Indiana Department of Environmental Management
We Protect Hoosiers and Our Environment.
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Carol S. Comer
Commissioner

NOTICE OF 30-DAY PERIOD
FOR PUBLIC COMMENT

Preliminary Findings Regarding a
Signficant Modification to a
Part 70 Operating Permit

for Central Indiana Ethanol, LLC in Grant County

Significant Permit Modification No.: 053-36781-00062

The Indiana Department of Environmental Management (IDEM) has received an application from Central Indiana Ethanol, LLC, located at 2955 West Delphi Pike, Marion, IN 46952, for a significant modification of its Part 70 Operating Permit issued on August 19, 2013. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow Central Indiana Ethanol, LLC to make certain changes at its existing source. Central Indiana Ethanol, LLC has applied to add alternative operating conditions for the fermentation scrubbers during plant shutdown.

This draft significant permit modification does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow for these changes.

A copy of the permit application and IDEM's preliminary findings are available at:

Marion Public Library
600 S. Washington St.
Marion, IN 46953

A copy of the preliminary findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

How can you participate in this process?

The date that this notice is published in a newspaper marks the beginning of a 30-day public comment period. If the 30th day of the comment period falls on a day when IDEM offices are closed for business, all comments must be postmarked or delivered in person on the next business day that IDEM is open.

You may request that IDEM hold a public hearing about this draft permit. If adverse comments concerning the **air pollution impact** of this draft permit are received, with a request for a public hearing, IDEM will decide whether or not to hold a public hearing. IDEM could also decide to hold a public meeting instead of, or in addition to, a public hearing. If a public hearing or meeting is held, IDEM will make a separate announcement of the date, time, and location of that hearing or meeting. At a hearing, you would have an opportunity to submit written comments and make verbal comments. At a meeting, you would have an opportunity to submit written comments, ask questions, and discuss any air pollution concerns with IDEM staff.

Comments and supporting documentation, or a request for a public hearing should be sent in writing to IDEM at the address below. If you comment via e-mail, please include your full U.S. mailing address so that you can be added to IDEM's mailing list to receive notice of future action related to this permit. If you do not want to comment at this time, but would like to receive notice of future action related to this permit application, please contact IDEM at the address below. Please refer to permit number SPM 053-36781-00062 in all correspondence.

Comments should be sent to:

Heath Hartley
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 2-8217
Or dial directly: (317) 232-8217
Fax: (317) 232-6749 attn: Heath Hartley
E-mail: hhartley@idem.IN.gov

All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have legal authority to regulate zoning, odor, or noise. For such issues, please contact your local officials.

For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

What will happen after IDEM makes a decision?

Following the end of the public comment period, IDEM will issue a Notice of Decision stating whether the permit has been issued or denied. If the permit is issued, it may be different than the draft permit because of comments that were received during the public comment period. If comments are received during the public notice period, the final decision will include a document that summarizes the comments and IDEM's response to those comments. If you have submitted comments or have asked to be added to the mailing list, you will receive a Notice of the Decision. The notice will provide details on how you may appeal IDEM's decision, if you disagree with that decision. The final decision will also be available on the Internet at the address indicated above, at the local library indicated above, and the IDEM public file room on the 12th floor of the Indiana Government Center North, 100 N. Senate Avenue, Indianapolis, Indiana 46204-2251.

If you have any questions, please contact Heath Hartley of my staff at the above address.

Jenny Acker, Section Chief
Permits Branch
Office of Air Quality

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DRAFT

Mr. Mark Sevier
Central Indiana Ethanol, LLC
2955 W Delphi Pike
Marion, IN 46952

Re: 053-36781-00062
Significant Permit Modification to
Part 70 Renewal No.: T053-32070-00062

Dear Mr. Sevier:

Central Indiana Ethanol, LLC was issued Part 70 Operating Permit Renewal No. T T053-32070-00062 on August 19, 2013 for a stationary ethanol production plant located at 2955 West Delphi Pike, Marion, IN 46952. An application requesting changes to this permit was received on January 29, 2016 and another application requesting additional changes was received on March 18, 2016. 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.

Please find attached the entire Part 70 Operating Permit as modified. The permit references the below listed attachment(s). Since these attachments have been provided in previously issued approvals for this source, IDEM OAQ has not included a copy of these attachments with this modification:

Attachment A – Fugitive Dust Control Plan
Attachment B - NSPS, 40 CFR 60, Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units
Attachment C - NSPS, 40 CFR 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced after July 23, 1984
Attachment D - NESHAP, 40 CFR 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006
Attachment E - NESHAP, 40 CFR 63, Subpart ZZZZ— National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
Attachment F - NESHAP, 40 CFR 63, Subpart CCCCCC— National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities

Previously issued approvals for this source containing these attachments are available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/.

Federal rules under Title 40 of United States Code of Federal Regulations may also be found on the U.S. Government Printing Office's Electronic Code of Federal Regulations (eCFR) website, located on the Internet at: http://www.ecfr.gov/cgi-bin/text-idx?tpl=/ecfrbrowse/Title40/40tab_02.tpl.

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.

DRAFT

If you have any questions on this matter, please contact Heath Hartley, of my staff, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251 at 317-232-8217 or 1-800-451-6027, and ask for extension 2-8217.

Sincerely,

Jenny Acker, Section Chief
Permits Branch
Office of Air Quality

Attachments: Modified Permit and Technical Support Document
cc: File - Grant County
Grant County Health Department
U.S. EPA, Region 5
Compliance and Enforcement Branch

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Part 70 Operating Permit Renewal

OFFICE OF AIR QUALITY

Central Indiana Ethanol, LLC
2955 West Delphi Pike
Marion, Indiana 46952

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

The Permittee must comply with all conditions of this permit. Noncompliance with any 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.

Operation Permit No.: T053-32070-00062	
Issued by: Original Signed Jenny Acker, Section Chief Permits Branch, Office of Air Quality	Issuance Date: August 19, 2013 Expiration Date: August 19, 2018

Significant Permit Modification No.: 053-35650-00062, issued on November 10, 2015

Significant Permit Modification No.: 053-36781-00062	
Issued by: Jenny Acker, Section Chief Permits Branch Office of Air Quality	 Issuance Date: Expiration Date: August 19, 2018

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SECTION A SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1, 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(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary ethanol production plant.

Source Address:	2955 West Delphi Pike, Marion, Indiana 46952
General Source Phone Number:	(765) 384 4001
SIC Code:	2869
County Location:	Grant
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD Rules Minor Source, under Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

This stationary ethanol production plant consists of two (2) plants:

(a) Central Indiana Ethanol, LLC is located at 2955 West Delphi Pike, Marion, Indiana; and
(b) EPCO Carbon Dioxide Products is located at 2975 West Delphi Pike, Marion, Indiana.

However, these plants are located on one or more contiguous properties, have the same two digit SIC code in addition to a support relationship, and are under common control. Therefore, they are considered one (1) major source, as defined by 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(14)]

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

(a) Three (3) corn dump pits, identified as EU001, constructed in 2006, each with a maximum throughput rate of 420 tons of corn per hour, controlled by baghouse CE001, and exhausting through stack EP001. This consists of two (2) truck dump pits and one (1) railcar dump pit.

(b) One (1) grain handling operation, constructed in 2006, controlled by baghouse CE001, exhausting through stack EP001, and consisting of the following:

(1) One (1) corn conveyor, identified as EU002, with a maximum throughput rate of 420 tons per hour.

(2) One (1) corn elevator, identified as EU003, with a maximum throughput rate of 420 tons per hour.

(3) Two (2) corn storage bins, identified as EU004 and EU005, each with a maximum storage capacity of 200,000 bushels and maximum throughput rate of 420 tons per hour.

(4) One (1) scalper, identified as EU006, with a maximum throughput rate of 140 tons per hour.

(5) One (1) surge bin, identified as EU007, with a maximum throughput rate of 140 tons per hour.

(6) One (1) corn storage bin, identified as Storage Bin #3 (EU086), (constructed in 2008) with a maximum storage capacity of 750,000 bushels and maximum throughput rate of 420 tons per hour.

(c) One (1) corn storage bin, identified as EU066, approved for construction in 2010, with a maximum capacity of 750,000 bushels and a maximum throughput rate of 420 tons per hour, utilizing no control devices, and exhausting to the atmosphere.

(d) Three (3) hammermills, identified as EU010, EU011, and EU067, with EU010 and EU011 constructed in 2006 and EU067 approved for construction in 2010, each with a maximum throughput rate of 140 tons of corn per hour, controlled by baghouse CE003, and exhausting through stack EP003.

(e) One (1) receiving and transfer system, approved for construction in 2011, consisting of:

(1) One (1) unloading area, consisting of:

(A) One (1) truck unloading area, identified as Truck Unloading #1 EU070, with a maximum capacity of 25 tons of material per hour, consisting of two (2) pneumatic truck unloading conveyors, identified as EU071 and EU072, with a combined maximum capacity of 25 tons of material per hour, with particulate emissions controlled by one (1) baghouse, identified as CE015, with all emissions exhausted through stack EP015. CE015 has an airflow of 4,200 scfm.

(B) One (1) railcar unloading area, identified as EU073, with a maximum capacity of 25 tons of material per hour, consisting of one (1) pneumatic railcar unloading conveyor, identified as EU074, with a maximum capacity of 25 tons of material per hour, with particulate emissions controlled by one (1) baghouse, identified as CE015, with all emissions exhausted through stack EP015. CE015 has an airflow of 4,200 scfm.

(C) One (1) forklift unloading area, identified as EU075, with a maximum capacity of 25 tons of material per hour, approved in 2013 for modification, with particulate emissions vented through baghouse CE022, exhausting to stack EP022. CE022 has an exhaust flow rate of 22,500.

(D) One (1) truck unloading area, identified as Truck Unloading #2 EU080, with a maximum capacity of 25 tons of material per hour, consisting of one (1) conveyor, with particulate emissions controlled by one (1) baghouse, identified as CE018, with all emissions exhausted through stack EP018. The baghouse has a grain loading of 0.0000295 grain/dscf and 1,300 scfm air flow rate.

(E) One (1) truck unloading area identified as Truck Unloading #3 EU085, with a maximum capacity of 40 tons of material per hour, consisting of one (1) conveyor and one storage bin. The storage bin is identified as Storage Bin #3 EU086. Particulate control is provided by one (1) baghouse, identified as CE016, with all emissions exhausted through

stack EP016. The baghouse has an exhaust flow rate of 2,500.

(2) One (1) storage process, consisting of three (3) storage bins, identified as Storage Bin #1 EU076, Storage Bin #2 EU077, and Storage Bin #3 EU086. Storage Bin #1 and Storage Bin #2 have a combined maximum capacity of 250 tons and a maximum throughput rate of 25 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as CE015, with all emissions exhausted through stack EP015. Storage Bin #3 has a maximum capacity of 98.01 tons and a maximum throughput rate of 30.60 tons per hour, is controlled by one (1) baghouse, identified as CE016, with all emissions exhausted through stack EP016.

(3) One (1) process feed area, consisting of a pneumatic conveyor, identified as EU087, which receives material from Storage Bin #1 and Storage Bin #2 to the cook process through an air lock. The feed system can also receive material directly from Truck Unloading #2 (EU080) to the cook process. The conveyance system has a maximum capacity of 25 tons per hour. The air lock conveyance system is controlled by one (1) baghouse, identified as CE017, and exhausting through stack EP017.CE017 has an air flow rate of 650 scfm.

(f) One (1) fermentation process, constructed in 2006, with a maximum throughput rate of 7,266 gallons of ethanol per hour, controlled by CO_2 wet scrubbers CE005 (vented to stack EP005) and CE010 (vented to stack EP010), and consisting of the following:

(1) Four (4) fermenters, identified as EU016, EU017, EU018, and EU019.

(2) One (1) beer well, identified as EU020.

Under NSPS, Subpart VVa, 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.

(g) One (1) thermal oxidizer with heat recovery steam generator (TO/HRSG) system, identified as CE007, constructed in 2006, with a maximum heat input capacity of 135 MMBtu/hr, using natural gas and process waste gases from the DDGS dryers as fuels, with emissions exhausted through stack EP007.

Under 40 CFR 60, Subpart Db, CE007 is an affected facility.

(h) One (1) distillation process, identified as Distillation Process 1, constructed in 2006, with equipment leaks from this process identified as F003, with a maximum throughput rate of 7,266 gallons of fuel grade ethanol per hour, controlled by TO/HRSG system CE007, exhausting through stack EP007, and consisting of the following:

(1) One (1) slurry mixers, identified as EU049.

(2) One (1) slurry tank, identified as EU050.

(3) Two (2) liquefaction tanks, identified as EU014 and EU051, each with a maximum capacity of 7,000 gallons per hour.

(4) One (1) cook tube, identified as EU052.

(5) One (1) flash tank, identified as EU053.

(6) One (1) yeast tank, identified as EU015.

(7) One (1) 190 proof condenser, identified as EU054.

(8) One (1) 200 proof condenser, identified as EU055.

(9) One (1) beer stripper, identified as EU021.

(10) One (1) side stripper, identified as EU022.

(11) One (1) rectifier, identified as EU023.

(12) Molecular sieve units, identified as EU024.

(13) Eight (8) evaporators, identified as EU025.

(14) Four (4) centrifuges, identified as EU026 through EU029.One (1) centrifuge identified as EU069, approved for construction in 2010.

Under NSPS, Subpart VVa, 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.

(i) Two (2) natural gas fired DDGS dryers, identified as EU035 and EU056, constructed in 2006, each with a maximum heat input rate of 45 MMBtu/hr and a maximum throughput rate of 34 tons of DDGS per hour, controlled by multiclone CE006, with emissions venting to Thermal Oxidizer/Heat Recovery Steam Generating (TO/HRSG) System CE007, and exhausting to stack EP007.

(j) One (1) DDGS cooler, identified as EU036, constructed in 2006, with a maximum throughput rate of 34 tons/hr of DDGS, controlled by baghouse CE014, and exhausting to stack EP014.

(k) One (1) DDGS loadout operation, constructed in 2006, with a maximum throughput rate of 101 tons per hour, controlled by baghouse CE008, exhausting to stack EP008, and consisting of the following:

(1) One (1) DDGS dump pit, identified as EU040.

(2) One (1) DDGS elevator, identified as EU041.

(3) One (1) DDGS conveyor, identified as EU042.

(4) One (1) DDGS load spout, identified as EU043.

(l) One (1) ethanol loading rack for trucks, identified as EU045A, constructed in 2006, with a maximum throughput rate of 800 gallons per minute. The truck loading process is controlled by the enclosed flare CE019, which is fueled by natural gas and has a maximum heat input capacity of 12.4 MMBtu/hr, and exhausts through stack EP019.

Under NSPS, Subpart VVa, 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.

(m) One (1) ethanol loading rack for railcars, identified as EU045B, constructed in 2006, with a maximum throughput rate of 1000 gallons per minute. The railcar loading process is

controlled by the enclosed flare CE019, which is fueled by natural gas and has a maximum heat input capacity of 12.4 MMBtu/hr, and exhausts through stack EP019.

Under NSPS, Subpart VVa, 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.

(n) One (1) distillation process, identified as Distillation Process 2, approved in 2013 for construction, with equipment leaks from this process identified as F006, with a maximum throughput rate of 40,000 gallons of 190 proof non-fuel grade ethanol per hour, consisting of the following:

(1) Three (3) distillation columns and seven (7) condensers operating in a close loop.

Under NSPS, Subpart VVa, 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.

(2) Two (2) liquid storage tanks, identified as T013 and T014, each with a maximum capacity of 500,000 gallons.

Under 40 CFR 60, Subpart Kb, T013 and T014 are affected facilities.

(3) Three (3) liquid storage tanks, identified as T015, T016, and T017, each with a maximum capacity of 29,000 gallons. One (1) 10,000 gallon storage tank identified as T018. One (1) liquid storage tank identified as T019, with a capacity of 3,000 gallons and one mixing tank T00 with a capacity of 500 gallons.

Under 40 CFR 60, Subpart Kb, T015, T016, and T017 are affected facilities.

(4) Two (2) natural gas fired boilers, identified as Boiler #1 (EU081) and Boiler #2 (EU082), each with a maximum heat input rate of 58.8 MMBtu/hr, exhausting uncontrolled to stacks EP020 and EP021, respectively.

Under 40 CFR 60, Subpart Dc, EU081 and EU082 are affected facilities.

(o) One (1) non-fuel grade ethanol loading skid for trucks, identified as EU083, approved in 2013 for construction, with a maximum throughput rate of 1000 gallons per minute. The truck loading process is controlled by the enclosed flare CE019, which is fueled by natural gas and has a maximum heat input capacity of 12.4 MMBtu/hr, and exhausts through stack EP019.

Under NSPS, Subpart VVa, 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.

(p) One (1) non-fuel grade ethanol loading skid for railcars, identified as EU084, approved in 2013 for construction, with a maximum throughput rate of 1667 gallons per minute. The railcar loading process is controlled by the enclosed flare CE019, which is fueled by natural gas and has a maximum heat input capacity of 12.4 MMBtu/hr, and exhausts through stack EP019.

Under NSPS, Subpart VVa, 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.

(q) One (1) distillation process, operating in a closed loop, identified as Distillation Process 3, approved in 2016 for construction, with equipment leaks from this process identified as F007, with a maximum throughput rate of 36,500,000 gallons of 200 proof non-fuel grade ethanol per year, consisting of the following:

(1) One (1) 1,600 gallon feed tank

(2) One (1) distillation column.

(3) Two (2) molecular sieve units

(4) One (1) liquid storage tank, identified as T021, with a maximum capacity of 250,000 gallons.

Under NSPS, Subpart VVa, 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.

A.4 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

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

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, including space heaters with a combined heat input capacity not to exceed 2.5 million (2,500,000) Btu per hour.

(b) Solvent recycling systems with batch capacity less than or equal to 100 gallons.

(c) Forced and induced draft cooling tower systems not regulated under a NESHAP, consisting of:

(1) One (1) four cell cooling tower, identified as F004, with a circulation rate of 33,000 gallons per minute.

(2) One (1) two cell cooling tower, identified as F006, approved in 2013 for construction, with a circulation rate of 21,000 gallons per minute.

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

(e) Heat exchanger cleaning and repair.

(f) Process vessel degassing and cleaning to prepare for internal repairs.

(g) Paved roads and parking lots with public access. [326 IAC 6-4][326 IAC 6-5]

(h) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(i) Farm operations.

(j) Stationary fire pumps, including one (1) emergency diesel fire pump, identified as EU034, constructed in 2006, with a maximum power rating of 350 horsepower, and exhausting to stack EP006. [326 IAC 2-2]

Under 40 CFR Part 63, Subpart ZZZZ, EU034 is an affected unit.

(k) Other emission units, not regulated by a NESHAP, with PM_{10}, NO_x, and SO_2 emissions less than five (5) pounds per hour or twenty-five (25) pounds per day, CO emissions less than twenty-five (25) pounds per day, VOC emissions less than three (3) pounds per hour or fifteen (15) pounds per day, lead emissions less than six-tenths (0.6) tons per year or three and twenty-nine hundredths (3.29) pounds per day, and emitting greater than one (1) pound per day but less than five (5) pounds per day or one (1) ton per year of a single HAP, or emitting greater than one (1) pound per day but less than twelve and five tenths (12.5) pounds per day or two and five tenths (2.5) ton per year of any combination of HAPs:

(1) One (1) 190 proof tank, identified as T001, constructed in 2006, with a maximum capacity of 100,000 gallons.

Under 40 CFR 60, Subpart Kb, T001 is an affected facility.

(2) One (1) 200 proof tank, identified as T002, constructed in 2006, with a maximum capacity of 100,000 gallons.

Under 40 CFR 60, Subpart Kb, T002 is an affected facility.

(3) One (1) denaturant tank, identified as T003, constructed in 2006, with a maximum capacity of 100,000 gallons. [326 IAC 8-4-3]

Under 40 CFR 60, Subpart Kb, T003 is an affected facility.

(4) Two (2) denatured ethanol tanks, identified as T004 and T005, constructed in 2006, each with a maximum capacity of 750,000 gallons.

Under 40 CFR 60, Subpart Kb, T004 and T005 are affected facilities.

(5) One (1) fuel additive tank, identified as T006, constructed in 2006, with a maximum storage capacity of 2,300 gallons.

(6) One (1) diesel storage tank, identified as T007, constructed in 2006, with a maximum storage capacity of 1,000 gallons.

(7) One (1) gasoline storage tank, identified as T008, approved for construction in 2010, with a maximum capacity of 350 gallons of gasoline, and exhausting to the atmosphere. [326 IAC 8-4-6][326 IAC 8-4-9]

Under 40 CFR 63, Subpart CCCCCC, T008 is an affected facility.

(8) One (1) diesel storage tank, identified as T009, approved for construction in 2010, with a maximum capacity of 1,000 gallons of diesel fuel, and exhausting to the atmosphere.

(9) One (1) E-85 storage tank, identified as T010, approved for construction in 2010, with a maximum capacity of 1,000 gallons of E-85 fuel, and exhausting to the atmosphere.

(10) One (1) biomethanator, identified as EU048, constructed in 2006, controlled by 6.0 MMBtu/hr biomethanator flare CE013, and exhausting to stack EP013. [326 IAC 2-2]

(11) One (1) corn oil separation unit, identified as EU061.

(12) One (1) corn oil storage tank, identified as EU062, with a maximum capacity of 35,000 gallons.

EPCO Carbon Dioxide Products

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour, including space heaters with a combined heat input capacity not to exceed 0.63 million (630,000) Btu per hour.

(b) Forced and induced draft cooling tower systems not regulated under a NESHAP, consisting of:

(1) One (1) four cell cooling tower, identified as EPCO, with a circulation rate of 900 gallons per minute.

(c) Paved roads and parking lots with public access. [326 IAC 6-4][326 IAC 6-5]

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, 053-32070-00062, 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.

(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. 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) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

(1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(35), and

(2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent 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(35).

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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][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) no later than 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

The Permittee shall implement the PMPs.

(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. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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 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 Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

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

Indiana Department of Environmental Management
Compliance 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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)(8) 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.

