm as propane, 2.7 lb/hr	96% CE	BACT-PSD
Red Trail Energy: Richardton, ND	ND-0020/ 04004 (8/4/2004)	DDGS Cooling (22 tons/hr)	VOC: No Control, 20 ppm as carbon	NI	BACT-PSD
United Wisconsin Grain Producers: Friesland, WI	WI-0204/ 03-DCF-048 (12/15/2006)	DDGS Cooler and Transport (162,462 tons/yr)	VOC: No Control, 4.61 lb/hr	NI	BACT-PSD

The proposed BACT for New Energy represents the most stringent VOC requirements.

(f) New Energy determined that a federally enforceable limit was the most cost-effective technically feasible control option for controlling VOCs from the DDGS cooler system and is the primary control option used throughout the country for controlling VOC emissions from DDGS coolers.

(g) New Energy previously chose a federally enforceable limit of 5.70 lb/hr of VOC to avoid the requirements of 326 IAC 8-1-6 and 326 IAC 2-2.

(h) New Energy Corp. has proposed the following emission limitations as BACT for the DDGS cooler system:

(1) A federally enforceable limit of 39.9 tons per year of VOC; and

(2) Implementation of good operating practices to minimize the formation of VOC emissions.

New Energy proposed a BACT limit of 39.9 tons per year for VOC, which equates to 9.11 lb/hr. This proposed limit is based on the average hourly emission rate from stack test data (as carbon) gathered in May, 2010 and a reasonable safety factor of less than 25%. IDEM believes this safety factor is reasonable based on the variability of the operation and the test data provided. In addition, the EAB determined 25% was acceptable in the case of *Knauf Fiber Glass, GmbH* (PSD Appeal Nos. 99-8 to –72 (EAB, March 14, 2000) 9 E.A.D. 1, 15).

However, this proposed limit was calculated from emission rates presented as "lb/hr as carbon". IDEM believes the proposed limit should be calculated from emission rates presented as "lb/hr as ethanol". IDEM also believes it is more appropriate to develop the new VOC BACT limit using all of the test data (shown in the table below) from the August 2008 and March 2010 stack tests and not just the average hourly emission rate.

VOC Test Data (lb/hr, as ethanol)		
August 2008	Run 1	4.10
	Run 2	7.47
	Run 3	7.81
March 2010	Run 1	17.5
	Run 2	25.8
	Run 3	22.6

Step 5 – Select BACT

Based on the information presented above, IDEM, OAQ has determined that the following requirements represent BACT for the DDGS cooler system at the source:

For the DDGS cooler system, the BACT for VOC is the use of a thermal oxidizer; and:

(a) Whenever the thermal oxidizer RTO-503 is operating properly:

(1) The thermal oxidizer RTO-503 shall have an overall VOC control efficiency of not less than 98%, and the maximum VOC emission rate shall be less than 0.55 lb/hr; or

(2) The thermal oxidizer RTO-503 shall have an outlet VOC concentration of not more than 10 ppm.

(b) Whenever the thermal oxidizer RTO-503 is out of service due to maintenance or malfunction:

(1) The two (2) thermal oxidizers controlling VOC emissions from the DDGS dryers (EU-10), the evaporation process (EU-09), and the recovery column vent condenser, identified as E-409 (part of EU-08), shall control the DDGS cooler system (EU-18) and shall have an overall VOC control efficiency of not less than 95%; and

(2) The hours of operation of the DDGS cooler system (EU-18) when using this Alternative Operating Scenario shall not exceed 750 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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Toll Free (800) 451-6027
www.idem.IN.gov

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Tim Stickler
New Energy Corp
3201 W Calvert St
South Bend, IN 46613

DATE: March 30, 2012

FROM: Matt Stuckey, Branch Chief
Permits Branch
Office of Air Quality

SUBJECT: Final Decision
Significant Permit Modification
141-30242-00033

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Russell Abarr (President & COO)
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at jbrush@idem.IN.gov.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

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March 30, 2012

TO: St. Joseph County Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: **New Energy Corporation**
Permit Number: **141-30242-00033**

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: March 30, 2012

RE: New Energy Corporation / 141-30242-00033

FROM: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

In order to conserve paper and reduce postage costs, IDEM's Office of Air Quality is now sending many permit decisions on CDs in Adobe PDF format. The enclosed CD contains information regarding the company named above.

This permit is also available on the IDEM website at:
http://www.in.gov/ai/appfiles/idem-caats/

If you would like to request a paper copy of the permit document, please contact IDEM's central file room at:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

Please Note: *If you feel you have received this information in error, or would like to be removed from the Air Permits mailing list, please contact Patricia Pear with the Air Permits Administration Section at 1-800-451-6027, ext. 3-6875 or via e-mail at PPEAR@IDEM.IN.GOV.*

Enclosures
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2		Russell L Abarr President/COO New Energy Corporation 3201 W Calvert St South Bend IN 46613 *(RO CAATS)*									
3		Laurence A. McHugh Barnes & Thornburg 100 North Michigan South Bend IN 46601-1632 *(Affected Party)*									
4		Mr. Wayne Falda South Bend Tribune 255 W Colfax Ave South Bend IN 46626 *(Affected Party)*									
5		South Bend City Council / Mayors Office 227 W. Jefferson Blvd. South Bend IN 46601 *(Local Official)*									
6		St. Joseph County Board of Commissioners 227 West Jefferson Blvd, South Bend IN 46601 *(Local Official)*									
7		St. Joseph County Health Department 227 W Jefferson Blvd, Room 825 South Bend IN 46601-1870 *(Health Department)*									
8		Mr. Colin OBrien Natural Resources Defense Council 1200 New York Avenue NW, Ste. 400 Washington DC 20005 *(Affected Party)*									
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