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 053-32070-00062 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 permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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.16 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(42). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.17 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]

(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) 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 does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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.18 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 or notice 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.19 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) or (c) 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)(1) and (c)(1). 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) and (c)(1).

(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(37)) 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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.

B.20 Source Modification Requirement [326 IAC 2-7-10.5]

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

B.21 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.22 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

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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.23 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.24 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 5-1-1 (Applicability) and 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 except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

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. 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 that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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) For performance testing required by this permit, 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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)]

(a) For new units:
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

(b) For existing units:

Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance, 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.12 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. The analog instrument shall be capable of measuring values outside of the normal range.

(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.13 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

no later than ninety (90) days after the date of issuance of this permit.

The ERP does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

(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.14 Risk Management Plan [326 IAC 2-7-5(11)][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.15 Response to Excursions or Exceedances [326 IAC 2-7-5][326 IAC 2-7-6]

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

(a) The Permittee shall take reasonable response steps to 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 excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned or are returning 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 normal or usual manner of operation.

(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 record the reasonable response steps taken.

C.16 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 submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

C.17 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]

Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 and every three (3) years thereafter, the Permittee shall submit by July 1 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(33) (“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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6]

(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. Support information includes the following, where applicable:

(AA) All calibration and maintenance records.
(BB) All original strip chart recordings for continuous monitoring instrumentation.
(CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following, where applicable:

(AA) The date, place, as defined in this permit, and time of sampling or measurements.
(BB) The dates analyses were performed.
(CC) The company or entity that performed the analyses.
(DD) The analytical techniques or methods used.
(EE) The results of such analyses.
(FF) The operating conditions as existing at the time of sampling or measurement.

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, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)][326 IAC 2-1.1-11]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that 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. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

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) 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.

Stratospheric Ozone Protection

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

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS – Grain / DDGS Receiving & Handling

Emissions Unit Description [326 IAC 2-7-5(14)]:

(a) Three (3) corn dump pits, identified as EU001, constructed in 2006, each with a maximum throughput rate of 420 tons of corn per hour, controlled by baghouse CE001, and exhausting through stack EP001. This consists of two (2) truck dump pits and one (1) railcar dump pit.

(b) One (1) grain handling operation, constructed in 2006, controlled by baghouse CE001, exhausting through stack EP001, and consisting of the following:

(1) One (1) corn conveyor, identified as EU002, with a maximum throughput rate of 420 tons per hour.

(2) One (1) corn elevator, identified as EU003, with a maximum throughput rate of 420 tons per hour.

(3) Two (2) corn storage bins, identified as EU004 and EU005, each with a maximum storage capacity of 200,000 bushels and maximum throughput rate of 420 tons per hour.

(4) One (1) scalper, identified as EU006, with a maximum throughput rate of 140 tons per hour.

(5) One (1) surge bin, identified as EU007, with a maximum throughput rate of 140 tons per hour.

(6) One (1) corn storage bin, identified as Storage Bin #3 (EU086), (constructed in 2008) with a maximum storage capacity of 750,000 bushels and maximum throughput rate of 420 tons per hour.

(c) One (1) corn storage bin, identified as EU066, approved for construction in 2010, with a maximum capacity of 750,000 bushels and a maximum throughput rate of 420 tons per hour, utilizing no control devices, and exhausting to the atmosphere.

(d) Three (3) hammermills, identified as EU010, EU011, and EU067, with EU010 and EU011 constructed in 2006 and EU067 approved for construction in 2010, each with a maximum throughput rate of 140 tons of corn per hour, controlled by baghouse CE003, and exhausting through stack EP003.

(e) One (1) receiving and transfer system, approved for construction in 2011, consisting of:

(1) One (1) unloading area, consisting of:

(A) One (1) truck unloading area, identified as Truck Unloading #1 EU070, with a maximum capacity of 25 tons of material per hour, consisting of two (2) pneumatic truck unloading conveyors, identified as EU071 and EU072, with a combined maximum capacity of 25 tons of material per hour, with particulate emissions controlled by one (1) baghouse, identified as CE015, with all emissions exhausted through stack EP015. CE015 has an airflow of 4,200 scfm.

(B) One (1) railcar unloading area, identified as EU073, with a maximum capacity of 25 tons of material per hour, consisting of one (1) pneumatic railcar unloading conveyor, identified as EU074, with a maximum capacity of 25 tons

of material per hour, with particulate emissions controlled by one (1) baghouse, identified as CE015, with all emissions exhausted through stack EP015. CE015 has an airflow of 4,200 scfm.

(C) One (1) forklift unloading area, identified as EU075, with a maximum capacity of 25 tons of material per hour, approved in 2013 for modification, with particulate emissions vented through baghouse CE022, exhausting to stack EP022. CE022 has an exhaust flow rate of 22,500.

(D) One (1) truck unloading area, identified as Truck Unloading #2 EU080, with a maximum capacity of 25 tons of material per hour, consisting of one (1) conveyor, with particulate emissions controlled by one (1) baghouse, identified as CE018, with all emissions exhausted through stack EP018. The baghouse has a grain loading of 0.0000295 grain/dscf and 1,300 scfm air flow rate.

(E) One (1) truck unloading area identified as Truck Unloading #3 EU085, with a maximum capacity of 40 tons of material per hour, consisting of one (1) conveyor and one storage bin. The storage bin is identified as Storage Bin #3 EU086. Particulate control is provided by one (1) baghouse, identified as CE016, with all emissions exhausted through stack EP016. The baghouse has an exhaust flow rate of 2,500.

(2) One (1) storage process, consisting of three (3) storage bins, identified as Storage Bin #1 EU076, Storage Bin #2 EU077, and Storage Bin #3 EU086. Storage Bin #1 and Storage Bin #2 have a combined maximum capacity of 250 tons and a maximum throughput rate of 25 tons per hour, with particulate emissions controlled by one (1) baghouse, identified as CE015, with all emissions exhausted through stack EP015. Storage Bin #3 has a maximum capacity of 98.01 tons and a maximum throughput rate of 30.60 tons per hour, is controlled by one (1) baghouse, identified as CE016, with all emissions exhausted through stack EP016.

(3) One (1) process feed area, consisting of a pneumatic conveyor, identified as EU087, which receives material from Storage Bin #1 and Storage Bin #2 to the cook process through an air lock. The feed system can also receive material directly from Truck Unloading #2 (EU080) to the cook process. The conveyance system has a maximum capacity of 35 tons per year. The air lock conveyance system is controlled by one (1) baghouse, identified as CE017, and exhausting through stack EP017. CE017 has an air flow rate of 650 scfm.

(k) One (1) DDGS loadout operation, constructed in 2006, with a maximum throughput rate of 101 tons per hour, controlled by baghouse CE008, exhausting to stack EP008, and consisting of the following:

(1) One (1) DDGS dump pit, identified as EU040.

(2) One (1) DDGS elevator, identified as EU041.

(3) One (1) DDGS conveyor, identified as EU042.

(4) One (1) DDGS load spout, identified as EU043.

(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 Minor Limits for PM, PM_{10}, and $PM_{2.5}$ [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, PM, PM_{10}, and $PM_{2.5}$ emissions from the following units shall not exceed the emission limits listed in the table below:

Unit ID	Stack ID	Unit Description	Control ID	PM Emission Limit (lb/hr)	PM_{10} Emission Limit (lb/hr)	$PM_{2.5}$ Emission Limit (lb/hr)
EU001 - EU007, EU086	EP001	Grain Receiving and Handling	CE001	1.67	1.67	1.67
EU010, EU011, EU067	EP003	Hammermills	CE003	1.20	1.20	1.20
EU040 - EU043	EP008	DDGS Handling and Loadout	CE008	0.16	0.16	0.16
EU075	EP016	Fork Truck Unloading Area	CE022	0.64	0.64	0.64

Note: Emission limits are combined lb/hr limits for all emission units exhausting out of each stack.

Compliance with these PM, PM_{10}, and $PM_{2.5}$ limits, combined with the potential to emit PM, PM_{10}, and $PM_{2.5}$ from other emission units at the source, shall limit the PM, PM_{10}, and $PM_{2.5}$ emissions from the entire source to less than 250 tons per twelve (12) consecutive month period, each, and render 326 IAC 2-2 (PSD) not applicable.

D.1.2 Particulate Emission Limitations [326 IAC 6-3-2]

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

Unit ID	Unit Description	Control ID	Max. Throughput Rate (tons/hr)	Particulate Emission Limit (lb/hr)
EU001	Three (3) Corn Dump Pits	CE001	420	66.89
EU002	Corn Conveyor	CE001	420	66.89
EU003	Corn Elevator	CE001	420	66.89
EU004	Corn Storage Bin	CE001	420	66.89
EU005	Corn Storage Bin	CE001	420	66.89
EU086	Corn Storage Bin (Storage Bin #3)	CE001	420	66.89
EU066	Corn Storage Bin	N/A	420	66.89
EU006	Scalper	CE001	140	54.72
EU007	Surge Bin	CE001	140	54.72
EU010	Hammermill	CE003	140	54.72
EU011	Hammermill	CE003	140	54.72
EU067	Hammermill	CE003	140	54.72
EU040	DDGS Dump Pit	CE008	101	51.38
EU041	DDGS Elevator	CE008	101	51.38
EU042	DDGS Conveyor	CE008	101	51.38
EU043	DDGS Load Spout	CE008	101	51.38
EU070	Truck Unloading Area #1	CE015	25	35.43
EU071 and EU072	Truck Unloading Conveyors for Area #1	CE015	25	35.43
EU073	Railcar Unloading Area	CE015	25	35.43
EU074	Railcar Unloading Conveyor	CE015	25	35.43
EU075	Forklift Unloading Area	CE022	25	35.43
EU076 and EU077	Storage Bin #1 and Storage Bin #2	CE015	25	35.43

Unit ID	Unit Description	Control ID	Max. Throughput Rate (tons/hr)	Particulate Emission Limit (lb/hr)
EU080	Truck Unloading Area	CE018	25	35.43
EU085	Truck Unloading Area #3	CE016	30.60	40.57
EU087	Pneumatic conveyance air lock to cook process	CE017	25	35.43

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

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

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

or

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

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

(b) Pursuant to 326 IAC 6-3-2(e)(3), when the process weight exceeds 200 tons per hour, the maximum allowable emission may exceed the emission limits shown in the table above, provided the concentration of particulate matter in the gas discharged to the atmosphere is less than 0.10 pounds per 1,000 pounds of gases.

D.1.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.1.4 Particulate Control

In order to ensure compliance with Conditions D.1.1 and D.1.2, the baghouses for particulate control shall be in operation and control emissions from the emission units at all times that the emission units are in operation as listed in the table below:

Unit ID	Unit Description	Baghouse ID
EU001 - EU007, EU086	Grain Receiving and Handling	CE001
EU010, EU011, EU067	Hammermills	CE003
EU040 - EU043	DDGS Handling and Loadout	CE008
EU075	Forklift Unloading Area	CE022

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

D.1.5 Testing Requirements [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.1.1 and D.1.2, the Permittee shall perform PM, PM_{10}, and $PM_{2.5}$ testing of baghouses CE001, CE003, and CE008 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. PM_{10} and $PM_{2.5}$ includes filterable and condensable PM.

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

D.1.6 Visible Emissions Notations

(a) Visible emission notations of baghouse CE001, CE003, CE008, and CE022 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 a reasonable response. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.1.7 Parametric Monitoring

The Permittee shall record the pressure drop across the baghouses used in conjunction with the corn dump pits (EU001), the grain handling operations (EU002 through EU007, and EU086), the hammermills (EU010, EU011, and EU067), and the DDGS handling and loadout operations (EU040 through EU043) at least once per day when the associated emission units are in operation. When, for any one reading, the pressure drop across the baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal range for these units is a pressure drop between 1.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps 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 or replaced at least once every six (6) months.

D.1.8 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 line. Operations may continue only if the event qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

D.1.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.6, the Permittee shall maintain records of daily visible emission notations of the baghouses stack exhausts. 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 the compliance status with Condition D.1.7, the Permittee shall maintain daily records of pressure drop across the baghouses. 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).

(c) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS - Fermentation Process

Emissions Unit Description [326 IAC 2-7-5(14)]:

(f) One (1) fermentation process, constructed in 2006, with a maximum throughput rate of 7,266 gallons of ethanol per hour, controlled by CO_2 wet scrubbers CE005 (vented to stack EP005) and CE010 (vented to stack EP010), and consisting of the following:

(1) Four (4) fermenters, identified as EU016, EU017, EU018, and EU019.

(2) One (1) beer well, identified as EU020.

Under NSPS, Subpart VVa, 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.

(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.2.1 PSD and MACT Minor Limits for VOC and HAP [326 IAC 2-2][326 IAC 2-4.1]

In order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-4.1 (MACT) not applicable, the Permittee shall comply with the following:

(a) Emissions from wet scrubber CE005, which is used to control the emissions from the fermentation process, shall not exceed the following:

(i) VOC emissions shall not exceed 9.5 lb/hr.

(ii) Acetaldehyde emissions shall not exceed 1.88 lb/hr.

(iii) Total HAP emissions shall not exceed 1.91 lb/hr.

(b) Emissions from wet scrubber CE010, which is used to control the emissions from the fermentation process, shall not exceed with the following:

(i) VOC emissions shall not exceed 0.62 lb/hr.

(ii) Acetaldehyde emissions shall not exceed 0.114 lb/hr.

(iii) Total HAP emissions shall not exceed 0.13 lb/hr.

Compliance with these VOC limits, combined with the potential to emit VOC from other emission units at the source, shall limit the VOC emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 (PSD) not applicable.

Compliance with these HAP limits, combined with the potential to emit HAP from other emission units at the source, shall limit the HAP emissions from the entire source to less than 10 tons per twelve (12) consecutive month period for a single HAP and less than 25 tons per twelve (12) consecutive month period for total HAPs and render 326 IAC 2-4.1 (MACT) not applicable.

D.2.2 VOC Emissions [326 IAC 8-5-6]

Pursuant to 326 IAC 8-5-6 (Fuel Grade Ethanol Production at Dry Mills), the Permittee shall comply with the following:

When using whole kernel corn to produce a meal that is then used in the production of fuel grade ethanol:

(a) The VOC emissions from the fermentation process shall be controlled by wet scrubbers CE005 and CE010.

(b) The overall VOC control efficiency (including the capture efficiency and adsorption efficiency) for wet scrubber CE005 shall be at least 98%, or the VOC emissions from the scrubber CE005 shall not exceed 20 ppmv.

(c) The overall VOC control efficiency (including the capture efficiency and adsorption efficiency) for wet scrubber CE010 shall be at least 98%, or the VOC emissions from the scrubber CE010 shall not exceed 20 ppmv.

D.2.3 VOC BACT [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (VOC BACT), when using a feedstock other than whole kernel corn or a combination with whole kernel corn to produce a meal that is used in the production of fuel grade ethanol, the Permittee shall comply with the following:

(a) The VOC emissions from the fermentation operation (EU016 through EU020) shall be controlled by CO2 scrubbers CE005 and CE010.

(b) The overall VOC control efficiency (including the capture efficiency and adsorption efficiency) for wet scrubber CE005 shall be at least 98%, or the VOC emissions from the scrubber CE005 shall not exceed 20 ppmv.

(c) The overall VOC control efficiency (including the capture efficiency and adsorption efficiency) for wet scrubber CE010 shall be at least 98%, or the VOC emissions from the scrubber CE010 shall not exceed 20 ppmv.

(d) The VOC emissions from the fermentation operation (EU016 through EU020) shall not exceed 9.5 lb/hr for CE005 and 0.62 lb/hr for CE010.

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.2.5 VOC and HAP Control

In order to ensure compliance with Conditions D.2.1, D.2.2, and D.2.3 wet scrubbers CE005 and CE010 for VOC and HAP control shall be in operation and control emissions from the fermentation process at all times that the fermentation process is in operation.

D.2.6 Testing Requirements [326 IAC 2-1.1-11][326 IAC 8-5-6]

(a) In order to demonstrate compliance with Conditions D.2.1, D.2.2, and D.2.3, the Permittee shall perform VOC (including emission rate, adsorption efficiency, and capture efficiency) and acetaldehyde testing of scrubber CE005 utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration.

(b) Within sixty (60) days of using a feedstock other than whole kernel corn, milo, or wheat and in order to demonstrate compliance with Conditions D.2.1, D.2.2, and D.2.3,, the Permittee shall perform VOC (including emission rate, adsorption efficiency, and capture efficiency) and acetaldehyde testing of scrubber CE005 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 2-7-5(1)][326 IAC 2-7-6(1)]

D.2.7 Parametric Monitoring [326 IAC 8-5-6]

(a) The Permittee shall monitor and record scrubber CE005 as follows:

(1) The Permittee shall monitor and record the pressure drop across scrubber CE005 at least once per day when the fermentation process is in operation. When, for any one reading, the pressure drop across the scrubber is outside the normal range, the Permittee shall take a reasonable response step. The normal range for these units is a pressure drop between 1.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(2) The Permittee shall monitor and record the flow rate of scrubber CE005 at least once per day when the fermentation process is in operation.

(3) The Permittee shall determine the minimum flow rate from the latest valid stack test that demonstrates compliance with the limits in Conditions D.2.1(a) and D.2.2(b), and D.2.3.

(4) On and after the date the stack test results are available, the Permittee shall maintain a flow rate at or above the minimum rate as observed during the latest compliant stack test.

(5) When, for any one reading, the flow rate is below the above mentioned minimum, the Permittee shall take a reasonable response. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(b) The Permittee shall monitor and record scrubber CE010 as follows:

(1) The Permittee shall monitor and record the pressure drop across scrubber CE010 at least once per day when the fermentation process is in operation. When, for any one reading, the pressure drop across the scrubber is outside the normal range, the Permittee shall take a reasonable response. The normal range for these units is a pressure drop between 6.0 and 15.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable

response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

(2) The Permittee shall monitor and record the flow rate of scrubber CE010 at least once per day when the fermentation process is in operation.

(3) The Permittee shall determine the minimum flow rate from the latest valid stack test that demonstrates compliance with the limits in Conditions D.2.1(b), D.2.2(c), and D.2.3.

(4) On and after the date the stack test results are available, the Permittee shall maintain a flow rate at or above the minimum rate as observed during the latest compliant stack test.

(5) When, for any one reading, the flow rate is below the above mentioned minimum, the Permittee shall take a reasonable response. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

D.2.8 Scrubber Monitoring - Alternative Operating Scenario [326 IAC 8-5-6]

(a) During periods of decreased operation in preparation for facility shut down, the Permittee shall monitor and record the following parameters once per hour to ensure they meet the values in the table below:

Unit	Hours After the Mash Feed Rate Reaches Zero (hr)	Minimum Flow Rate (gpm)	Minimum Ammonium Bisullfite Addition Rate (mL/min)
CE005	24	14.5	32
	36	9.3	0
	41.5	0	0
CE010	24	8.5	12
	36	5.6	0
	41.5	0	0

(b) When for any one reading, the flow rate is below the above mentioned minimum, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

D.2.9 Scrubber Failure Detection

In the event that a scrubber malfunction has been observed:

Failed units and the associated process will be shut down immediately until the failed units have 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).

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

D.2.10 Record Keeping Requirements [326 IAC 8-5-6]

(a) To document the compliance status with Condition D.2.7(a), the Permittee shall maintain daily records of pressure drop and flow rate for scrubber CE005. The Permittee shall include in its daily record when a pressure drop or flow rate reading is not taken and the reason for the lack of a pressure drop or flow rate reading (e.g., the process did not operate that day).

(b) To document the compliance status with Condition D.2.7(b), the Permittee shall maintain daily records of pressure drop and flow rate for scrubber CE010. The Permittee shall include in its daily record when a pressure drop or flow rate reading is not taken and the reason for the lack of a pressure drop or flow rate reading (e.g., the process did not operate that day).

(c) To document the compliance status with Condition D.2.8 and 326 IAC 8-5-6, the Permittee shall maintain hourly records of the flow rate and ammonium bisulfite addition rate for scrubbers CE005 and CE010 during periods of decreased operation in preparation for facility shut down. The first hour begins with the initial reduction at or after 12 hours from no flow from mash feed. The Permittee shall include in its hourly record when a flow rate and ammonium bisulfite addition rate is not taken and the reason for the lack of the reading.

(d) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS – TO/HRSG System & DDGS Drying

Emissions Unit Description [326 IAC 2-7-5(14)]:

(g) One (1) thermal oxidizer with heat recovery steam generator (TO/HRSG) system, identified as CE007, constructed in 2006, with a maximum heat input capacity of 135 MMBtu/hr, using natural gas and process waste gases from the DDGS dryers as fuels, with emissions exhausted through stack EP007.

Under 40 CFR 60, Subpart Db, CE007 is an affected facility.

(h) One (1) distillation process, identified as Distillation Process 1, constructed in 2006, with equipment leaks from this process identified as F003, with a maximum throughput rate of 7,266 gallons of fuel grade ethanol per hour, controlled by TO/HRSG system CE007, exhausting through stack EP007, and consisting of the following:

(1) One (1) slurry mixers, identified as EU049.

(2) One (1) slurry tank, identified as EU050.

(3) Two (2) liquefaction tanks, identified as EU014 and EU051 each with a maximum capacity of 7,000 gallons per hour.

(4) One (1) cook tube, identified as EU052.

(5) One (1) flash tank, identified as EU053.

(6) One (1) yeast tank, identified as EU015.

(7) One (1) 190 proof condenser, identified as EU054.

(8) One (1) 200 proof condenser, identified as EU055.

(9) One (1) beer stripper, identified as EU021.

(10) One (1) side stripper, identified as EU022.

(11) One (1) rectifier, identified as EU023.

(12) Molecular sieve units, identified as EU024.

(13) Eight (8) evaporators, identified as EU025.

(14) Four (4) centrifuges, identified as EU026 through EU029.One (1) centrifuge, identified as EU069, approved for construction in 2010.

Under NSPS, Subpart VVa, 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.

(i) Two (2) natural gas fired DDGS dryers, identified as EU035 and EU056, constructed in 2006, each with a maximum heat input rate of 45 MMBtu/hr and a maximum throughput rate of 34 tons of DDGS per hour, controlled by multiclone CE006, with emissions venting to Thermal Oxidizer/Heat Recovery Steam Generating (TO/HRSG) System CE007, and exhausting to stack EP007.

(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.3.1 PSD and MACT Minor Limits for PM, PM_{10}, $PM_{2.5}$, VOC, CO, SO_2, NO_x, and HAP [326 IAC 2-2][326 IAC 2-4.1]

In order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-4.1 (MACT) not applicable, the Permittee shall comply with the following emission limits for the TO/HRSG System CE007, which is used to control the DDGS dryers (EU035 and EU056) and the distillation process:

(a) PM emissions shall not exceed 8.0 lb/hr.

(b) PM_{10} emissions shall not exceed 8.0 lb/hr.

(c) $PM_{2.5}$ emissions shall not exceed 8.0 lb/hr.

(d) VOC emissions shall not exceed 5.15 lb/hr.

(e) CO emissions shall not exceed 21.0 lb/hr.

(f) SO_2 emissions shall not exceed 8.5 lb/hr.

(g) NO_x emissions shall not exceed 19.7 lb/hr.

(h) Acetaldehyde emissions shall not exceed 0.18 lb/hr.

(i) Total HAP emissions shall not exceed 0.53 lb/hr.

Compliance with these PM, PM_{10}, $PM_{2.5}$, VOC, SO_2, CO, and NO_x limits, combined with the potential to emit PM, PM_{10}, $PM_{2.5}$, VOC, SO_2, CO, and NO_x from other emission units at the source, shall limit the PM, PM_{10}, $PM_{2.5}$, VOC, SO_2, CO, and NO_x emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 (PSD) not applicable.

Compliance with these HAP limits, combined with the potential to emit HAP from other emission units at the source, shall limit the HAP emissions from the entire source to less than 10 tons per twelve (12) consecutive month period for a single HAP and less than 25 tons per twelve (12) consecutive month period for total HAPs and render 326 IAC 2-4.1 (MACT) not applicable.

D.3.2 VOC Emissions [326 IAC 8-5-6]

Pursuant to 326 IAC 8-5-6 (Fuel Grade Ethanol Production at Dry Mills), the Permittee shall comply with the following:

When using whole kernel corn to produce a meal that is then used in the production of fuel grade ethanol:

(a) The VOC emissions from the DDGS dryers (EU035 and EU056) and the distillation process shall be controlled by TO/HRSG system CE007.

(b) The overall efficiency for the thermal oxidizer CE007 (including the capture efficiency and destruction efficiency) shall be at least 98% or the maximum outlet VOC concentration shall not exceed 10 ppmv.

D.3.3 VOC BACT [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (VOC BACT), when using a feedstock other than whole kernel corn or a combination with whole kernel corn to produce a meal that is used in the production of fuel grade ethanol, the Permittee shall comply with the following:

(a) The VOC emissions from the distillation, DDGS drying, and auxiliary processes (EU035, EU056, and CE007) shall be controlled by an RTO.

(b) The overall VOC control efficiency (including the capture efficiency and adsorption efficiency) for the RTO shall be at least 98% or the maximum outlet VOC concentration shall not exceed 10 ppmv.

(c) The VOC emissions from the distillation, DDGS drying, and auxiliary processes (EU035, EU056, and CE007) shall not exceed 5.15 lb/hr.

D.3.4 Particulate Emissions [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from the 135 MMBtu/hr TO/HRSG system (CE007) shall be limited to 0.30 pounds per MMBtu heat input.

The limit was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}} = \frac{1.09}{(135)^{0.26}} = 0.30 \text{ lb/MMBtu}$$

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

D.3.5 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), particulate emissions from each of following operations shall not exceed the pound per hour limits listed in the table below:

Unit ID	Unit Description	Max. Throughput Rate (tons/hr)	Particulate Emission Limit (lb/hr)
EU035	DDGS Dryer	34	41.1
EU056	DDGS Dryer	34	41.1

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

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

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

D.3.6 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.3.7 VOC and HAP Control

In order to ensure compliance with Conditions D.3.1(d), D.3.1(h), D.3.1(i), D.3.2, and D.3.3, the TO/HRSG system (CE007) for VOC and HAP control shall be in operation and control emissions from the DDGS dryers (EU035 and EU056) and the distillation process at all times that these units are in operation.

D.3.8 Particulate Control

In order to ensure compliance with Conditions D.3.1(a), D.3.1(b), D.3.1(c), and D.3.5, the cyclone (CE006) for particulate control shall be in operation and control emissions from the DDGS Dryers (EU035 and EU056) at all times these units are in operation.

D.3.9 Testing Requirements [326 IAC 2-1.1-11][326 IAC 8-5-6]

(a) In order to demonstrate compliance with Conditions D.3.1, D.3.4, and D.3.5, the Permittee shall perform PM, PM_{10}, $PM_{2.5}$, VOC, SO_2, CO, NO_x, and acetaldehyde testing of thermal oxidizer CE007 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. PM_{10} and $PM_{2.5}$ includes filterable and condensable PM.

(b) In order to demonstrate compliance with Conditions D.3.1, D.3.2, and D.3.3, the Permittee shall perform VOC (including emission rate, adsorption efficiency, and capture efficiency) and acetaldehyde testing of thermal oxidizer CE007 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) Within sixty (60) days of using a feedstock other than whole kernel corn, milo, or wheat, the Permittee shall comply with the following:

In order to demonstrate compliance with Conditions D.3.1 and D.3.3, the Permittee shall perform VOC (including emission rate, destruction efficiency, and capture efficiency), and acetaldehyde testing of thermal oxidizer CE007 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 2-7-5(1)][326 IAC 2-7-6(1)]

D.3.10 Visible Emissions Notations

(a) Visible emission notations of the stack exhaust from the TO/HRSG system stack EP007 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 a reasonable response. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.3.11 Thermal Oxidizer Temperature [326 IAC 8-5-6]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the TO/HRSG system (CE007) for measuring operating temperature. For the purpose of this condition, continuous means no less often than once per fifteen (15) minute. The output of this system shall be recorded as a 3-hour average.

(b) The Permittee shall determine the 3-hour average temperature from the latest valid stack test that demonstrates compliance with the limits in Conditions D.3.1, D.3.2, and D.3.3.

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

(d) If the 3-hour average temperature falls below the above mentioned 3-hour average temperature, the Permittee shall take a reasonable response. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.3.12 Parametric Monitoring [326 IAC 8-5-6]

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the TO/HRSG system (CE007) for measuring the duct pressure or fan amperage. 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.

(b) The Permittee shall determine the appropriate 3-hour average duct pressure or fan amperage from the latest valid stack test that demonstrates compliance with the limits in Conditions D.3.1, D.3.2, and D.3.3.

(c) On and after the date the stack test results are available, the 3-hour average duct pressure or fan amperage shall be maintained within the 3-hour average normal range as established in the latest compliant stack test.

(d) When, for any one reading, the 3-hour average duct pressure or fan amperage is outside the above mentioned 3-hour average ranges, the Permittee shall take a reasonable response. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.3.13 Cyclone Failure Detection

In the event that a cyclone malfunction has been observed:

Failed units and the associated process will be shut down immediately until the failed units have

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).

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

D.3.14 Record Keeping Requirements [326 IAC 8-5-6]

(a) To document the compliance status with Condition D.3.10, the Permittee shall maintain records of daily visible emission notations of stack EP007. 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 the compliance status with Condition D.3.11, the Permittee shall maintain continuous temperature records for the thermal oxidizer and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

(c) To document the compliance status with Condition D.3.12, the Permittee shall maintain continuous duct pressure or fan amperage records for the TO/HRSG system CE007 and the 3-hour average duct pressure or fan amperage used to demonstrate compliance during the most recent compliant stack test.

(d) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS – DDGS Cooler

Emissions Unit Description [326 IAC 2-7-5(14)]:

(j) One (1) DDGS cooler, identified as EU036, constructed in 2006, with a maximum throughput rate of 34 tons/hr of DDGS, controlled by baghouse CE014, and exhausting to stack EP014.

(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.4.1 PSD and MACT Minor Limits for PM, PM_{10}, $PM_{2.5}$, and HAP [326 IAC 2-2][326 IAC 2-4.1]

In order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-4.1 (MACT) not applicable, the Permittee shall comply with the following emission limit for DDGS Cooler (EU036), which is controlled by baghouse CE014:

(a) PM emissions shall not exceed 0.94 lb/hr.

(b) PM_{10} emissions shall not exceed 0.94 lb/hr.

(c) $PM_{2.5}$ emissions shall not exceed 0.94 lb/hr.

(d) The total DDGS produced shall not exceed 210,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month, and VOC emissions from DDGS cooler EU036 shall not exceed 0.065 pounds per ton of DDGS produced.

(e) Acetaldehyde emissions shall not exceed 0.075 lb/hr.

Compliance with these PM, PM_{10}, $PM_{2.5}$, and VOC limits, combined with the potential to emit PM, PM_{10}, $PM_{2.5}$, and VOC from other emission units at the source, shall limit the PM, PM_{10}, $PM_{2.5}$, and VOC emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 (PSD) not applicable.

Compliance with these HAP limits, combined with the potential to emit HAP from other emission units at the source, shall limit the HAP emissions from the entire source to less than 10 tons per twelve (12) consecutive month period for a single HAP and less than 25 tons per twelve (12) consecutive month period for total HAPs and render 326 IAC 2-4.1 (MACT) not applicable.

D.4.2 Particulate Emission Limitations [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, particulate emissions from the DDGS cooler (EU036) shall not exceed 41.06 pounds per hour when operating at the maximum process throughput rate of 34 tons per hour.

The pounds per hour limitation was calculated using the following equation:

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

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

D.4.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.4.4 Particulate Control

In order to ensure compliance with Conditions D.4.1(a), D.4.1(b), and D.4.1(c), baghouse CE014 for particulate control shall be in operation and control emissions from the DDGS Cooler (EU036) at all times that this unit is in operation.

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.4.5 Testing Requirements [326 IAC 2-1.1-11]

In order to demonstrate compliance with Conditions D.4.1 and D.4.2, the Permittee shall perform PM, PM_{10}, $PM_{2.5}$, VOC, and acetaldehyde testing of the DDGS Cooler (EU036) 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. PM_{10} and $PM_{2.5}$ includes filterable and condensable PM.

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

D.4.6 Visible Emissions Notations

(a) Visible emission notations of the baghouse CE014 stack 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 a reasonable response. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.4.7 Parametric Monitoring

The Permittee shall record the pressure drop across baghouse CE014 at least once per day when the associated emission unit is in operation. When, for any one reading, the pressure drop

across the baghouse is outside the normal range, the Permittee shall take reasonable response. The normal range for these units is a pressure drop between 1.0 and 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. Section C – Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps 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 or replaced at least once every six (6) months.

D.4.8 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 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).

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

D.4.9 Record Keeping Requirements

(a) To document the compliance status with Condition D.4.1(d), the Permittee shall maintain monthly records of the amount of DDGS produced.

(b) To document the compliance status with Condition D.4.6, the Permittee shall maintain records of daily visible emission notations of the baghouse stack 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 process did not operate that day).

(c) To document the compliance status with Condition D.4.7, the Permittee shall maintain daily records of the pressure drop across the baghouse. 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).

(d) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

D.4.10 Reporting Requirements

A quarterly report of DDGS production to document the compliance status with Condition D.4.1(d) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C – General Reporting contains the Permittee's obligations with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS – Ethanol Loading Racks

Emissions Unit Description [326 IAC 2-7-5(14)]:

(l) One (1) ethanol loading rack for trucks, identified as EU045A, constructed in 2006, with a maximum throughput rate of 800 gallons per minute. The truck loading process is controlled by the enclosed flare CE019, which is fueled by natural gas and has a maximum heat input capacity of 12.4 MMBtu/hr, and exhausts through stack EP019.

Under NSPS, Subpart VVa, 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.

(m) One (1) ethanol loading rack for railcars, identified as EU045B, constructed in 2006, with a maximum throughput rate of 1000 gallons per minute. The railcar loading process is controlled by the enclosed flare CE019, which is fueled by natural gas and has a maximum heat input capacity of 12.4 MMBtu/hr, and exhausts through stack EP019.

Under NSPS, Subpart VVa, 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.

(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.5.1 PSD and MACT Minor Limits for VOC, CO, NO_x, and HAP [326 IAC 2-2][326 IAC 2-4.1]

In order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-4.1 (MACT) not applicable, the Permittee shall comply with the following emission limits for the loading racks EU045A and EU045B:

(a) The total combined denatured ethanol and blended ethanol load-out from loading racks EU045A and EU045B shall not exceed 64,900,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The total denaturant used at the loading racks EU045A and EU045B shall not exceed 4,900,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) The blended ethanol shall not exceed a blend of 30% gasoline.

(d) CO emissions from flare CE019, controlling ethanol loading racks EU045A and EU045B, shall not exceed 0.129 lb/kgal.

(e) NO_x emissions from flare CE019, controlling ethanol loading racks EU045A and EU045B, shall not exceed 0.077 lb/kgal.

Compliance with these VOC, CO, and NO_x limits, combined with the potential to emit VOC, CO, and NO_x from other emission units at the source, shall limit the VOC, CO, and NO_x emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 (PSD) not applicable.

Compliance with these HAP limits, combined with the potential to emit HAP from other emission units at the source, shall limit the HAP emissions from the entire source to less than 10 tons per

twelve (12) consecutive month period for a single HAP and less than 25 tons per twelve (12) consecutive month period for total HAPs and render 326 IAC 2-4.1 (MACT) not applicable.

D.5.2 VOC Emissions [326 IAC 8-5-6]

Pursuant to 326 IAC 8-5-6 (Fuel Grade Ethanol Production at Dry Mills), the Permittee shall comply with the following:

When using whole kernel corn to produce a meal that is then used in the production of fuel grade ethanol:

(a) The VOC emissions from the ethanol loading rack for trucks (EU045) shall be collected and controlled by enclosed flare CE019.

(b) The VOC emissions from the ethanol loading rack for railcars (EU045B) shall be collected and controlled by enclosed flare CE019.

(c) The overall efficiency for the enclosed flare CE019 (including the capture efficiency and destruction efficiency), shall be at least 98%.

D.5.3 VOC BACT [326 IAC 8-1-6]

Pursuant to 326 IAC 8-1-6 (VOC BACT), when using a feedstock other than whole kernel corn or a combination with whole kernel corn to produce a meal that is used in the production of fuel grade ethanol, the Permittee shall comply with the following:

(a) The VOC emissions from the ethanol loading rack for trucks (EU045A and EU045B) shall be collected and controlled by enclosed flare CE019.

(b) The overall efficiency for the enclosed flare CE019 (including the capture efficiency and destruction efficiency), shall be at least 98%.

(c) The VOC emissions from the ethanol loading rack for trucks (EU045A and EU045B) shall not exceed 1.0 lb/hr.

D.5.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.5.5 VOC and HAP Control

In order to ensure compliance with Conditions D.5.1, D.5.2, and D.5.3 for VOC and HAP control:

(a) Enclosed flare CE019 shall be in operation and control emissions from the ethanol loading racks (EU045A and EU045B) at all times when these racks are in operation.

(b) The ethanol loading racks (EU045A and EU045B) shall utilize submerged loading method.

(c) The railcars and trucks shall not use vapor balance services.

D.5.6 Testing Requirements [326 IAC 2-1.1-11][326 IAC 8-5-6]

(a) In order to demonstrate compliance with Conditions D.5.1 and D.5.2, the Permittee shall perform VOC (including emission rate, capture efficiency, and destruction efficiency), CO, and NO_x testing of enclosed flare CE019 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.

(b) Not later than 60 days after EU045A and EU045B are routed to CE0019, the Permittee shall perform VOC (including emission rate, capture efficiency, and destruction efficiency), CO, and NO_x testing of the enclosed flare CE019 utilizing methods 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 2-7-5(1)][326 IAC 2-7-6(1)]

D.5.7 Flare Pilot Flame [326 IAC 8-5-6]

In order to ensure compliance with Conditions D.5.1 and D.5.2, the Permittee shall monitor the presence of a flare pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame when ethanol loading racks EU045A and/or EU045B are in operation.

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

D.5.8 Record Keeping Requirements [326 IAC 8-5-6]

(a) To document the compliance status with Condition D.5.1(a), the Permittee shall maintain monthly records of the total amount of denatured ethanol and blended ethanol loaded out from loading racks EU045A and EU045B.

(b) To document the compliance status with Condition D.5.1(b), the Permittee shall maintain monthly records of total denaturant used at loading racks EU045A and EU045B.

(c) To document the compliance status with Condition D.5.1(c), the Permittee shall maintain monthly records of the specifications of the blended ethanol loaded out to truck and rail.

(d) To document the compliance status with Condition D.5.7, the Permittee shall maintain records of temperature or other parameters sufficient to demonstrate the presence of a pilot flame when loading racks EU045A and/or EU045B are in operation.

(e) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

D.5.9 Reporting Requirements

A quarterly report of the information to document the compliance status with Condition D.5.1(a) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C – General Reporting contains the Permittee's obligations with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

SECTION D.6 EMISSIONS UNIT OPERATION CONDITIONS – Insignificant Activities

Emissions Unit Description [326 IAC 2-7-5(14)]:

(j) Stationary fire pumps, including one (1) emergency diesel fire pump, identified as EU034, constructed in 2006, with a maximum power rating of 350 horsepower, and exhausting to stack EP006. [326 IAC 2-2]

Under 40 CFR Part 63, Subpart ZZZZ, EU034 is an affected unit.

(k) Other emission units, not regulated by a NESHAP, with PM_{10}, NO_x, and SO_2 emissions less than five (5) pounds per hour or twenty-five (25) pounds per day, CO emissions less than twenty-five (25) pounds per day, VOC emissions less than three (3) pounds per hour or fifteen (15) pounds per day, lead emissions less than six-tenths (0.6) tons per year or three and twenty-nine hundredths (3.29) pounds per day, and emitting greater than one (1) pound per day but less than five (5) pounds per day or one (1) ton per year of a single HAP, or emitting greater than one (1) pound per day but less than twelve and five tenths (12.5) pounds per day or two and five tenths (2.5) ton per year of any combination of HAPs:

(3) One (1) denaturant tank, identified as T003, constructed in 2006, with a maximum capacity of 100,000 gallons. [326 IAC 8-4-3]

Under 40 CFR 60, Subpart Kb, T003 is an affected facility.

(7) One (1) gasoline storage tank, identified as T008, approved for construction in 2010, with a maximum capacity of 350 gallons of gasoline, and exhausting to the atmosphere. [326 IAC 8-4-6][326 IAC 8-4-9]

Under 40 CFR 63, Subpart CCCCCC, T008 is an affected facility.

(10) One (1) biomethanator, identified as EU048, constructed in 2006, controlled by 6.0 MMBtu/hr biomethanator flare CE013, and exhausting to stack EP013. [326 IAC 2-2]

(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.6.1 PSD Minor Limits for CO and NO_x [326 IAC 2-2]

In order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the Permittee shall comply with the following:

(a) The operating hours for the emergency diesel fire pump (EU034) shall not exceed 500 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) The biomethanator flare (CE013) shall not operate when any of the DDGS dryers (EU035 and EU056) are in operation.

Compliance with these CO and NO_x limits, combined with the potential to emit CO and NO_x from other emission units at the source, shall limit the CO and NO_x emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 (PSD) not applicable.

D.6.2 Volatile Organic Compounds (VOC) [326 IAC 8-4-3(d)]

Pursuant to 326 IAC 8-4-3(d) (Petroleum Liquid Storage Facilities), the Permittee shall maintain the following records for a period of two (2) years for tank T003:

(a) The types of volatile petroleum liquid stored;

(b) The maximum true vapor pressure of the liquids as stored; and

(c) The results of the inspections performed on the storage vessels.

The above records shall be made available to the IDEM, OAQ upon written request.

D.6.3 Avoidance Limit for VOC [326 IAC 8-4-6][326 IAC 8-4-9]

In order to render the requirements of 326 IAC 8-4-6 and 326 IAC 8-4-9 not applicable to the storage tank identified as T008, the monthly gasoline throughput from the storage tank shall not exceed 10,000 gallons per month. Compliance with the above limit will render the requirements of 326 IAC 8-4-6 and 326 IAC 8-4-9 not applicable to the storage tank.

D.6.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.6.5 Flare Pilot Flame [326 IAC 8-5-6]

In order to comply with Conditions D.6.1, the Permittee shall monitor the presence of a flare pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame when the biomethanator is in operation.

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

D.6.6 Record Keeping Requirements

(a) To document the compliance status with Condition D.6.1(a), the Permittee shall maintain monthly records of the operating hours for the emergency diesel fire pump (EU034).

(b) To document the compliance status with Condition D.6.2, the Permittee shall maintain the following records for a period of two (2) years for tank T003:

(1) The types of volatile petroleum liquid stored;

(2) The maximum true vapor pressure of the liquids as stored; and

(3) The results of the inspections performed on the storage vessels.

(c) To document the compliance status with Condition D.6.3, the Permittee shall maintain monthly records of the gasoline throughput from the storage tank identified as T008.

(d) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

D.6.7 Reporting Requirements

A quarterly report of the information to document the compliance status with Condition D.6.1(a) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C – General Reporting contains the Permittee's obligations with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a “responsible official,” as defined by 326 IAC 2-7-1(35).

SECTION D.7 EMISSIONS UNIT OPERATION CONDITIONS – Non-Fuel Grade Ethanol

Emissions Unit Description [326 IAC 2-7-5(14)]:

(n) One (1) distillation process, identified as Distillation Process 2, approved in 2013 for construction, with equipment leaks from this process identified as F006, with a maximum throughput rate of 40,000 gallons of 190 proof non-fuel grade ethanol per hour, consisting of the following:

(1) Three (3) distillation columns and seven (7) condensers operating in a close loop.

Under NSPS, Subpart VVa, 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.

(2) Two (2) liquid storage tanks, identified as T013 and T014, each with a maximum capacity of 500,000 gallons.

Under 40 CFR 60, Subpart Kb, T013 and T014 are affected facilities.

(3) Three (3) liquid storage tanks, identified as T015, T016, and T017, each with a maximum capacity of 29,000 gallons. One (1) 10,000 gallon storage tank identified as T018. One (1) liquid storage tank identified as T019, with a capacity of 3,000 gallons, and one mixing tank T020 with a capacity of 500 gallons.

Under 40 CFR 60, Subpart Kb, T015, T016, and T017 are affected facilities.

(4) Two (2) natural gas fired boilers, identified as Boiler #1 (EU081) and Boiler #2 (EU082), each with a maximum heat input rate of 58.8 MMBtu/hr, exhausting uncontrolled to stacks EP020 and EP021, respectively.

Under 40 CFR 60, Subpart Dc, EU081 and EU082 are affected facilities.

(o) One (1) non-fuel grade ethanol loading skid for trucks, identified as EU083, approved in 2013 for construction, with a maximum throughput rate of 1000 gallons per minute. The truck loading process is controlled by the enclosed flare CE019, which is fueled by natural gas and has a maximum heat input capacity of 12.4 MMBtu/hr, and exhausts through stack EP019.

Under NSPS, Subpart VVa, 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.

(p) One (1) non-fuel grade ethanol loading skid for railcars, identified as EU084, approved in 2013 for construction, with a maximum throughput rate of 1667 gallons per minute. The railcar loading process is controlled by the enclosed flare CE019, which is fueled by natural gas and has a maximum heat input capacity of 12.4 MMBtu/hr, and exhausts through stack EP019.

Under NSPS, Subpart VVa, 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.

(q) One (1) distillation process, operating in a closed loop, identified as Distillation Process 3, approved in 2016 for construction, with equipment leaks from this process identified as F007, with a maximum throughput rate of 36,500,000 gallons of 200 proof non-fuel grade ethanol per year, consisting of the following:

(1) One (1) 1,600 gallon feed tank

(2) One (1) distillation column.

(3) Two (2) molecular sieve units

(4) One (1) liquid storage tank, identified as T021, with a maximum capacity of 250,000 gallons.

Under NSPS, Subpart VVa, 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.

(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.7.1 Minor Limits for VOC, CO, NO_x, and HAP [326 IAC 2-2][326 IAC 8-1-6][326 IAC 2-4.1][Clean Air Act, Section 112(a)(1) and (a)(2)]

In order to render the requirements of 326 IAC 2-2 (PSD), 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) and 326 IAC 2-4.1 (MACT) not applicable, the Permittee shall comply with the following emission limits for the loading skids EU083 and EU084:

(a) The potential emissions of cumulative HAPs shall be limited to no more than 3.85 tons per year from Tanks T013 through T017 and shall be limited to any single HAP or combination of these HAPs: benzene, chloroform, dimethyl phthalate, methyl isobutyl ketone, and toluene.

(b) The total combined non-fuel grade ethanol load-out from loading skids EU083 and EU084 shall not exceed 60,000,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.

(c) CO emissions from flare CE019, controlling ethanol loading skids EU083 and EU084, shall not exceed 0.129 lb/kgal.

(d) NO_x emissions from flare CE019, controlling ethanol loading skids EU083 and EU084, shall not exceed 0.077 lb/kgal.

(e) The total combined 200 proof non-fuel grade ethanol load-out from loading skids EU083 and EU084 shall not exceed 36,500,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.

(f) When loading 190 proof non-fuel grade ethanol, VOC emissions from flare CE019, controlling ethanol loading skids EU083 and EU084, shall not exceed 0.00072 lb/kgal.

(g) When loading 200 proof non-fuel grade ethanol, VOC emissions from flare CE019, controlling ethanol loading skids EU083 and EU084, shall not exceed 0.00082 lb/kgal.

Compliance with these VOC, CO, and NO_x limits, combined with the potential to emit VOC, CO, and NO_x from other emission units at the source, shall limit the VOC, CO, and NO_x emissions from the entire source to less than 250 tons per twelve (12) consecutive month period and render 326 IAC 2-2 (PSD) not applicable.

Compliance with the VOC limits shall limit the potential to emit of VOC to less than twenty-five (25) tons per twelve (12) consecutive month period from the loading skids (EU083/EU084) and shall render the requirements of 326 IAC 8-1-6 not applicable to loading skids (EU083/EU084).

Compliance with these HAP limits, combined with the potential to emit HAP from other emission units at the source, shall limit the HAP emissions from the entire source to less than 10 tons per twelve (12) consecutive month period for a single HAP and less than 25 tons per twelve (12) consecutive month period for total HAPs and render 326 IAC 2-4.1 (MACT) not applicable.

D.7.2 Particulate Emissions [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from the 58.8 MMBtu/hr Boiler #1 (EU081) and Boiler #2 (EU082) shall be limited to 0.26 pounds per MMBtu heat input, each.

The limit was calculated using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}} = \frac{1.09}{(117.6)^{0.26}} = 0.32 \text{ lb/MMBtu}$$

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

D.7.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and any control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

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

D.7.4 VOC and HAP Control

In order to comply with Condition D.7.1 for VOC and HAP control:

(a) Enclosed flare CE019 shall be in operation and control emissions from the non-fuel grade ethanol loading skids (EU083 and EU084) at all times when these skids are in operation.

(b) The ethanol loading skids (EU083 and EU084) shall utilize submerged loading method.

(c) The railcars and trucks shall not use vapor balance services.

D.7.5 VOC and HAP

In order to determine compliance with the VOC and HAP emissions limits in Condition D.7.1(a), the VOC and HAP emissions from the tank storage and tank filling of Tanks T013 through T017 shall be calculated using USEPA's TANKS program (version 4.0 or its updates).

D.7.6 Testing Requirements [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.7.1(c), D.7.1(d) and D.7.1(f), the Permittee shall perform VOC (including emission rate and capture efficiency), CO, and NO_x testing of enclosed flare CE019 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).

(b) Not later than 180 days after the startup of distillation process 3, in order to demonstrate compliance with Conditions D.7.1(c), D.7.1(d) and D.7.1(g), the Permittee shall perform VOC (including emission rate and capture efficiency), CO, and NO_x testing of enclosed flare CE019 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 2-7-5(1)][326 IAC 2-7-6(1)]

D.7.7 Flare Pilot Flame

In order to comply with Condition D.7.1, the Permittee shall monitor the presence of a flare pilot flame using a thermocouple or any other equivalent device to detect the presence of a flame when ethanol loading skids EU083 and/or EU084 are in operation.

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

D.7.8 Record Keeping Requirements

(a) To document the compliance status with Condition D.7.1(b), the Permittee shall maintain monthly records of the total amount of non-fuel grade ethanol loaded out from loading racks EU083 and EU084.

(b) To document the compliance status with Condition D.7.7, the Permittee shall maintain records of temperature or other parameters sufficient to demonstrate the presence of a pilot flame when loading skids EU083 and/or EU084 are in operation.

(c) To document the compliance status with Condition D.7.1(e), the Permittee shall maintain monthly records of the total amount of 200 proof non-fuel grade ethanol loaded out from loading racks EU083 and EU084.

(d) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

D.7.9 Reporting Requirements

Quarterly reports of the non-fuel grade ethanol loading to document the compliance status with Conditions D.7.1(b) and D.7.1(e) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C – General Reporting contains the Permittee's obligations with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

SECTION E.1 NSPS

Facility Description [326 IAC 2-7-5(14)]:

(g) One (1) thermal oxidizer with heat recovery steam generator (TO/HRSG) system, identified as CE007, constructed in 2006, with a maximum heat input capacity of 135 MMBtu/hr, using natural gas and process waste gases from the DDGS dryers as fuels, with emissions exhausted through stack EP007.

Under 40 CFR 60, Subpart Db, CE007 is an affected facility.

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

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

E.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart Db.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Ave.
MC61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.1.2 Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units NSPS [40 CFR 60, Subpart Db][326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Db (included as Attachment B to the operating permit) which are incorporated by reference as 326 IAC 12 for the emission unit(s) listed above:

(a) 40 CFR 60.40b;
(b) 40 CFR 60.41b;
(c) 40 CFR 60.44b;
(d) 40 CFR 60.46b;
(e) 40 CFR 60.48b; and
(f) 40 CFR 60.49b.

SECTION E.2 NSPS

Facility Description [326 IAC 2-7-5(14)]:

(n) One (1) distillation process, identified as Distillation Process 2, approved in 2013 for construction, with equipment leaks from this process identified as F006, with a maximum throughput rate of 40,000 gallons of 190 proof non-fuel grade ethanol per hour, consisting of the following:

(2) Two (2) liquid storage tanks, identified as T013 and T014, each with a maximum capacity of 500,000 gallons.

Under 40 CFR 60, Subpart Kb, T013 and T014 are affected facilities.

(3) Three (3) liquid storage tanks, identified as T015, T016, and T017, each with a maximum capacity of 29,000 gallons. One (1) 10,000 gallon storage tank identified as T018. One (1) liquid storage tank identified as T019, with a capacity of 3,000 gallons, and one mixing tank T020 with a capacity of 500 gallons.

Under 40 CFR 60, Subpart Kb, T015, T016, and T017 are affected facilities.

(q) One (1) distillation process, operating in a closed loop, identified as Distillation Process 3, approved in 2016 for construction, with equipment leaks from this process identified as F007, with a maximum throughput rate of 36,500,000 gallons of 200 proof non-fuel grade ethanol per year, consisting of the following:

(4) One (1) liquid storage tank, identified as T021, with a maximum capacity of 250,000 gallons.

Under NSPS, Subpart VVa, 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.

Insignificant Activities

(k) Other emission units, not regulated by a NESHAP, with PM_{10}, NO_x, and SO_2 emissions less than five (5) pounds per hour or twenty-five (25) pounds per day, CO emissions less than twenty-five (25) pounds per day, VOC emissions less than three (3) pounds per hour or fifteen (15) pounds per day, lead emissions less than six-tenths (0.6) tons per year or three and twenty-nine hundredths (3.29) pounds per day, and emitting greater than one (1) pound per day but less than five (5) pounds per day or one (1) ton per year of a single HAP, or emitting greater than one (1) pound per day but less than twelve and five tenths (12.5) pounds per day or two and five tenths (2.5) ton per year of any combination of HAPs:

(1) One (1) 190 proof tank, identified as T001, constructed in 2006, with a maximum capacity of 100,000 gallons.

Under 40 CFR 60, Subpart Kb, T001 is an affected facility.

(2) One (1) 200 proof tank, identified as T002, constructed in 2006, with a maximum capacity of 100,000 gallons.

Under 40 CFR 60, Subpart Kb, T002 is an affected facility.

(3) One (1) denaturant tank, identified as T003, constructed in 2006, with a maximum

capacity of 100,000 gallons. [326 IAC 8-4-3]

Under 40 CFR 60, Subpart Kb, T003 is an affected facility.

(4) Two (2) denatured ethanol tanks, identified as T004 and T005, constructed in 2006, each with a maximum capacity of 750,000 gallons.

Under 40 CFR 60, Subpart Kb, T004 and T005 are affected facilities.

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

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

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

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart Kb.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Ave.
MC61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.2.2 Standards of Performance for Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced after July 23, 1984 NSPS [40 CFR 60, Subpart Kb] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Kb (included as Attachment C to the operating permit) which are incorporated by reference as 326 IAC 12 for the emission unit(s) listed above:

(a) 40 CFR 60.110b (a), (b), (d)(2), (d)(3), (d)(7), (d)(8), (e)(1)(i), (e)(2), (e)(3);
(b) 40 CFR 60.111b;
(c) 40 CFR 60.112b(a)(1);
(d) 40 CFR 60.113b(a);
(e) 40 CFR 60.115b(a);
(f) 40 CFR 60.116b(a), (b), (c), (e) ; and
(g) 40 CFR 60.117b.

SECTION E.3 NSPS

Facility Description [326 IAC 2-7-5(14)]:

(f) One (1) fermentation process, constructed in 2006, with a maximum throughput rate of 7,266 gallons of ethanol per hour, controlled by CO_2 wet scrubbers CE005 (vented to stack EP005) and CE010 (vented to stack EP010), and consisting of the following:

(1) Four (4) fermenters, identified as EU016, EU017, EU018, and EU019.

(2) One (1) beer well, identified as EU020.

Under NSPS, Subpart VVa, 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.

(h) One (1) distillation process, identified as Distillation Process 1, constructed in 2006, with equipment leaks from this process identified as F003, with a maximum throughput rate of 7,266 gallons of fuel grade ethanol per hour, controlled by TO/HRSG system CE007, exhausting through stack EP007, and consisting of the following:

(1) One (1) slurry mixer, identified as EU049.

(2) One (1) slurry tank, identified as EU050.

(3) Two (2) liquefaction tanks, identified as EU014 and EU051, each with a maximum capacity of 7,000 gallons per hour.

(4) One (1) cook tube, identified as EU052.

(5) One (1) flash tank, identified as EU053.

(6) One (1) yeast tank, identified as EU015.

(7) One (1) 190 proof condenser, identified as EU054.

(8) One (1) 200 proof condenser, identified as EU055.

(9) One (1) beer stripper, identified as EU021.

(10) One (1) side stripper, identified as EU022.

(11) One (1) rectifier, identified as EU023.

(12) Molecular sieve units, identified as EU024.

(13) Eight (8) evaporators, identified as EU025.

(14) Four (4) centrifuges, identified as EU026 through EU029. One (1) centrifuge, identified as EU069, approved for construction in 2010.

Under NSPS, Subpart VVa, 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.

(l) One (1) ethanol loading rack for trucks, identified as EU045A, constructed in 2006, with a maximum throughput rate of 800 gallons per minute. The truck loading process is controlled by the enclosed flare CE019, which is fueled by natural gas and has a maximum heat input capacity of 12.4 MMBtu/hr, and exhausts through stack EP019.

Under NSPS, Subpart VVa, 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.

(m) One (1) ethanol loading rack for railcars, identified as EU045B, constructed in 2006, with a maximum throughput rate of 1000 gallons per minute. The railcar loading process is controlled by the enclosed flare CE019, which is fueled by natural gas and has a maximum heat input capacity of 12.4 MMBtu/hr, and exhausts through stack EP019.

Under NSPS, Subpart VVa, 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.

(n) One (1) distillation process, identified as Distillation Process 2, approved in 2013 for construction, with equipment leaks from this process identified as F006, with a maximum throughput rate of 40,000 gallons of 190 proof non-fuel grade ethanol per hour, consisting of the following:

(1) Three (3) distillation columns and seven (7) condensers operating in a close loop.

Under NSPS, Subpart VVa, 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.

(o) One (1) non-fuel grade ethanol loading skid for trucks, identified as EU083, approved in 2013 for construction, with a maximum throughput rate of 1000 gallons per minute. The truck loading process is controlled by the enclosed flare CE019, which is fueled by natural gas and has a maximum heat input capacity of 12.4 MMBtu/hr, and exhausts through stack EP019.

Under NSPS, Subpart VVa, 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.

(p) One (1) non-fuel grade ethanol loading skid for railcars, identified as EU084, approved in 2013 for construction, with a maximum throughput rate of 1667 gallons per minute. The railcar loading process is controlled by the enclosed flare CE019, which is fueled by natural gas and has a maximum heat input capacity of 12.4 MMBtu/hr, and exhausts through stack EP019.

Under NSPS, Subpart VVa, 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.

(q) One (1) distillation process, operating in a closed loop, identified as Distillation Process 3, approved in 2016 for construction, with equipment leaks from this process identified as F007, with a maximum throughput rate of 36,500,000 gallons of 200 proof non-fuel grade ethanol per year, consisting of the following:

(1) One (1) 1,600 gallon feed tank

(2) One (1) distillation column.

(3) Two (2) molecular sieve units

(4) One (1) liquid storage tank, identified as T021, with a maximum capacity of 250,000 gallons.

Under NSPS, Subpart VVa, 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.

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

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

E.3.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart VVa.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Ave.
MC61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.3.2 Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 NSPS [40 CFR 60, Subpart VVa][326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart VVa (included as Attachment D to the operating permit) which are incorporated by reference as 326 IAC 12 for the sources of equipment leaks of VOC emission unit(s) listed above:

(a) 40 CFR 60.480a;
(b) 40 CFR 60.481a;
(c) 40 CFR 60.482-1a;
(d) 40 CFR 60.482-2a;
(e) 40 CFR 60.482-3a;
(f) 40 CFR 60.482-4a;
(g) 40 CFR 60.482-5a;
(h) 40 CFR 60.482-6a;
(i) 40 CFR 60.482-7a;
(j) 40 CFR 60.482-8a;
(k) 40 CFR 60.482-9a;
(l) 40 CFR 60.482-10a;
(m) 40 CFR 60.482-11a;
(n) 40 CFR 60.483-1a;
(o) 40 CFR 60.483-2a;
(p) 40 CFR 60.484a;
(q) 40 CFR 60.485a;
(r) 40 CFR 60.486a;

(s) 40 CFR 60.487a;
(t) 40 CFR 60.488a; and
(u) 40 CFR 60.489a.

SECTION E.4 NESHAP

Facility Description [326 IAC 2-7-5(14)]:

Insignificant Activities

(j) Stationary fire pumps, including one (1) emergency diesel fire pump, identified as EU034, constructed in 2006, with a maximum power rating of 350 horsepower, and exhausting to stack EP006. [326 IAC 2-2]

Under 40 CFR Part 63, Subpart ZZZZ, EU034 is an affected unit.

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

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

E.4.1 General Provisions Relating to National Emissions Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-82][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1, 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, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart ZZZZ.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

E.4.2 National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines NESHAP [40 CFR Part 63, Subpart ZZZZ] [326 IAC 20-82]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment E to the operating permit) which are incorporated by reference as 326 IAC 20-82 for the emission unit(s) listed above:

(a) 40 CFR 63.6580;
(b) 40 CFR 63.6585(a), (c), (d);
(c) 40 CFR 63.6590(a)(1)(iii), (a)(1)(iv);
(d) 40 CFR 63.6595(a)(1), (b), (c);
(e) 40 CFR 63.6603;
(f) 40 CFR 63.6605;
(g) 40 CFR 63.6625(e)(3), (f), (h), (i);
(h) 40 CFR 63.6635;
(i) 40 CFR 63.6640;
(j) 40 CFR 63.6645(a)(5);
(k) 40 CFR 63.6650;
(l) 40 CFR 63.6655;
(m) 40 CFR 63.6660;
(n) 40 CFR 63.6665;
(o) 40 CFR 63.6670;

(p) 40 CFR 63.6675;
(q) Table 2d (item 4);
(r) Table 6 (item 9); and
(s) Table 8.

SECTION E.5 NESHAP

Facility Description [326 IAC 2-7-5(14)]:

Insignificant Activities

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

(7) One (1) gasoline storage tank, identified as T008, approved for construction in 2010, with a maximum capacity of 350 gallons of gasoline, and exhausting to the atmosphere.

Under 40 CFR 63, Subpart CCCCCC, T008 is an affected facility.

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

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

E.5.1 General Provisions Relating to National Emissions Standards for Hazardous Air Pollutants under 40 CFR Part 63 [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart CCCCCC.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports to:

United States Environmental Protection Agency, Region 5
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

E.5.2 National Emissions Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities NESHAP [40 CFR Part 63, Subpart CCCCCC]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart CCCCCC (included as Attachment F to the operating permit) for the emission unit(s) listed above:

(a) 40 CFR 63.11110;
(b) 40 CFR 63.11111(a), (b), (e), (h), (i), (j);
(c) 40 CFR 63.11112(a), (d);
(d) 40 CFR 63.11113(b), (c);
(e) 40 CFR 63.11115;
(f) 40 CFR 63.11116;
(g) 40 CFR 63.11125(d);
(h) 40 CFR 63.11126(b);
(i) 40 CFR 63.11130;

(j) 40 CFR 63.11131; and
(k) 40 CFR 63.11132.

SECTION E.6 NSPS

Facility Description [326 IAC 2-7-5(14)]:

(n) One (1) distillation process, identified as Distillation Process 2, approved in 2013 for construction, with equipment leaks from this process identified as F006, with a maximum throughput rate of 40,000 gallons of 190 proof non-fuel grade ethanol per hour, consisting of the following:

(4) Two (2) natural gas fired boilers, identified as Boiler #1 (EU081) and Boiler #2 (EU082), each with a maximum heat input rate of 58.8 MMBtu/hr, exhausting uncontrolled to stacks EP020 and EP021, respectively.

Under 40 CFR 60, Subpart Dc, EU081 and EU082 are affected facilities.

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

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

E.6.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1, for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart Dc.

(b) Pursuant to 40 CFR 60.4, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Ave.
MC61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.6.2 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units NSPS [40 CFR 60, Subpart Dc][326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Dc (included as Attachment G to the operating permit) which are incorporated by reference as 326 IAC 12 for the emission unit(s) listed above:

(a) 40 CFR 60.40c(a), (b), (c), (d);
(b) 40 CFR 60.41c; and
(c) 40 CFR 60.48c(a), (f)(4), (g), (i), (j).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Central Indiana Ethanol, LLC
Source Address: 2955 West Delphi Pike, Marion, Indiana 46952
Part 70 Permit No.: T053-32070-00062

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 AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Central Indiana Ethanol, LLC
Source Address: 2955 West Delphi Pike, Marion, Indiana 46952
Part 70 Permit No.: T053-32070-00062

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**) daytime 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
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: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Central Indiana Ethanol, LLC
Source Address: 2955 West Delphi Pike, Marion, Indiana 46952
Part 70 Permit No.: T053-32070-00062
Facility: Loading Racks (EU083 and EU084)
Parameter: Total combined non-fuel grade ethanol loadout rate
Limit: The total combined non-fuel grade ethanol load-out from loading skids EU083 and EU084 shall not exceed 60,000,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.

Quarter: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Central Indiana Ethanol, LLC.
Source Address: 2955 W. Delphi Pike, Marion, Indiana 46952
Part 70 Permit No.: T053-32070-00062
Facility: DDGS Cooler (EU036)
Parameter: DDGS Production Rate
Limit: The total DDGS produced shall not exceed 210,000 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

Quarter: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Central Indiana Ethanol, LLC.
Source Address: 2955 W. Delphi Pike, Marion, Indiana 46952
Part 70 Permit No.: T053-32070-00062
Facility: Ethanol Loading Racks (EU045A and EU045B)
Parameter: Total combined denatured ethanol and blended ethanol loadout rate
Limit: The total combined denatured ethanol and blended ethanol load-out from loading racks EU045A and EU045B shall not exceed 64,900,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.

Quarter: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Central Indiana Ethanol, LLC.
Source Address: 2955 W. Delphi Pike, Marion, Indiana 46952
Part 70 Permit No.: T053-32070-00062
Facility: Ethanol Loading Racks (EU045A and EU045B)
Parameter: Total denaturant used
Limit: The total denaturant used at the loading racks EU045A and EU045B shall not exceed 4,900,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.

Quarter: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Central Indiana Ethanol, LLC.
Source Address: 2955 W. Delphi Pike, Marion, Indiana 46952
Part 70 Permit No.: T053-32070-00062
Facility: Emergency Diesel Fire Pump (EU034)
Parameter: Operating Hours
Limit: The operating hours for the emergency diesel fire pump (EU034) shall not exceed 500 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

Quarter: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:_____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Central Indiana Ethanol, LLC
Source Address: 2955 West Delphi Pike, Marion, Indiana 46952
Part 70 Permit No.: T053-32070-00062
Facility: Loading Racks (EU083 and EU084)
Parameter: Total combined 200 proof non-fuel grade ethanol loadout rate
Limit: The total combined 200 proof non-fuel grade ethanol load-out from loading skids EU083 and EU084 shall not exceed 36,500,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.

Quarter: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Central Indiana Ethanol, LLC
Source Address: 2955 West Delphi Pike, Marion, Indiana 46952
Part 70 Permit No.: T053-32070-00062

Months: _____ to _____ Year: _____

This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting. Any deviation from the requirements of this permit, 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: _____

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a Part 70
Minor Source Modification and Significant Permit Modification

Source Description and Location

Source Name:	Central Indiana Ethanol, LLC
Source Location:	2955 West Delphi Pike, Marion, IN 46952
County:	Grant
SIC Code:	2869 (Industrial Organic Chemicals, Not Elsewhere Classified)
Operation Permit No.:	T 053-32070-00062
Operation Permit Issuance Date:	August 19, 2013
Minor Source Modification No.:	053-36973-00062
Significant Permit Modification No.:	053-36781-00062
Permit Reviewer:	Heath Hartley

Source Definition

The Central Indiana Ethanol (CIE) plant (source number 053-00062) sells carbon dioxide (CO2), a byproduct of its ethanol production, to the Air Products plant. The Air Products plant processes the CO2 into a marketable product. The Air Products leases property next to the CIE plant.

IDEM, OAQ has examined whether these two plants should be considered one “major source” as defined at 326 IAC 2-7-1(22). In order for two plants to be considered one major source, they must meet all three of the following criteria:

(1) the plants must be under common ownership or common control;

(2) the plants must have the same two-digit Standard Industrial Classification (SIC) Code or one must serve as a support facility for the other; and,

(3) the plants must be located on contiguous or adjacent properties.

The CIE plant is owned by Central Indiana Ethanol, LLC. The Air Products plant is owned by Air Products Incorporated. The two companies do not have common directors on their board of directors and they do not have any corporate officers in common. There is no common ownership between the two plants.

Where there is no common ownership, IDEM, OAQ must determine if there is common control. All Part 70 permits issued by IDEM, OAQ are subject to review by U.S. EPA. U.S. EPA may object to any permit that does not meet its standards. U.S. EPA has set a standard to determine if common control exists between two plants. U.S. EPA’s standard relies on an examination of who has the power to manage the pollution-emitting activities of the plants, including the power to make or veto decisions to control emissions or to influence production levels or compliance with environmental regulations. Each determination is done on a case by case basis, based on the facts presented. A January 10, 2012 letter from U.S. EPA Region III to the Virginia Department of Environmental Quality examining the relationship between a new power plant, GPC and an existing landfill, Suffolk Energy Partners, illustrates how a review is done under this standard. This letter is available at http://www.epa.gov/region07/air/title5/t5memos/gpc2012.pdf on the Internet.

In this letter U.S. EPA states, in footnote 5:

> The phrase "common control" is not defined in the Clean Air Act, or in EPA's regulations that pertain to Title V or PSD. In an early NSR rulemaking, however, EPA rejected a simplified test of control based on some specified voting share, instead stating that "[c]ontrol can be a difficult

> factual determination, involving the power of one business entity to affect the construction decisions or pollution control decisions of another business entity" and further explained that EPA would "be guided by the general definition of control used by the Securities and Exchange Commission, [in which] control 'means the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person (or organization or association) whether through the ownership of voting shares, contract, or otherwise.'" 45 Fed. Reg. 59874, 59878 (September 11, 1980) (quoting 17 C.F.R. § 210.1-02(g)). This definition is echoed in other Securities and Exchange Commission regulations, such as in 17 C.F.R. § 230.405, which defines "control" as including the term "under common control with" and as meaning "the possession, direct or indirect, of the power to direct or cause the direction of the management and policies of a person, whether through the ownership of voting securities, by contract, or otherwise." See also 17 C.F.R. § 240.12b-2. See also August 2, 1996 Memorandum from John S. Seitz, Office of Air Quality Planning and Standards, Major Source Determinations for Military Installations under the Air Toxics, New Source Review, and Title V Operating Permit Programs of the Clean Air Act; May 11, 2009 Letter from Ronald J. Borsellino, Acting Director, Division of Environmental Planning and Protection, U.S. EPA Region 2, to Scott Salisbury, President, Manchester Renewable Power Corp./LES and Lawrence C. Hesse, President, Ocean County Landfill Corp.; and July 8, 2004 Letter from Jane M. Kenny, Regional Administrator, U.S. EPA Region 2, to Erin M. Crotty, Commissioner, New York State Department of Environmental Conservation, "Re: EPA's Review of Proposed Permit for AI Turi Landfill, Permit ID: 3-3330-00002/00039, Mod 1.4

In the case of the landfill and the power plant, U.S. EPA found that the parties' agreement called for the landfill to sell all of its methane gas to the power plant, and for the power plant to buy all the landfill gas. Based on this agreement, as well as the dependency of the power plant on the landfill for its only fuel, U.S. EPA concluded that they were under common control.

U.S. EPA Region 5 referenced this same standard for determining common control in its July 15, 1997 letter to Robert Hodanbosi of Ohio EPA regarding the common control of Stein, Inc. and Allega, Inc. by LTV Steel. This letter can be found at http://www.epa.gov/region07/air/title5/t5memos/ardcorre.pdf on the Internet.

Air Products has an agreement with CIE to purchase CIE's CO2. Each plant is responsible for its own air quality control requirements. CIE can control the amount of CO2 that Air Products will receive. This gives the CIE plant the power to control the amount of marketable CO2 that the Air Products plant can produce. The Air Products plant has no other source of raw CO2. The Air Products plant depends on the CIE plant as its sole source of CO2. If the CIE plant were to shut down or stop selling its CO2 to the Air Products plant, the Air Products plant would have to stop production completely. Since the Air Products plant is totally reliant on the CIE plant for its sole raw material, the CIE plant can exert control over the Air Products plant's production levels. Following U.S. EPA's criteria, IDEM, OAQ finds that the two plants are under common control, meeting the first part of the major source definition.

The SIC Code Manual of 1987 sets out how to determine the proper SIC Code for each type of business. More information about SIC Codes is available at https://www.osha.gov/pls/imis/sic_manual.html on the Internet. Both the CIE plant and the Air Products plant have the two-digit SIC Code 28 for the Major Group Chemicals and Allied Products.

A plant is a support facility to another plant if it dedicates 50% or more of its output to another plant. The CIE plant sends less than 50% of its total output to the Air Products plant. The Air Products plant provides 0% of its output, its work, to the CIE plant. The plants do not have a support relationship. However, since the plants have the same two-digit SIC Code, the second part of the major source definition is met.

The two plants are located on properties that share a common border. The plant properties are contiguous, meeting the third element of the major source definition. The CIE plant and the Air Products plant meet all three parts of the major source definition. Therefore, IDEM, OAQ has determined that the two plants are part of the same major source.

This determination was made in TVOP T053-32070-00062, issued on August 19, 2013.

Existing Approvals

The source was issued Part 70 Operating Permit No. 053-32070-00062 on August 19, 2013. The source has since received the following approvals:

(a) Significant Source Modification No. 053-35637-00062, issued on October 26, 2015; and
(b) Significant Permit Modification No. 053-35650-00062, issued on November 10, 2015.

County Attainment Status

The source is located in Grant County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective July 20, 2012, for the 8-hour ozone standard.[1]
$PM_{2.5}$	Unclassifiable or attainment effective April 5, 2005, for the annual $PM_{2.5}$ standard.
$PM_{2.5}$	Unclassifiable or attainment effective December 13, 2009, for the 24-hour $PM_{2.5}$ standard.
PM_{10}	Unclassifiable effective November 15, 1990.
NO_2	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.

[1]Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.

(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. Grant 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) $PM_{2.5}$
Grant County has been classified as attainment for $PM_{2.5}$. Therefore, direct $PM_{2.5}$, SO_2, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(c) Other Criteria Pollutants
Grant County has been classified as attainment or unclassifiable in Indiana for all criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

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, the fugitive emissions from ethanol production facilities are not counted toward determination of PSD, Emission Offset, and Part 70 Permit applicability.

Source Status - Existing Source

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 (ton/yr)
PM	< 250
PM_{10}	< 250
$PM_{2.5}$	< 250
SO_2	< 250
NO_X	< 250
VOC	< 250
CO	< 250
Single HAP	< 10
Total HAPs	< 25

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHGs emissions to determine operating permit applicability or PSD applicability to a source or modification.

(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant, excluding GHGs, is emitted at a rate of two hundred fifty (250) tons per year or more 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 not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Central Indiana Ethanol, LLC on January 29, 2015, relating to adding alternative operating conditions for the fermentation scrubbers during plant shutdown. These changes to the permit are considered Title I changes.

Central Indiana Ethanol, LLC, submitted a modification application on March 18, 2016, requesting to add a new tank (T021) and a new distillation process to produce 200 proof high grade non-fuel grade ethanol. The following is a list of the proposed emission units:

(a) One (1) distillation process, operating in a closed loop, identified as Distillation Process 3, approved in 2016 for construction, with equipment leaks from this process identified as F007, with a maximum throughput rate of 36,500 kgallons of 200 proof non-fuel grade ethanol per year, consisting of the following:

(1) One (1) 1,600 gallon feed tank

(2) One (1) distillation column.

(3) Two (2) molecular sieve units

(4) One (1) liquid storage tank, identified as T021, with a maximum capacity of 250,000 gallons.

Under NSPS, Subpart VVa, 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.

Enforcement Issues

The Permittee should have sent an application within 60 days of IDEM's receipt of the test report, pursuant to Agreed Order issued October 30, 2014. The test report was submitted to IDEM on June 26, 2015. The application for this modification, however, was not submitted until November 23, 2015.

IDEM is reviewing this matter and will take the appropriate action.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Permit Level Determination – Part 70 Modification to an Existing Source

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."

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit. If the control equipment has been determined to be integral, the table reflects the PTE after consideration of the integral control device.

Increase in PTE Before Controls of the Modification	
Pollutant	**Potential To Emit** (ton/yr)
PM	-
PM_{10}	-
$PM_{2.5}$	-
SO_2	-
VOC	16.8
CO	-
NO_X	-
Single HAPs - Hexane	0.8
Total HAPs	1.2

Appendix A of this TSD reflects the unrestricted potential emissions of the modification.

This source modification is subject to 326 IAC 2-7-10.5(e)(1), because the increase in potential to emit (PTE) of the modification is greater than 10 tons per year of VOC and less than 25 tons per year. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a Significant Permit Modification under 326 IAC 2-7-12(d), because significant changes to monitoring and record keeping are being added to the permit.

Permit Level Determination – PSD and Emission Offset

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 New Source Review Permit, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Project Emissions (ton/yr)						
Process / Emission Unit	**PM**	**PM_{10}**	**$PM_{2.5}$***	**SO_2**	**NO_X**	**VOC**	**CO**
Distillation Process 3 (Leaks F007)	-	-	-	-	-	1.62	-
Tank 021	-	-	-	-	-	0.13	-
Increase to loading skids (EU083 & EU084)	-	-	-	-	-	0.00	-
Total for Modification	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.75**	**0.00**
PSD Major Source Thresholds	250	250	250	250	250	250	250

*$PM_{2.5}$ listed is direct $PM_{2.5}$.

(a) On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court's decision. U.S. EPA's guidance states that U.S. EPA will no longer require PSD or Title V permits for sources "previously classified as 'Major' based solely on greenhouse gas emissions."

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHGs emissions to determine operating permit applicability or PSD applicability to a source or modification.

(b) This modification to an existing minor PSD stationary source is not major because the emissions increase of each PSD regulated pollutant are less than the PSD major source thresholds. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability Determination

The following federal rules are applicable to the source modification:

NSPS:

(a) Tank T021 is subject to the New Source Performance Standards for Volatile Organic Liquid Storage Vessels for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 CFR 60, Subpart Kb, which is incorporated by reference as 326 IAC 12, because it

has capacity greater than 75 cubic meters (19,813 gallons) and will be used to store volatile organic liquids.

Tank T021 is subject to the following portions of 40 CFR 60, Subpart Kb:

(1) 40 CFR 60.110b(a), (b), (d)(2), (d)(3), (d)(7), (d)(8), (e)(1)(i), (e)(2), (e)(3);
(2) 40 CFR 60.111b;
(3) 40 CFR 60.112b(a)(1);
(4) 40 CFR 60.113b(a);
(5) 40 CFR 60.115b(a);
(6) 40 CFR 60.116b(a), (b), (c), (e); and
(7) 40 CFR 60.117b.

(b) Ethanol is one of the chemicals listed in 40 CFR 60.489. Therefore, this ethanol production plant is subject to the requirements of Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 (40 CFR 60.480a, Subpart VVa). By complying with the provisions of NSPS VVa, the source is satisfying the requirements of NSPS VV for those affected units for which construction, reconstruction, or modification commenced after January 5, 1981, and on or before November 7, 2006. The new distillation process 3 will also be subject to the requirements of 40 CFR 60, Subpart VVa.

The units subject to this rule include the following:

(q) One (1) distillation process, operating in a closed loop, identified as Distillation Process 3, approved in 2016 for construction, with equipment leaks from this process identified as F007, with a maximum throughput rate of 36,500,000 gallons of 200 proof non-fuel grade ethanol per year, consisting of the following:

(1) One (1) 1,600 gallon feed tank

(2) One (1) distillation column.

(3) Two (2) molecular sieve units

(4) One (1) liquid storage tank, identified as T021, with a maximum capacity of 250,000 gallons.

Under NSPS, Subpart VVa, 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.

These facilities are subject to the following portions of 40 CFR 60, Subpart VVa:

(1) 40 CFR 60.480a(a), (b), (c), (d);
(2) 40 CFR 60.481a;
(3) 40 CFR 60.482-1a;
(4) 40 CFR 60.482-2a;
(5) 40 CFR 60.482-3a;
(6) 40 CFR 60.482-4a;
(7) 40 CFR 60.482-5a;
(8) 40 CFR 60.482-6a;
(9) 40 CFR 60.482-7a;
(10) 40 CFR 60.482-8a;
(11) 40 CFR 60.482-9a;
(12) 40 CFR 60.482-10a;
(13) 40 CFR 60.482-11a;
(14) 40 CFR 60.483-1a;
(15) 40 CFR 60.483-2a;

(16) 40 CFR 60.484a;
(17) 40 CFR 60.485a;
(18) 40 CFR 60.486a;
(19) 40 CFR 60.487a;
(20) 40 CFR 60.488a; and
(21) 40 CFR 60.489a.

(c) Ethanol is one of the chemicals listed in 40 CFR 60.667 of Subpart NNN, however, according to the EPA memo from Mr. George T. Czerniak dated December 6, 2002, the manufacture of ethanol using a fermentation process (biological synthesis) was excluded from the scope of NSPS, Subpart NNN. Therefore, the requirements of the New Source Performance Standards for Volatile Organic Compound (VOC) Emissions From Synthetic Organic Chemical Manufacturing Industry (SOCMI) Distillation Operations (40 CFR 60, Subpart NNN) are not included in this permit for the proposed distillation process 3 at this ethanol production plant.

NESHAP:

(a) The requirements of the following NESHAPs under 40 CFR Part 63 are not included in the permit:

(1) NESHAP from the Synthetic Organic Chemical Manufacturing Industry (40 CFR 63.100, Subpart F); and
(2) NESHAP from the Synthetic Organic Chemical Manufacturing Industry for Process Vents, Storage Vessels, Transfer Operations, and Wastewater (40 CFR 63.110, Subpart G).

To be subject to the requirements of these NESHAPs, this source must consist of chemical manufacturing process units that meet all of the criteria in 40 CFR 63.100(b)(1), (b)(2), and (b)(3). Since this source only produces ethanol, which is not one of the chemicals listed in Table 1 of 40 CFR 63, Subpart F or listed in 40 CFR 63.100(b)(1)(i) and (b)(1)(ii), this source is not subject to the requirements of these NESHAPs.

(b) The requirements of National Emission Standards for Organic Hazardous Air Pollutants for Equipment Leaks 40 CFR 63, Subpart H are not included in this permit because the source is not subject to a specific subpart in 40 CFR 63 that references Subpart H.

(c) The requirements of National Emission Standards for Organic Hazardous Air Pollutants for Certain Processes Subject to the Negotiated Regulation for Equipment Leaks 40 CFR 63, Subpart I, are not included in this permit because this source does not operate one of the processes listed in 40 CFR 63.190(b)(1)-(6), nor is it a major source of HAP emissions.

(d) The requirements of the National Emissions Standards for Tanks - Level 1 (40 CFR 63.900, Subpart OO) are not included in this permit because there are no subparts of 40 CFR 60, 61, or 63 applicable to this source that reference Subpart OO.

(e) The requirements of the National Emissions Standards for Closed Vent Systems, Control Devices, Recovery Devices and Routing to a Fuel Gas System or a Process (40 CFR 63.980, Subpart SS) are not included in this permit because there are no subparts of 40 CFR 60, 61, or 63 applicable to this source that reference Subpart SS.

(f) The requirements of the National Emissions Standards for Equipment Leaks - Control Level 1 (40 CFR 63.1000, Subpart TT) are not included in this permit because there are no subparts of 40 CFR 60, 61, or 63 applicable to this source that reference Subpart TT.

(g) The requirements of the National Emissions Standards for Equipment Leaks - Control Level 2 (40 CFR 63.1019, Subpart UU) are not included in this permit because there are no subparts of 40 CFR 60, 61, or 63 applicable to this source that reference Subpart UU.

(h) The requirements of the National Emissions Standards for Storage Vessels (Tanks) - Control Level 2 (40 CFR 63.1060, Subpart WW) are not included in this permit because there are no subparts of 40 CFR 60, 61, or 63 applicable to this source that reference Subpart WW.

CAM:

CAM Applicability Analysis							
Emission Unit	**Control Device Used**	**Emission Limitation** (Y/N)	**Uncontrolled PTE** (ton/yr)	**Controlled PTE** (ton/yr)	**Part 70 Major Source Threshold** (ton/yr)	**CAM Applicable** (Y/N)	**Large Unit** (Y/N)
Equipment Leaks - Non-Fuel Grade Distillation Process 3	Yes	N	7.6	1.6	100	N	N
Loading skids (EU083 & EU084)	Flare CE-019	Y	<100	<100	100	N	N

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the new or modified units as part of this modification.

State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

326 IAC 2-2 and 2-3 (PSD and Emission Offset)
PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

326 IAC 2-7-6(5) (Annual Compliance Cerification)
The U.S. EPA Federal Register 79 FR 54978 notice does not exempt Title V Permittees from the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D), but the submittal of the Title V annual compliance certification to IDEM satisfies the requirement to submit the Title V annual compliance certifications to EPA. IDEM does not intend to revise any permits since the requirements of 40 CFR 70.6(c)(5)(iv) or 326 IAC 2-7-6(5)(D) still apply, but Permittees can note on their Title V annual compliance certification that submission to IDEM has satisfied reporting to EPA per Federal Register 79 FR 54978. This only applies to Title V Permittees and Title V compliance certifications.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The operation of this source after this modification will continue to limit emissions to 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.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements (BACT))
The provisions of 326 IAC 8-1-6 are applicable to new facilities, as of January 1, 1980, that have potential VOC emissions of twenty-five (25) tons or more per year, are located anywhere in the state, and that are not otherwise regulated by another provision in 326 IAC 8, 326 IAC 20-48, or 326 IAC 20-56.

- The potential VOC emissions from distillation process 3 are less than 25 tons per year; therefore, 326 IAC 8-1-6 is not applicable to this unit.
- The potential VOC emissions from tank 021 are less than 25 tons per year; therefore, 326 IAC 8-1-6 is not applicable to this unit.
- The potential VOC emissions from the loading skids (EU083 and EU084) are greater than 25 tons per year. However, the source has taken limits to keep VOC emissions to less than 25 tons per year, in order to render the requirements of 326 IAC 8-1-6 not applicable to this unit.

326 IAC 8-4-3 (Petroleum Liquid Storage Facilities)

Tanks T021 and feed tank will not be used to store petroleum liquid; they will store denatured ethanol. Therefore, these tanks are not subject to the requirements of 326 IAC 8-4-3.

326 IAC 8-5-6 (Fuel Grade Ethanol Production at Dry Mills)
Since the proposed distillation process 3 will only produce non-fuel grade ethanol, the requirements of 326 IAC 8-5-6 do not apply to this process.

326 IAC 8-9-4 (Volatile Organic Liquid Storage Vessels)
This rule only applies to sources located in Clark, Floyd, Lake or Porter Counties. The source is not located in one of these counties; therefore, the tanks are not subject to this rule.

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.

Changes to the compliance determination and monitoring requirements are detailed in the Proposed Changes section of this document.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T053-32070-00062. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Revisions:

1. The emission units descriptions in sections A.3, D.3, D.7, E.2, E.3, and E.6 have been revised to add the proposed Distillation Process 3, and to update the descriptions of the Distillation Process 1 and Distillation Process 2.

2. Condition D.2.8 - Scrubber Monitoring - Alternative Operating Scenario and Condition D.2.10 - Record Keeping Requirements have been updated to include monitoring requirements for the scrubbers CE005 and CE010 under the proposed Alternative Operating Scenario and the associated recordkeeping requirements.

3. Condition D.7.1 - PSD minor limits and VOC minor limits have been added for the loading of 200 proof non-fuel grade ethanol and for loading of the 190 proof non-fuel grade ethanol at the existing loading skids.

4. Testing requirements were added to D.7.6 for the loading of denatured 200 proof non-fuel grade ethanol at the existing loading skids.

5. Record keeping and reporting requirements have been added to D.7.8 and D.7.9, respectively.

6. A new reporting form has been added for the denatured 200 proof non-fuel grade loading throughput limit.

A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

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

.....

(h) One (1) distillation process, **identified as Distillation Process 1,** constructed in 2006, **with equipment leaks from this process identified as F003,** with a maximum throughput rate of 7,266 gallons of **fuel grade** ethanol per hour, controlled by TO/HRSG system CE007, exhausting through stack EP007, and consisting of the following:

.....

(n) One (1) distillation process, **identified as Distillation Process 2,** approved in 2013 for construction, **with equipment leaks from this process identified as F006,** with a maximum throughput rate of 40,000 gallons of **190 proof** non-fuel grade ethanol per hour, consisting of the following:

.....

(q) One (1) distillation process, operating in a closed loop, identified as Distillation Process 3, approved in 2016 for construction, with equipment leaks from this process identified as F007, with a maximum throughput rate of 36,500,000 gallons of 200 proof non-fuel grade ethanol per year, consisting of the following:

(1) One (1) 1,600 gallon feed tank

(2) One (1) distillation column.

(3) Two (2) molecular sieve units

(4) One (1) liquid storage tank, identified as T021, with a maximum capacity of 250,000 gallons.

Under NSPS, Subpart VVa, 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.

.....

D.2.8 Scrubber Monitoring - Alternative Operating Scenario [326 IAC 8-5-6]

(a) During periods of decreased operation in preparation for facility shut down, the Permittee shall monitor and record the following parameters once per hour to ensure they meet the values in the table below:

Unit	Hours After the Mash Feed Rate Reaches Zero (hr)	Minimum Flow Rate (gpm)	Minimum Ammonium Bisullfite Addition Rate (mL/min)
CE005	24	14.5	32
	36	9.3	0
	41.5	0	0

CE010	**24**	**8.5**	**12**
	36	**5.6**	**0**
	41.5	**0**	**0**

(b) When for any one reading, the flow rate is below the above mentioned minimum, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

D.2.~~8~~**9** Scrubber Failure Detection

In the event that a scrubber malfunction has been observed:

.....

D.2.~~9~~**10** Record Keeping Requirements [326 IAC 8-5-6]

.....

(c) To document the compliance status with Condition D.2.8 and 326 IAC 8-5-6, the Permittee shall maintain hourly records of the flow rate, ammonium bisulfite addition rate, for scrubbers CE005 and CE010 during periods of decreased operation in preparation for facility shut down. The first hour begins with the initial reduction at or after 12 hours from no flow from mash feed. The Permittee shall include in its hourly record when a flow rate and ammonium bisulfite addition rate is not taken and the reason for the lack of the reading.

(**d**~~c~~) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

.....

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS – TO/HRSG System & DDGS Drying

Emissions Unit Description [326 IAC 2-7-5(14)]:

.....

(h) One (1) distillation process, **identified as Distillation Process 1,** constructed in 2006, **with equipment leaks from this process identified as F003,** with a maximum throughput rate of 7,266 gallons of **fuel grade** ethanol per hour, controlled by TO/HRSG system CE007, exhausting through stack EP007, and consisting of the following:

.....

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

.....

SECTION D.7 EMISSIONS UNIT OPERATION CONDITIONS – Non-Fuel Grade Ethanol

Emissions Unit Description [326 IAC 2-7-5(14)]:

(n) One (1) distillation process, **identified as Distillation Process 2,** approved in 2013 for

construction, **with equipment leaks from this process identified as F006,** with a maximum throughput rate of 40,000 gallons of **190 proof** non-fuel grade ethanol per hour, consisting of the following:

.....

(q) One (1) distillation process, operating in a closed loop, identified as Distillation Process 3, approved in 2016 for construction, with equipment leaks from this process identified as F007, with a maximum throughput rate of 36,500,000 gallons of 200 proof non-fuel grade ethanol per year, consisting of the following:

(1) One (1) 1,600 gallon feed tank

(2) One (1) distillation column.

(3) Two (2) molecular sieve units

(4) One (1) liquid storage tank, identified as T021, with a maximum capacity of 250,000 gallons.

Under NSPS, Subpart VVa, 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.

(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.7.1 Minor Limits for VOC, CO, NO_x, and HAP [326 IAC 2-2] **[326 IAC 8-1-6]** [326 IAC 2-4.1][Clean Air Act, Section 112(a)(1) and (a)(2)]

In order to render the requirements of 326 IAC 2-2 (PSD)**, 326 IAC 8-1-6 (New Facilities; General Reduction Requirements)** and 326 IAC 2-4.1 (MACT) not applicable, the Permittee shall comply with the following emission limits for the loading skids EU083 and EU084:

.....

(e) The total combined non-fuel grade 200 proof ethanol load-out from loading skids EU083 and EU084 shall not exceed 36,500,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.

(f) When loading 190 proof non-fuel grade ethanol, VOC emissions from flare CE019, controlling ethanol loading skids EU083 and EU084, shall not exceed 0.00072 lb/kgal.

(g) When loading 200 proof non-fuel grade ethanol, VOC emissions from flare CE019, controlling ethanol loading skids EU083 and EU084, shall not exceed 0.00082 lb/kgal.

Compliance with the VOC limits shall limit the potential to emit of VOC to less than twenty-five (25) tons per twelve (12) consecutive month period from the loading skids (EU083/EU084) and shall render the requirements of 326 IAC 8-1-6 not applicable to loading skids (EU083/EU084).

.....

D.7.6 Testing Requirements [326 IAC 2-1.1-11]

(a) ~~Not later than 180 days after the startup of distillatio nprocess 3~~ **In order to demonstrate compliance with Conditions D.7.1(c), D.7.1(d) and D.7.1(f),** the Permittee shall perform VOC (including emission rate~~,~~ **and** capture efficiency~~, and destruction efficiency~~), CO, and NO_x testing of enclosed flare CE019 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).

(b) Not later than 180 days after the startup of the ~~closed-loop distillation process~~ **closed-loop distillation process 3**, **in order to demonstrate compliance with Conditions D.7.1(c), D.7.1(d) and D.7.1(g),** the Permittee shall perform VOC (including emission rate~~,~~ **and** capture efficiency~~, and destruction efficiency~~), CO, and NO_x testing of enclosed flare CE019 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.

.....

D.7.8 Record Keeping Requirements

.....

(b) To document the compliance status with Condition D.7.~~6~~**7**, the Permittee shall maintain records of temperature or other parameters sufficient to demonstrate the presence of a pilot flame when loading skids EU083 and/or EU084 are in operation.

(c) To document the compliance status with Condition D.7.1(e), the Permittee shall maintain monthly records of the total amount of 200 proof non-fuel grade ethanol loaded out from loading racks EU083 and EU084.

(~~c~~**d**) Section C - General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

D.7.9 Reporting Requirements

~~A q~~**Q**uarterly report**s** of the non-fuel grade ethanol loading to document the compliance status with Condition**s** D.7.1(b) **and D.7.1(e)** shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C – General Reporting contains the Permittee's obligations with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(35).

.....

SECTION E.2 NSPS

Emissions Unit Description [326 IAC 2-7-5(14)]:

(n) One (1) distillation process, **identified as Distillation Process 2,** approved in 2013 for construction, **with equipment leaks from this process identified as F006,** with a maximum throughput rate of 40,000 gallons of **190 proof** non-fuel grade ethanol per hour, consisting of the following:

.....

(q) One (1) distillation process, operating in a closed loop, identified as Distillation Process 3, approved in 2016 for construction, with equipment leaks from this process identified as F007, with a maximum throughput rate of 36,500,000 gallons of 200 proof non-fuel grade ethanol per year, consisting of the following:

(4) One (1) liquid storage tank, identified as T021, with a maximum capacity of 250,000 gallons.

Under NSPS, Subpart VVa, 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.

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

.....

SECTION E.3 NSPS

Emissions Unit Description [326 IAC 2-7-5(14)]:

.....

(h) One (1) distillation process, **identified as Distillation Process 1,** constructed in 2006, **with equipment leaks from this process identified as F003,** with a maximum throughput rate of 7,266 gallons of **fuel grade** ethanol per hour, controlled by TO/HRSG system CE007, exhausting through stack EP007, and consisting of the following:

.....

(n) One (1) distillation process, **identified as Distillation Process 2,** approved in 2013 for construction, **with equipment leaks from this process identified as F006,** with a maximum throughput rate of 40,000 gallons of **190 proof** non-fuel grade ethanol per hour, consisting of the following:

.....

(q) One (1) distillation process, operating in a closed loop, identified as Distillation Process 3, approved in 2016 for construction, with equipment leaks from this process identified as F007, with a maximum throughput rate of 36,500,000 gallons of 200 proof non-fuel grade ethanol per year, consisting of the following:

(1) One (1) 1,600 gallon feed tank

(2) One (1) distillation column.

(3) Two (2) molecular sieve units

(4) One (1) liquid storage tank, identified as T021, with a maximum capacity of 250,000 gallons.

Under NSPS, Subpart VVa, 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.

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

.....

SECTION E.6 NSPS

Facility Description [326 IAC 2-7-5(14)]:

(n) One (1) distillation process, **identified as Distillation Process 2,** approved in 2013 for construction, **with equipment leaks from this process identified as F006,** with a maximum throughput rate of 40,000 gallons of **190 proof** non-fuel grade ethanol per hour, consisting of the

following:
.....

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

.....

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: **Central Indiana Ethanol, LLC**
Source Address: **2955 West Delphi Pike, Marion, Indiana 46952**
Part 70 Permit No.: **T053-32070-00062**
Facility: **Loading Racks (EU083 and EU084)**
Parameter: **Total combined 200 proof non-fuel grade ethanol loadout rate**
Limit: **The total combined 200 proof non-fuel grade ethanol load-out from loading skids EU083 and EU084 shall not exceed 36,500,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.**

Quarter: _____ YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total

☐ **No deviation occurred in this quarter.**

☐ **Deviation/s occurred in this quarter.**
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____

Phone: _____

Other Changes

The changes listed below have been made to Part 70 Operating Permit No. T053-32070-00062. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Change 1: IDEM has updated rule citations, where applicable.

Change 2: IDEM is changing the Section C Compliance Monitoring Condition to clearly describe when new monitoring for new and existing units must begin.

Change 3: IDEM clarified Condition C.12 - Instrument Specifications to indicate that the analog instrument must be capable of measuring the parameters outside the normal range.

Change 4: 326 IAC 2-7-1 was updated on August 1, 2014. This rule update changed the rule cite for the definition of “Regulated Pollutant” used only for purposes of “Emission Reporting”. Therefore, Section C Emission Statement has been updated accordingly.

Change 5: IDEM added "where applicable" to the lists in Section C - General Record Keeping Requirements to more closely match the underlying rule.

Change 6: The Permittee has the obligation to document the compliance status. The wording has been revised to properly reflect this in Section D - Record Keeping Requirements.

Change 7: IDEM added the rule citation 326 IAC 2-7-5(1) to the Compliance Determination Requirements subsection title in Sections D.1, D.2, D.3, D.4, D.5 and D.7 to clarify the authority of these conditions.

Compliance Determination Requirements **[326 IAC 2-7-5(1)]**

Change 8: IDEM revised Sections E.1 to E.6 for clarity.

Change 9: 326 IAC 2-7-16 states that the Permittee must notify IDEM within "four (4) daytime business hours" for emergencies. The Emergency Occurrence Report Form lacked the word 'daytime'. 'Daytime' is being added to be consistent with the rule.

Change 10: The Quarterly Report forms have been modified to remove the numbered months. The Permittee should state which months are being reported.

Change 11: Revised Section A.1 to remove "Greenhouse Gases above 100,000 tons per year".

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary ethanol production plant.

Source Address:	2955 West Delphi Pike, Marion, Indiana 46952
General Source Phone Number:	(765) 384 4001
SIC Code:	2869
County Location:	Grant
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD **Rules** ~~with Greenhouse Gases above 100,000 tons per year~~ Minor Source, under Section 112 of the Clean Air Act Not 1 of 28 Source Categories

.....

B.16 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~~**42**). The renewal application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

.....

B.19 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]

.....

(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~~**37**)) 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:

.....

C.11 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)]

(a) For new units:
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.

(b) For existing units:
Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance ~~or of initial start-up, whichever is later,~~ to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance ~~or of initial start-up, whichever is later~~, 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

~~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 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. **The analog instrument shall be capable of measuring values outside of the normal range.**

.....

C.17 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]

Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 and every three (3) years thereafter, the Permittee shall submit by July 1 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~~**33**) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

.....

C.18 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

(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. Support information includes the following, **where applicable**:

(AA) All calibration and maintenance records.

(BB) All original strip chart recordings for continuous monitoring instrumentation.

(CC) Copies of all reports required by the Part 70 permit.

Records of required monitoring information include the following**, where applicable**:

.....

D.1.9 Record Keeping Requirements

.....

(c) Section C - General Record Keeping Requirements ~~of this permit~~ contains the Permittee's obligation with regard to the records required by this condition.

.....

Note: This change has also been made to all General Record Keeping Requirements conditions throughout the D section of the permit (D.2.10, D.3.14, D.4.9, D.5.8, D.6.6 and D.7.8).

SECTION E.1 ~~FACILITY OPERATION CONDITIONS - 40 CFR 60, Subpart Db - Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units~~ NSPS

.....

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

E.1.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR 60, Subpart A]

(a) **Pursuant to 40 CFR 60.1,** ~~T~~**t**he 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 ~~Industrial-Commercial-Institutional Steam Generating Units, as specified in 40 CFR 60, Subpart Db in accordance with the schedule in 40 CFR 60, Subpart Db~~ **emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart Db**.

(b) Pursuant to 40 CFR 60.~~19~~**4**, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality

100 North Senate Ave.
MC61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.1.2 Standards of Performance for Industrial-Commercial-Institutional Steam Generating Units **NSPS** [40 CFR 60, Subpart Db][326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Db (included as Attachment B **to the operating permit**) which are incorporated by reference as 326 IAC 12 for the ~~Industrial-Commercial-Institutional Steam Generating Units~~ **emission unit(s) listed above**:
.....

SECTION E.2 ~~FACILITY OPERATION CONDITIONS - 40 CFR 60, Subpart Kb - Standards of Performance for Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced after July 23, 1984~~ NSPS

.....

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

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

(a) **Pursuant to 40 CFR 60.1,** ~~T~~**t**he 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 ~~Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced after July 23, 1984, as specified in 40 CFR 60, Subpart Kb in accordance with the schedule in 40 CFR 60, Subpart Kb~~ **emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart Kb**.

(b) Pursuant to 40 CFR 60.~~19~~**4**, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Ave.
MC61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.2.2 Standards of Performance for Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced after July 23, 1984 **NSPS** [40 CFR 60, Subpart Kb] [326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Kb (included as Attachment C **to the operating permit**) which are incorporated by reference as 326 IAC 12 for the ~~Volatile Organic Liquid Storage Vessels for which Construction, Reconstruction, or Modification Commenced after July 23, 1984~~ **emission unit(s) listed above**:
.....

SECTION E.3 ~~FACILITY OPERATION CONDITIONS - 40 CFR 60, Subpart VVa - Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006~~ NSPS

.....

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

E.3.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR 60, Subpart A]

(a) **Pursuant to 40 CFR 60.1,** ~~T~~**t**he 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 ~~sources of equipment leaks of VOC, as specified in 40 CFR 60, Subpart VVa in accordance with the schedule in 40 CFR 60, Subpart VVa~~ **emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart VVa**.

(b) Pursuant to 40 CFR 60.~~19~~**4**, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Ave.
MC61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.3.2 Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for Which Construction, Reconstruction, or Modification Commenced After November 7, 2006 **NSPS** [40 CFR 60, Subpart VVa][326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart VVa (included as Attachment D **to the operating permit**) which are incorporated by reference as 326 IAC 12 for the ~~sources of equipment leaks of VOC~~ **emission unit(s) listed above**:
.....

SECTION E.4 ~~FACILITY OPERATION CONDITIONS – 40 CFR 63, Subpart ZZZZ - National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines~~ NESHAP

.....

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

E.4.1 General Provisions Relating to National Emissions Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-82][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.~~6580~~**1**, 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-~~82~~**1**, for the ~~reciprocating internal combustion engines as specified in 40 CFR Part 63, Subpart ZZZZ in accordance with the schedule~~ **emission unit(s) listed above, except as otherwise specified** in 40 CFR 63, Subpart ZZZZ.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

E.4.2 National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines **NESHAP** [40 CFR Part 63, Subpart ZZZZ] **[326 IAC 20-82]**

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment E **to the operating permit**) which are incorporated by reference as 326 IAC 20-82 for the ~~reciprocating internal combustion engines~~ **emission unit(s) listed above**:
.....

SECTION E.5 ~~FACILITY OPERATION CONDITIONS – 40 CFR 63, Subpart CCCCCC - National Emission Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities~~ NESHAP

.....

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

E.5.1 General Provisions Relating to National Emissions Standards for Hazardous Air Pollutants under 40 CFR Part 63 [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.1~~1110~~, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A – General Provisions ~~for the gasoline dispensing facilities as specified in 40 CFR Part 63, Subpart CCCCCC in accordance with the schedule in 40 CFR 63, Subpart CCCCCC~~ **for the emission unit(s) listed above, except as otherwise specified in 40 CFR Part 63, Subpart CCCCCC**.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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~~
United States Environmental Protection Agency, Region 5
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

E.5.2 National Emissions Standards for Hazardous Air Pollutants for Source Category: Gasoline Dispensing Facilities **NESHAP** [40 CFR Part 63, Subpart CCCCCC]

The Permittee shall comply with the following provisions of 40 CFR Part 63, Subpart CCCCCC (included as Attachment F **to the operating permit**) for the ~~gasoline dispensing facilities~~ **emission unit(s) listed above:**

.....

SECTION E.6 ~~FACILITY OPERATION CONDITIONS - 40 CFR 60, Subpart Dc - Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units~~ NSPS

.....

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

E.6.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR 60, Subpart A]

(a) Pursuant to 40 CFR 60.1, The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12**-1**, for the ~~Small Industrial-Commercial-Institutional Steam Generating Units, as specified in 40 CFR 60, Subpart Dc in accordance with the schedule in 40 CFR 60, Subpart Dc~~ **emission unit(s) listed above, except as otherwise specified in 40 CFR Part 60, Subpart Dc**.

(b) Pursuant to 40 CFR 60.~~19~~**4**, the Permittee shall submit all required notifications and reports to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Ave.
MC61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

E.6.2 Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units **NSPS** [40 CFR 60, Subpart Dc][326 IAC 12]

The Permittee shall comply with the following provisions of 40 CFR Part 60, Subpart Dc (included as Attachment G **to the operating permit**) which are incorporated by reference as 326 IAC 12 for the ~~Small Industrial-Commercial-Institutional Steam Generating Units~~ **emission unit(s) listed above**:

.....

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Central Indiana Ethanol, LLC
Source Address: 2955 West Delphi Pike, Marion, Indiana 46952
Part 70 Permit No.: T053-32070-00062

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) **daytime** 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.

.....

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name: Central Indiana Ethanol, LLC
Source Address: 2955 West Delphi Pike, Marion, Indiana 46952
Part 70 Permit No.: T053-32070-00062
Facility: Loading Racks (EU083 and EU084)
Parameter: Total combined non-fuel grade ethanol loadout rate
Limit: The total combined non-fuel grade ethanol load-out from loading skids EU083 and EU084 shall not exceed 60,000,000 gallons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR: _____

	Column 1	Column 2	Column 1 + Column 2

Month	This Month	Previous 11 Months	12 Month Total
~~Month 1~~			
~~Month 2~~			
~~Month 3~~			

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.
Deviation has been reported on:

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

.....

Note: This change has been made to all reporting forms.

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on March 15, 2016.

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 053-36973-00062. The operation of this proposed modification shall be subject to the conditions of the attached Significant Permit Modification No. 053-36781-00062. The staff recommend to the Commissioner that this Part 70 Significant Permit Modification be approved.

IDEM Contact

(a) Questions regarding this proposed permit can be directed to Heath Hartley 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) 232-8217 or toll free at 1-800-451-6027 extension 2-8217.

(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 Permit Guide on the Internet at: http://www.in.gov/idem/5881.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

Appendix A: Emission Calculations
Emissions Summary
Uncontrolled Potential to Emit

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley
Date: March 1, 2016

Process, Emission Units, Stack	Control Device	Potential to Emit Before Control (tons/yr)									
		PM	PM_{10}	$PM_{2.5}$	SO_2	VOC	CO	NO_x	GHGs as CO_2e	Total HAPs	Worst HAP
Grain Receiving and Handling (EU001 - EU007, EU064) (EP001)	CE001	732.09	732.09	124.45	-	-	-	-	-	-	-
Hammermills (EU010, EU011, and EU067) (EP003)	CE003	525.60	525.60	89.35	-	-	-	-	-	-	-
DDGS Handling and Loadout (EU040 - EU043) (EP008)	CE008	70.39	70.39	11.97	-	-	-	-	-	-	-
DDGS Cooler (EU036) (EP014)	CE014	227.50	227.50	38.68	-	9.68	-	-	-	0.53	0.33
Corn Storage Bin (EU066)	N/A	64.39	14.35	2.44	-	-	-	-	-	-	-
Truck & Railcar Unloading Areas (EU070 & EU073) & Storage Bins	CE015	4.65	4.65	4.65	-	-	-	-	-	-	-
Truck Unloading Area (EU080)	CE018	1.44	1.44	1.44	-	-	-	-	-	-	-
Pneumatic Conveyance Air Lock to Cook Process (EU087)	CE017	0.72	0.72	0.72	-	-	-	-	-	-	-
Fermentation Scrubber (EU016 through EU020) (EP005)	CE005	-	-	-	-	1,434.45	-	-	-	0.47	0.26
Fermentation Scrubber (EU016 through EU020) (EP010)	CE010	-	-	-	-	98.55	-	-	-	0.21	0.00
DDGS Dryers (EU035 and EU056) & TO/HSRG (EU014, EU015, EU021 through EU029, EU049 through EU055, and EU069) (EP007) *	CE006 / CE007	0.73	2.94	2.94	0.23	2.13	32.46	31.57	116,647	0.75	-
		1.10	4.41	4.41	0.35	3.19	48.70	46.38		1.13	-
		171.58	171.58	171.58	210.24	1,256.37	612.76	0.00	-	35.48	6.13
Ethanol Loadout & Flare (EU045A and EU045B) (EP019) **	CE019	negl.	negl.	negl.	negl.	1,208.80	27.12	16.19	5,184	70.40	-
Fire Pump (EU034) (EP006)	N/A	0.07	0.17	0.17	0.04	0.19	0.43	1.29	86	0.00	0.00
Biomethanator Flare (EU048) (EP013)	CE013	negl.	negl.	negl.	negl.	1.37	9.72	1.79	3,111	0.05	-
Space Heaters	N/A	0.02	0.08	0.08	0.01	0.06	0.90	1.07	1,296	0.02	-
EPCO Plant - Space Heaters	N/A	0.01	0.02	0.02	negl.	0.01	0.23	0.27	327	0.01	-
Boiler #1 (EU081) (EP020) & Boiler #2 (EU082) (EP021)	N/A	0.96	3.84	3.84	0.30	2.78	42.42	50.50	60,967	0.95	-
Non-Fuel Grade Ethanol Loadout Skids & Flare (EU083 & EU084) (EP019) ***	CE019	negl.	negl.	negl.	negl.	72.63	22.60	13.49	6,429	4.42	-
Fork Truck Unloading Area (EU075)	CE022	24.92	24.92	24.92	-	-	-	-	-	-	-
	CE016	2.77	2.77	2.77	-	-	-	-	-	-	-
SOURCE TOTAL (Part 70 and PSD Applicability)	**-**	**1,828.94**	**1,787.46**	**484.42**	**211.17**	**4,090.19**	**797.34**	**162.55**	**194,046.51**	**114.42**	**6.73**
Fugitive Emissions											
Uncaptured Emissions From Grain Receiving (F001)	N/A	2.26	0.50	0.50	-	-	-	-	-	-	-
Truck Traffic (F002)	N/A	8.36	1.71	0.40	-	-	-	-	-	-	-
Truck Traffic - EPCO Plant (F002)	N/A	1.01	0.20	0.05	-	-	-	-	-	-	-
Equipment Leaks - Distillation Process 1 (F003)	N/A	-	-	-	-	13.20	-	-	-	2.62	0.01
Cooling Tower (F004)	N/A	9.05	9.05	9.05	-	-	-	-	-	-	-
Cooling Tower - EPCO Plant (F004)	N/A	0.25	0.25	0.25	-	-	-	-	-	-	-
Corn Oil Storage (EU061 and EU062) (F005)	N/A	-	-	-	-	0.54	-	-	-	0.29	negl.
Storage Tanks (T001 - T010)	N/A	-	-	-	-	4.33	-	-	-	-	-
Equipment Leaks-NonFuel Grade Ethanol Distillation Process 2 (F006	N/A	-	-	-	-	11.35	-	-	-	0.67	0.57
Cooling Tower - NonFuel Grade Ethanol Distillation Process (F004)	N/A	5.76	5.76	5.76	-	-	-	-	-	-	-
Storage Tanks (T013 - T020)	N/A	-	-	-	-	0.69	-	-	-	3.90	-
Equipment Leaks-NonFuel Grade Ethanol Distillation Process 3 (F007	N/A	-	-	-	-	7.56	-	-	-		
SOURCE TOTAL (FUGITIVES)	**-**	**26.69**	**17.47**	**16.00**	**0.00**	**30.10**	**0.00**	**0.00**	**0.00**	**7.49**	**0.58**

Notes:
Non-HAP fugitive emissions are not counted toward the determination of Part 70, PSD, or Emission Offset applicability.
HAP fugitive emissions are counted only toward the determination of Part 70 applicability.
* These totals include the combustion emissions and the process emissions from both the DDGS dryers and the TO/HSRG.
** These totals include the combustion emissions and the process emissions from the ethanol loadout and flare.
*** These totals include the combustion emissions and the process emissions from the non-fuel grade ethanol loadout and flare.

Appendix A: Emission Calculations
Emissions Summary
Uncontrolled Potential to Emit

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley
Date: March 1, 2016

Appendix A: Emission Calculations
Emissions Summary
Controlled Potential to Emit

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Title V Operating Permit No.: T053-32070-00062
Issued: August 19,2013
Significant Source Modification No.: 053-35637-00062
Significant Permit Modification No.: 053-35650-00062
Reviewer: Deena Patton

Process, Emission Units, Stack	Control Device	Potential to Emit After Control (tons/yr)									
		PM	PM_{10}	$PM_{2.5}$	SO_2	VOC	CO	NO_x	GHGs as CO_2e	Total HAPs	Worst HAP
Grain Receiving and Handling (EU001 - EU007, EU064) (EP001)	CE001	7.32	7.32	1.24	-	-	-	-	-	-	-
Hammermills (EU010, EU011, and EU067) (EP003)	CE003	5.26	5.26	0.89	-	-	-	-	-	-	-
DDGS Handling and Loadout (EU040 - EU043) (EP008)	CE008	0.70	0.70	0.12	-	-	-	-	-	-	-
DDGS Cooler (EU036) (EP014)	CE014	2.28	2.28	0.39	-	9.68	-	-	-	0.53	0.33
Corn Storage Bin (EU066)	N/A	64.39	14.35	2.44	-	-	-	-	-	-	-
Truck & Railcar Unloading Areas (EU070 & EU073) & Storage Bins	CE015	4.65E-03	4.65E-03	7.91E-04	-	-	-	-	-	-	-
Truck Unloading Area (EU080)	CE018	1.44E-03	1.44E-03	2.45E-04	-	-	-	-	-	-	-
Pneumatic Conveyance Air Lock to Cook Process (EU087)	CE017	1.22E-04	1.22E-04	1.22E-04	-	-	-	-	-	-	-
Fermentation Scrubber (EU016 through EU020) (EP005)	CE005	-	-	-	-	5.74	-	-	-	0.24	0.13
Fermentation Scrubber (EU016 through EU020) (EP010)	CE010	-	-	-	-	0.04	-	-	-	0.11	1.75E-03
DDGS Dryers (EU035 and EU056) & TO/HSRG (EU014, EU015, EU021 through EU029, EU049 through EU055, and EU069) (EP007)	CE006 / CE007	0.73	2.94	2.94	1.27	4.77	61.28	42.22	116,647	0.75	-
		1.10	4.41	4.41						1.13	-
		17.16	17.16	17.16					-	3.55	0.61
Ethanol Loadout & Flare (EU045A and EU045B) (EP019)	CE019	negl.	negl.	negl.	negl.	24.18	27.12	16.19	5,184	1.41	-
Fire Pump (EU034) (EP006)	N/A	0.07	0.17	0.17	0.04	0.19	0.43	1.29	86	0.00	0.00
Biomethanator Flare (EU048) (EP013)	CE013	negl.	negl.	negl.	negl.	1.37	9.72	1.79	3,111	0.05	-
Space Heaters	N/A	0.02	0.08	0.08	0.01	0.06	0.90	1.07	1,296	0.02	-
EPCO Plant - Space Heaters	N/A	0.01	0.02	0.02	negl.	0.01	0.23	0.27	327	0.01	-
Boiler #1 (EU081) (EP020) & Boiler #2 (EU082) (EP021)	N/A	0.96	3.84	3.84	0.30	2.78	42.42	50.50	60,967	0.95	-
Non-Fuel Grade Ethanol Loadout Skids & Flare (EU083 & EU084) (EP019)	CE019	negl.	negl.	negl.	negl.	1.27	22.60	13.49	6,429	0.19	-
Fork Truck Unloading Area (EU075)	CE022	2.49E-02	2.49E-02	4.24E-03	-	-	-	-	-	-	-
	CE016	2.77E-03	2.77E-03	4.71E-04	-	-	-	-	-	-	-
SOURCE TOTAL (Part 70/PSD Applicability)	**-**	**100.02**	**58.54**	**33.70**	**1.62**	**50.08**	**164.70**	**126.82**	**194,046.51**	**8.92**	**1.08**
Fugitive Emissions											
Uncaptured Emissions From Grain Receiving (F001)	N/A	2.26	0.50	0.50	-	-	-	-	-	-	-
Truck Traffic (F002)	N/A	4.18	0.86	0.20	-	-	-	-	-	-	-
Truck Traffic - EPCO Plant (F002)	N/A	0.50	0.10	0.02	-	-	-	-	-	-	-
Equipment Leaks (F003)	N/A	-	-	-	-	13.20	-	-	-	0.78	negl.
Cooling Tower (F004)	N/A	9.05	9.05	9.05	-	-	-	-	-	-	-
Cooling Tower - EPCO Plant (F004)	N/A	0.25	0.25	0.25	-	-	-	-	-	-	-
Corn Oil Storage (EU061 and EU062) (F005)	N/A	-	-	-	-	0.54	-	-	-	0.29	negl.
Storage Tanks (T001 - T010)	N/A	-	-	-	-	4.33	-	-	-	-	-
Equipment Leaks - NonFuel Grade Ethanol Distillation Process (F006)	N/A	-	-	-	-	3.39	-	-	-	0.20	2.64E-03
Cooling Tower - NonFuel Grade Ethanol Distillation Process (F004)	N/A	5.76	5.76	5.76	-	-	-	-	-	-	-
Storage Tanks (T013 - T021)	N/A	-	-	-	-	0.69	-	-	-	3.90	-
Equipment Leaks-NonFuel Grade Ethanol Distillation Process 3 (F007	N/A	-	-	-	-	1.62	-	-	-	0	0
SOURCE TOTAL (FUGITIVES)	**-**	**22.00**	**16.51**	**15.78**	**0.00**	**22.15**	**0.00**	**0.00**	**0.00**	**5.17**	**2.64E-03**

Notes:
Non-HAP fugitive emissions are not counted toward the determination of Part 70, PSD, or Emission Offset applicability.
HAP fugitive emissions are counted only toward the determination of Part 70 applicability.

Appendix A: Emission Calculations
Emissions Summary
Uncontrolled Potential to Emit

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley
Date: March 1, 2016

Appendix A: Emission Calculations
Emissions Summary
Potential to Emit After Issuance of Permit (Limited PTE)

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Title V Operating Permit No.: T053-32070-00062
Issued: August 19,2013
Significant Source Modification No.: 053-35637-00062
Significant Permit Modification No.: 053-35650-00062
Reviewer: Deena Patton

Process, Emission Units, Stack	Control Device	Limited Potential to Emit (tons/yr)									
		PM	PM_{10}	$PM_{2.5}$	SO_2	VOC	CO	NO_x	GHGs as CO_2e	Total HAPs	Worst HAP
Grain Receiving and Handling (EU001 - EU007, EU064) (EP001)	CE001	7.31	7.31	7.31	-	-	-	-	-	-	-
Hammermills (EU010, EU011, and EU067) (EP003)	CE003	5.26	5.26	5.26	-	-	-	-	-	-	-
DDGS Handling and Loadout (EU040 - EU043) (EP008)	CE008	0.70	0.70	0.70	-	-	-	-	-	-	-
DDGS Cooler (EU036) (EP014)	CE014	4.12	4.12	4.12	-	6.83	-	-	-	0.53	0.33
Corn Storage Bin (EU066)	N/A	64.39	14.35	2.44	-	-	-	-	-	-	-
Truck & Railcar Unloading Areas (EU070 & EU073) & Storage Bins (EU076 & EU077)	CE015	4.65	4.65	4.65	-	-	-	-	-	-	-
Truck Unloading Area (EU080)	CE018	1.44	1.44	1.44	-	-	-	-	-	-	-
Pneumatic Conveyance Air Lock to Cook Process (EU087)	CE017	0.72	0.72	0.72	-	-	-	-	-	-	-
Fermentation Scrubber (EU016 through EU020) (EP005)	CE005	-	-	-	-	41.61	-	-	-	8.37	8.23
Fermentation Scrubber (EU016 through EU020) (EP010)	CE010	-	-	-	-	2.72	-	-	-	0.57	0.50
DDGS Dryers (EU035 and EU056) & TO/HSRG (EU014, EU015, EU021 through EU029, EU049 through EU055, and EU069) (EP007)	CE006 / CE007	35.04	35.04	35.04	37.23	22.56	91.98	86.29	116,647 -	2.32	0.79
Ethanol Loadout & Flare (EU045A and EU045B) (EP019)	CE019	negl.	negl.	negl.	negl.	3.23	4.19	2.50	5,184	0.19	-
Fire Pump (EU034) (EP006)	N/A	0.07	0.17	0.17	0.04	0.19	0.43	1.29	86	0.00	4.03E-04
Biomethanator Flare (EU048) (EP013)	CE013	*see note									
Space Heaters	N/A	0.02	0.08	0.08	0.01	0.06	0.90	1.07	1,296	0.02	-
EPCO Plant - Space Heaters	N/A	0.01	0.02	0.02	negl.	0.01	0.23	0.27	327	0.01	-
Boiler #1 (EU081) (EP020) & Boiler #2 (EU082) (EP021)	N/A	0.96	3.84	3.84	0.30	2.78	42.42	50.50	60,967	0.95	-
Non-Fuel Grade Ethanol Loadout Skids & Flare (EU083 & EU084) (EP	CE019	negl.	negl.	negl.	negl.	0.22	3.87	2.31	6,429	0.11	-
Fork Truck Unloading Area (EU075)	CE022	2.49E-02	2.49E-02	4.24E-03	-	-	-	-	-	-	-
	CE016	2.77	2.77	2.77	-	-	-	-	-	-	-
SOURCE TOTAL (Part 70/PSD Applicability)	**-**	**127.47**	**80.49**	**68.56**	**37.58**	**80.20**	**144.01**	**144.23**	**190,935.93**	**13.06**	**9.85**
Fugitive Emissions											
Uncaptured Emissions From Grain Receiving (F001)	N/A	2.26	0.50	0.50	-	-	-	-	-	-	-
Truck Traffic (F002)	N/A	4.18	0.86	0.20	-	-	-	-	-	-	-
Truck Traffic - EPCO Plant (F002)	N/A	0.50	0.10	0.02	-	-	-	-	-	-	-
Equipment Leaks (F003)	N/A	-	-	-	-	13.20	-	-	-	0.78	negl.
Cooling Tower (F004)	N/A	9.05	9.05	9.05	-	-	-	-	-	-	-
Cooling Tower - EPCO Plant (F004)	N/A	0.25	0.25	0.25	-	-	-	-	-	-	-
Corn Oil Storage (EU061 and EU062) (F005)	N/A	-	-	-	-	0.54	-	-	-	0.29	negl.
Storage Tanks (T001 - T010)	N/A	-	-	-	-	4.33	-	-	-	-	-
Equipment Leaks - NonFuel Grade Ethanol Distillation Process (F006)	N/A	-	-	-	-	3.39	-	-	-	0.20	-
Cooling Towers - NonFuel Grade Ethanol Distillation Process (F004)	N/A	5.76	5.76	5.76	-	-	-	-	-	-	-
Storage Tanks (T013 - T021)	N/A	-	-	-	-	0.69	-	-	-	3.90	-
Equipment Leaks-NonFuel Grade Ethanol Distillation Process 3 (F007	N/A	-	-	-	-	1.6198649	-	-	-	0	0
SOURCE TOTAL (FUGITIVES)	**-**	**22.00**	**16.51**	**15.78**	**0.00**	**22.15**	**0.00**	**0.00**	**0.00**	**5.17**	**0.00**

Notes:
Non-HAP fugitive emissions are not counted toward the determination of Part 70, PSD, or Emission Offset applicability.
HAP fugitive emissions are counted only toward the determination of Part 70 applicability.
* The biomethanator flare only operates when the DDGS dryers are down. The operation of the DDGS dryers is the worst case scenario for emissions, and the emissions from the DDGS dryers have been included in the total PTE.

Appendix A: Emission Calculations
HAP Emissions Summary
Uncontrolled Potential to Emit

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

Process, Emission Units, Stack	Control Device	Potential to Emit Before Control (tons/yr)										
		Acetaldehyde	Acrolein	Benzene	Chloroform	Dimethyl Phthalate	Formaldehyde	Hexane	Methanol	Methyl Isobutyl Ketone	Toluene	Total HAPs
Grain Receiving and Handling (EU001 - EU007, EU064) (EP001)	CE001	-	-	-	-	-	-	-	-	-	-	-
Hammermills (EU010, EU011, and EU067) (EP003)	CE003	-	-	-	-	-	-	-	-	-	-	-
DDGS Handling and Loadout (EU040 - EU043) (EP008)	CE008	-	-	-	-	-	-	-	-	-	-	-
DDGS Cooler (EU036) (EP014)	CE014	0.33	0.07	-	-	-	0.07	-	0.07	-	-	0.53
Corn Storage Bin (EU066)	N/A	-	-	-	-	-	-	-	-	-	-	-
Truck & Railcar Unloading Areas (EU070 & EU073) & Storage Bins (EU076 &	CE015	-	-	-	-	-	-	-	-	-	-	-
Truck Unloading Area (EU080)	CE018	-	-	-	-	-	-	-	-	-	-	-
Fermentation Scrubber (EU016 through EU020) (EP005)	CE005	0.26	0.09	-	-	-	0.04	-	0.09	-	-	0.47
Fermentation Scrubber (EU016 through EU020) (EP010)	CE010	1.75E-03	0.09	-	-	-	0.04	-	0.09	-	-	0.21
DDGS Dryers (EU035 and EU056) & TO/HSRG (EU014, EU015, EU021 through EU029, EU049 through EU055 and EU069) (EP007) *	CE006 / CE007	-	-	negl.	-	-	0.03	0.71	-	-	negl.	0.75
		-	-	negl.	-	-	0.04	1.06	-	-	negl.	1.13
		6.13	3.94	-	-	-	4.38	-	3.07	-	-	35.48
Ethanol Loadout & Flare (EU045A and EU045B) (EP009) **	CE009	-	-	3.02	-	-	negl.	60.52	-	-	6.04	70.40
Fire Pump (EU034) (EP006)	N/A	4.03E-04	4.86E-05	4.90E-04	-	-	6.20E-04	-	-	-	2.15E-04	2.08E-03
Biomethanator Flare (EU048) (EP013)	CE013	-	-	negl.	-	-	negl.	0.05	-	-	negl.	0.05
Space Heaters	N/A	-	-	negl.	-	-	negl.	0.02	-	-	negl.	0.02
EPCO Plant - Space Heaters	N/A	-	-	negl.	-	-	negl.	negl.	-	-	negl.	0.01
Boiler #1 (EU081) (EP020) & Boiler #2 (EU082) (EP021)	N/A	-	-	negl.	-	-	0.04	0.91	-	-	negl.	0.95
Non-Fuel Grade Ethanol Loadout Skids & Flare (EU083 & EU084) (EP019) ***	CE019	-	-	0.18	-	-	negl.	3.73	-	-	0.36	4.42
Fork Truck Unloading Area (EU075)	CE016	-	-	-	-	-	-	-	-	-	-	-
	CE022	-	-	-	-	-	-	-	-	-	-	-
SOURCE TOTAL (PSD Applicability)	**-**	**6.73**	**4.18**	**3.20**	**0.00**	**0.00**	**4.63**	**67.00**	**3.31**	**0.00**	**6.41**	**114.42**
Fugitive Emissions												
Uncaptured Emissions From Grain Receiving (F001)	N/A	-	-	-	-	-	-	-	-	-	-	-
Truck Traffic (F002)	N/A	-	-	-	-	-	-	-	-	-	-	-
Truck Traffic - EPCO Plant (F002)	N/A	-	-	-	-	-	-	-	-	-	-	-
Equipment Leaks - Distillation Process 1 (F003)	N/A	0.01	-	0.11	-	-	-	2.21	0.01	-	0.22	2.62
Cooling Tower (F004)	N/A	-	-	-	-	-	-	-	-	-	-	-
Cooling Tower - EPCO Plant (F004)	N/A	-	-	-	-	-	-	-	-	-	-	-
Corn Oil Storage (EU061 and EU062) (F005)	N/A	negl.	negl.	-	-	-	negl.	-	0.06	-	-	0.29
Storage Tanks (T001 - T010)	N/A	-	-	-	-	-	-	-	-	-	-	-
Equipment Leaks-NonFuel Grade Ethanol Distillation Process 2 (F006)	N/A	2.64E-03	-	0.03	-	-	-	0.57	negl.	-	0.06	0.67
Cooling Tower - NonFuel Grade Ethanol Distillation Process (F004)	N/A	-	-	-	-	-	-	-	-	-	-	-
Storage Tanks (T013 - T021) (a)	N/A	-	-	1.95	1.95	1.95	-	-	-	1.95	1.95	3.90
Equipment Leaks-NonFuel Grade Ethanol Distillation Process 3 (F007)	N/A	-	-	1.89E-02	-	-	-	3.78E-01	1.51E-03	-	3.78E-02	0.45
SOURCE TOTAL (FUGITIVES)	**-**	**0.01**	**0.00**	**2.11**	**1.95**	**1.95**	**0.00**	**3.15**	**0.07**	**1.95**	**2.27**	**7.93**
SOURCE TOTAL (Part 70 Applicability)	**-**	**6.74**	**4.18**	**5.31**	**1.95**	**1.95**	**4.63**	**70.15**	**3.38**	**1.95**	**8.67**	**122.35**

Notes:

Non-HAP fugitive emissions are not counted toward the determination of Part 70, PSD, or Emission Offset applicability.

HAP fugitive emissions are counted only toward the determination of Part 70 applicability.

(a) The potential HAPs from the tanks will be limited to any one of these HAPs or a combination of these HAPs: benzene, chloroform, dimethyl phthalate, methyl idobutyl ketone, and toluene.

* These totals include the combustion emissions and the process emissions from both the DDGS dryers and the TO/HSRG.

** These totals include the combustion emissions and the process emissions from the ethanol loadout and flare.

*** These totals include the combustion emissions and the process emissions from the non-fuel grade ethanol loadout and flare.

Appendix A: Emission Calculations
HAP Emissions Summary
Controlled Potential to Emit

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

Process, Emission Units, Stack	Control Device	Potential to Emit After Control (tons/yr)										
		Acetaldehyde	Acrolein	Benzene	Chloroform	Dimethyl Phthalate	Formaldehyde	Hexane	Methanol	Methyl Isobutyl Ketone	Toluene	Total HAPs
Grain Receiving and Handling (EU001 - EU007, EU064) (EP001)	CE001	-	-	-	-	-	-	-	-	-	-	-
Hammermills (EU010, EU011, and EU067) (EP003)	CE003	-	-	-	-	-	-	-	-	-	-	-
DDGS Handling and Loadout (EU040 - EU043) (EP008)	CE008	-	-	-	-	-	-	-	-	-	-	-
DDGS Cooler (EU036) (EP014)	CE014	0.33	0.07	-	-	-	0.07	-	0.07	-	-	0.53
Corn Storage Bin (EU066)	N/A	-	-	-	-	-	-	-	-	-	-	-
Truck & Railcar Unloading Areas (EU070 & EU073) & Storage Bins (EU076 &	CE015	-	-	-	-	-	-	-	-	-	-	-
Truck Unloading Area (EU080)	CE018	-	-	-	-	-	-	-	-	-	-	-
Fermentation Scrubber (EU016 through EU020) (EP005)	CE005	0.13	0.04	0.00	0.00	0.00	0.02	0.04	0.00	-	-	0.24
Fermentation Scrubber (EU016 through EU020) (EP010)	CE010	0.00	0.04	0.00	0.00	0.00	0.02	0.04	0.00	-	-	0.11
DDGS Dryers (EU035 and EU056) & TO/HSRG (EU014, EU015, EU021 through EU029, EU049 through EU055, and EU069) (EP007)	CE006 / CE007	-	-	negl.	-	-	0.03	0.71	-	-	negl.	0.75
		-	-	negl.	-	-	0.04	1.06	-	-	negl.	1.13
		0.61	0.39	0.90	0.90	3.94	0.44	0.31	0.00	-	-	3.55
Ethanol Loadout & Flare (EU045A and EU045B) (EP009)	CE009	-	-	0.06	-	-	negl.	1.29	-	-	0.12	1.41
Fire Pump (EU034) (EP006)	N/A	4.03E-04	4.86E-05	4.90E-04	-	-	6.20E-04	-	-	-	2.15E-04	2.08E-03
Biomethanator Flare (EU048) (EP013)	CE013	-	-	negl.	-	-	negl.	0.05	-	-	negl.	0.05
Space Heaters	N/A	-	-	negl.	-	-	negl.	0.02	-	-	negl.	0.02
EPCO Plant - Space Heaters	N/A	-	-	negl.	-	-	negl.	negl.	-	-	negl.	5.18E-03
Boiler #1 (EU081) (EP020) & Boiler #2 (EU082) (EP021)	N/A	-	-	negl.	-	-	0.04	0.91	-	-	negl.	0.95
Non-Fuel Grade Ethanol Loadout Skids & Flare (EU083 & EU084) (EP019)	CE019	-	-	3.74E-03	-	-	3.99E-03	0.17	-	-	7.44E-03	0.19
Fork Truck Unloading Area (EU075)	CE016	-	-	-	-	-	-	-	-	-	-	-
	CE022	-	-	-	-	-	-	-	-	-	-	-
SOURCE TOTAL (PSD Applicability)	**-**	**1.08**	**0.55**	**0.96**	**0.90**	**3.94**	**0.66**	**4.60**	**0.07**	**0.00**	**0.13**	**8.92**
Fugitive Emissions												
Uncaptured Emissions From Grain Receiving (F001)	N/A	-	-	-	-	-	-	-	-	-	-	-
Truck Traffic (F002)	N/A	-	-	-	-	-	-	-	-	-	-	-
Truck Traffic - EPCO Plant (F002)	N/A	-	-	-	-	-	-	-	-	-	-	-
Equipment Leaks - Distillation Process 1 (F003)	N/A	negl.	-	0.03	-	-	-	0.66	negl.	-	0.07	0.78
Cooling Tower (F004)	N/A	-	-	-	-	-	-	-	-	-	-	-
Cooling Tower - EPCO Plant (F004)	N/A	-	-	-	-	-	-	-	-	-	-	-
Corn Oil Storage (EU061 and EU062) (F005)	N/A	negl.	negl.	-	-	-	negl.	-	0.06	-	-	0.29
Storage Tanks (T001 - T010)	N/A	-	-	-	-	-	-	-	-	-	-	-
Equipment Leaks-NonFuel Grade Ethanol Distillation Process 2 (F006)	N/A	2.64E-03	-	0.01	-	-	-	0.17	negl.	-	0.02	0.20
Cooling Tower - NonFuel Grade Ethanol Distillation Process (F004)	N/A	-	-	-	-	-	-	-	-	-	-	-
Storage Tanks (T013 - T021) (a)	N/A	-	-	1.95	1.95	1.95	-	-	-	1.95	1.95	3.90
Equipment Leaks-NonFuel Grade Ethanol Distillation Process 3 (F007)		-	-	4.05E-03	-	-	-	8.10E-02	3.24E-04	-	8.10E-03	0.10
SOURCE TOTAL (FUGITIVES)	**-**	**2.64E-03**	**0.00E+00**	**2.00E+00**	**1.95**	**1.95**	**0.00E+00**	**9.10E-01**	**6.16E-02**	**1.95**	**2.04**	**5.27**
SOURCE TOTAL (Part 70 Applicability)	**-**	**1.08**	**0.55**	**2.96**	**2.85**	**5.89**	**0.66**	**5.51**	**0.13**	**1.95**	**2.17**	**14.19**

Notes:
(a) The potential HAPs from the tanks will be limited to any one of these HAPs or a combination of these HAPs: benzene, chloroform, dimethyl phthalate, methyl idobutyl ketone, and toluene.
Non-HAP fugitive emissions are not counted toward the determination of Part 70, PSD, or Emission Offset applicability.
HAP fugitive emissions are counted only toward the determination of Part 70 applicability.

Appendix A: Emission Calculations
HAP Emissions Summary
Potential to Emit After Issuance of Permit (Limited PTE)

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

Process, Emission Units, Stack	Control Device	Limited Potential to Emit (tons/yr)										
		Acetaldehyde	Acrolein	Benzene	Chloroform	Dimethyl Phthalate	Formaldehyde	Hexane	Methanol	Methyl Isobutyl Ketone	Toluene	Total HAPs
Grain Receiving and Handling (EU001 - EU007, EU064) (EP001)	CE001	-	-	-	-	-	-	-	-	-	-	-
Hammermills (EU010, EU011, and EU067) (EP003)	CE003	-	-	-	-	-	-	-	-	-	-	-
DDGS Handling and Loadout (EU040 - EU043) (EP008)	CE008	-	-	-	-	-	-	-	-	-	-	-
DDGS Cooler (EU036) (EP014)	CE014	0.33	0.07	-	-	-	0.07	-	0.07	-	-	0.53
Corn Storage Bin (EU066)	N/A	-	-	-	-	-	-	-	-	-	-	-
Truck & Railcar Unloading Areas (EU070 & EU073) & Storage Bins (EU076 &	CE015	-	-	-	-	-	-	-	-	-	-	-
Truck Unloading Area (EU080)	CE018	-	-	-	-	-	-	-	-	-	-	-
Fermentation Scrubber (EU016 through EU020) (EP005)	CE005	8.23	0.09	-	-	-	0.04	-	0.09	-	-	8.37
Fermentation Scrubber (EU016 through EU020) (EP010)	CE010	0.50	0.09	-	-	-	0.04	-	0.09	-	-	0.57
DDGS Dryers (EU035 and EU056) & TO/HSRG (EU014, EU015, EU021 through EU029, EU049 through EU055, and EU069) (EP007)*	CE006 / CE007	0.79	2.32	negl.	-	-	2.32	0.71	2.32	-	negl.	2.32
				negl.	-	-		1.06		-	negl.	
				-	-	-		-		-	-	
Ethanol Loadout & Flare (EU045A and EU045B) (EP009)	CE009	-	-	0.01	-	-	negl.	0.16	-	-	0.02	0.19
Fire Pump (EU034) (EP006)	N/A	4.03E-04	4.86E-05	4.90E-04	-	-	6.20E-04	-	-	-	2.15E-04	2.08E-03
Biomethanator Flare (EU048) (EP013)	CE013	**see note										
Space Heaters	N/A	-	-	negl.	-	-	negl.	0.02	-	-	negl.	0.02
EPCO Plant - Space Heaters	N/A	-	-	negl.	-	-	negl.	negl.	-	-	negl.	5.18E-03
Boiler #1 (EU081) (EP020) & Boiler #2 (EU082) (EP021)	N/A	-	-	negl.	-	-	0.04	0.91	-	-	negl.	0.95
Non-Fuel Grade Ethanol Loadout Skids & Flare (EU083 & EU084) (EP019)	CE019	-	-	4.90E-04	-	-	3.99E-03	0.10	-	-	9.38E-04	0.11
Fork Truck Unloading Area (EU075)	CE016	-	-	-	-	-	-	-	-	-	-	-
	CE022	-	-	-	-	-	-	-	-	-	-	-
SOURCE TOTAL (PSD Applicability)	**-**	**9.85**	**2.56**	**0.01**	**0.00**	**0.00**	**2.50**	**2.97**	**2.56**	**0.00**	**0.02**	**13.06**
Fugitive Emissions												
Uncaptured Emissions From Grain Receiving (F001)	N/A	-	-	-	-	-	-	-	-	-	-	-
Truck Traffic (F002)	N/A	-	-	-	-	-	-	-	-	-	-	-
Truck Traffic - EPCO Plant (F002)	N/A	-	-	-	-	-	-	-	-	-	-	-
Equipment Leaks - Distillation Process 1 (F003)	N/A	negl.	-	0.03	-	-	-	0.66	negl.	-	0.07	0.78
Cooling Tower (F004)	N/A	-	-	-	-	-	-	-	-	-	-	-
Cooling Tower - EPCO Plant (F004)	N/A	-	-	-	-	-	-	-	-	-	-	-
Corn Oil Storage (EU061 and EU062) (F005)	N/A	negl.	negl.	-	-	-	negl.	-	0.06	-	-	0.29
Storage Tanks (T001 - T010)	N/A	-	-	-	-	-	-	-	-	-	-	-
Equipment Leaks-NonFuel Grade Ethanol Distillation Process 2 (F006)	N/A	2.64E-03	-	0.01	-	-	-	0.17	negl.	-	0.02	0.20
Cooling Tower - NonFuel Grade Ethanol Distillation Process (F004)	N/A	-	-	-	-	-	-	-	-	-	-	-
Storage Tanks (T013 - T021) (a)	N/A	-	-	1.95	1.95	1.95	-	-	-	1.95	1.95	3.90
Equipment Leaks-NonFuel Grade Ethanol Distillation Process 3 (F007)	N/A	-	-	4.05E-03	-	-	-	0.08	3.24E-04	-	8.10E-03	0.10
SOURCE TOTAL (FUGITIVES)	**-**	**2.64E-03**	**0.00E+00**	**2.00E+00**	**1.95**	**1.95**	**0.00E+00**	**9.10E-01**	**6.16E-02**	**1.95**	**2.04**	**5.27**
SOURCE TOTAL (Part 70 Applicability)	**-**	**9.85**	**2.56**	**2.00**	**1.95**	**1.95**	**2.50**	**3.88**	**2.62**	**1.95**	**2.06**	**18.33**

Notes:
(a) The potential HAPs from the tanks will be limited to any one of these HAPs or a combination of these HAPs: benzene, chloroform, dimethyl phthalate, methyl idobutyl ketone, and toluene.
Non-HAP fugitive emissions are not counted toward the determination of Part 70, PSD, or Emission Offset applicability.
HAP fugitive emissions are counted only toward the determination of Part 70 applicability.
* The acrolein, formaldehyde, and methanol individual HAP limits are based on the total HAP limit of 2.32 tons per year.
** The biomethanator flare only operates when the DDGS dryers are down. The operation of the DDGS dryers is the worst case scenario for emissions, and the emissions from the DDGS dryers have been included in the total PTE.

Appendix A: Emission Calculations
Natural Gas HAPs Combustion Emissions Summary
Existing Emission Units

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

Pollutant	Emission Factor (lb/MMBtu)	TO / HRSG 135.0 MMBtu/hr (lb/hr)	TO / HRSG 135.0 MMBtu/hr (tons/yr)	Dryers (2 @ 45) 90.0 MMBtu/hr (lb/hr)	Dryers (2 @ 45) 90.0 MMBtu/hr (tons/yr)	Loadout Flare (CE009) 10.0 MMBtu/hr (lb/hr)	Loadout Flare (CE009) 10.0 MMBtu/hr (tons/yr)	Biomethanator Flare 6 MMBtu/hr (lb/hr)	Biomethanator Flare 6 MMBtu/hr (tons/yr)	Space Heaters 2.5 MMBtu/hr (lb/hr)	Space Heaters 2.5 MMBtu/hr (tons/yr)	EPCO Heaters 0.62 MMBtu/hr (lb/hr)	EPCO Heaters 0.62 MMBtu/hr (tons/yr)
2-Methylnaphthalene	2.40E-08	3.24E-06	1.42E-05	2.16E-06	9.46E-06	2.40E-07	1.05E-06	1.44E-07	6.31E-07	6.00E-08	2.63E-07	1.49E-08	6.52E-08
3-Methylchloranthrene	1.80E-09	2.43E-07	1.06E-06	1.62E-07	7.10E-07	1.80E-08	7.88E-08	1.08E-08	4.73E-08	4.50E-09	1.97E-08	1.12E-09	4.89E-09
7,12-Dimethylbenz(a)anthracene	1.60E-08	2.16E-06	9.46E-06	1.44E-06	6.31E-06	1.60E-07	7.01E-07	9.60E-08	4.20E-07	4.00E-08	1.75E-07	9.92E-09	4.34E-08
Acenaphthene	1.80E-09	2.43E-07	1.06E-06	1.62E-07	7.10E-07	1.80E-08	7.88E-08	1.08E-08	4.73E-08	4.50E-09	1.97E-08	1.12E-09	4.89E-09
Acenaphthlyene	1.80E-09	2.43E-07	1.06E-06	1.62E-07	7.10E-07	1.80E-08	7.88E-08	1.08E-08	4.73E-08	4.50E-09	1.97E-08	1.12E-09	4.89E-09
Anthracene	2.40E-09	3.24E-07	1.42E-06	2.16E-07	9.46E-07	2.40E-08	1.05E-07	1.44E-08	6.31E-08	6.00E-09	2.63E-08	1.49E-09	6.52E-09
Benz(a)anthracene	1.80E-09	2.43E-07	1.06E-06	1.62E-07	7.10E-07	1.80E-08	7.88E-08	1.08E-08	4.73E-08	4.50E-09	1.97E-08	1.12E-09	4.89E-09
Benzene	2.10E-06	2.84E-04	1.24E-03	1.89E-04	8.28E-04	2.10E-05	9.20E-05	1.26E-05	5.52E-05	5.25E-06	2.30E-05	1.30E-06	5.70E-06
Benzo(a)pyrene	1.20E-09	1.62E-07	7.10E-07	1.08E-07	4.73E-07	1.20E-08	5.26E-08	7.20E-09	3.15E-08	3.00E-09	1.31E-08	7.44E-10	3.26E-09
Benzo(b)fluoranthene	1.80E-09	2.43E-07	1.06E-06	1.62E-07	7.10E-07	1.80E-08	7.88E-08	1.08E-08	4.73E-08	4.50E-09	1.97E-08	1.12E-09	4.89E-09
Benzo(g,h,i)perylene	1.20E-09	1.62E-07	7.10E-07	1.08E-07	4.73E-07	1.20E-08	5.26E-08	7.20E-09	3.15E-08	3.00E-09	1.31E-08	7.44E-10	3.26E-09
Benzo(k)fluoranthene	1.80E-09	2.43E-07	1.06E-06	1.62E-07	7.10E-07	1.80E-08	7.88E-08	1.08E-08	4.73E-08	4.50E-09	1.97E-08	1.12E-09	4.89E-09
Chrysene	1.80E-09	2.43E-07	1.06E-06	1.62E-07	7.10E-07	1.80E-08	7.88E-08	1.08E-08	4.73E-08	4.50E-09	1.97E-08	1.12E-09	4.89E-09
Dibenzo(a,h)anthracene	1.20E-09	1.62E-07	7.10E-07	1.08E-07	4.73E-07	1.20E-08	5.26E-08	7.20E-09	3.15E-08	3.00E-09	1.31E-08	7.44E-10	3.26E-09
Dichlorobenzene	1.20E-06	1.62E-04	7.10E-04	1.08E-04	4.73E-04	1.20E-05	5.26E-05	7.20E-06	3.15E-05	3.00E-06	1.31E-05	7.44E-07	3.26E-06
Fluoranthene	3.00E-09	4.05E-07	1.77E-06	2.70E-07	1.18E-06	3.00E-08	1.31E-07	1.80E-08	7.88E-08	7.50E-09	3.29E-08	1.86E-09	8.15E-09
Fluorene	2.80E-09	3.78E-07	1.66E-06	2.52E-07	1.10E-06	2.80E-08	1.23E-07	1.68E-08	7.36E-08	7.00E-09	3.07E-08	1.74E-09	7.60E-09
Formaldehyde	7.50E-05	1.01E-02	4.43E-02	6.75E-03	2.96E-02	7.50E-04	3.29E-03	4.50E-04	1.97E-03	1.88E-04	8.21E-04	4.65E-05	2.04E-04
Hexane	1.80E-03	2.43E-01	1.06E+00	1.62E-01	7.10E-01	1.80E-02	7.88E-02	1.08E-02	4.73E-02	4.50E-03	1.97E-02	1.12E-03	4.89E-03
Indeno(1,2,3-cd)pyrene	1.80E-09	2.43E-07	1.06E-06	1.62E-07	7.10E-07	1.80E-08	7.88E-08	1.08E-08	4.73E-08	4.50E-09	1.97E-08	1.12E-09	4.89E-09
Napthalene	6.10E-07	8.24E-05	3.61E-04	5.49E-05	2.40E-04	6.10E-06	2.67E-05	3.66E-06	1.60E-05	1.53E-06	6.68E-06	3.78E-07	1.66E-06
Phenanathrene	1.70E-08	2.30E-06	1.01E-05	1.53E-06	6.70E-06	1.70E-07	7.45E-07	1.02E-07	4.47E-07	4.25E-08	1.86E-07	1.05E-08	4.62E-08
Pyrene	5.00E-09	6.75E-07	2.96E-06	4.50E-07	1.97E-06	5.00E-08	2.19E-07	3.00E-08	1.31E-07	1.25E-08	5.48E-08	3.10E-09	1.36E-08
Toluene	3.40E-06	4.59E-04	2.01E-03	3.06E-04	1.34E-03	3.40E-05	1.49E-04	2.04E-05	8.94E-05	8.50E-06	3.72E-05	2.11E-06	9.23E-06
Arsenic	2.40E-07	3.24E-05	1.42E-04	2.16E-05	9.46E-05	2.40E-06	1.05E-05	1.44E-06	6.31E-06	6.00E-07	2.63E-06	1.49E-07	6.52E-07
Cadmium	1.10E-06	1.49E-04	6.50E-04	9.90E-05	4.34E-04	1.10E-05	4.82E-05	6.60E-06	2.89E-05	2.75E-06	1.20E-05	6.82E-07	2.99E-06
Chromium	1.40E-06	1.89E-04	8.28E-04	1.26E-04	5.52E-04	1.40E-05	6.13E-05	8.40E-06	3.68E-05	3.50E-06	1.53E-05	8.68E-07	3.80E-06
Cobalt	8.40E-08	1.13E-05	4.97E-05	7.56E-06	3.31E-05	8.40E-07	3.68E-06	5.04E-07	2.21E-06	2.10E-07	9.20E-07	5.21E-08	2.28E-07
Manganese	3.80E-07	5.13E-05	2.25E-04	3.42E-05	1.50E-04	3.80E-06	1.66E-05	2.28E-06	9.99E-06	9.50E-07	4.16E-06	2.36E-07	1.03E-06
Mercury	2.60E-07	3.51E-05	1.54E-04	2.34E-05	1.02E-04	2.60E-06	1.14E-05	1.56E-06	6.83E-06	6.50E-07	2.85E-06	1.61E-07	7.06E-07
Nickel	2.10E-05	2.84E-03	1.24E-02	1.89E-03	8.28E-03	2.10E-04	9.20E-04	1.26E-04	5.52E-04	5.25E-05	2.30E-04	1.30E-05	5.70E-05
TOTAL		**0.26**	**1.13**	**0.17**	**0.75**	**0.02**	**0.08**	**0.01**	**0.05**	**0.005**	**0.02**	**0.001**	**0.01**

Total Combustion Emissions (tons/yr) **2.04**

Notes:
Emission factors are from AP-42, 5th Edition, Section 1.4, "Natural Gas Combustion," 7/98.

Methodology:
Emissions (lb/hr) = Heat Input Capacity (MMBtu/hr) * Emission Factor (lb/MMBtu)
Emissions (tons/yr) = Emissions (lb/hr) * 8760 hr/yr ÷ 2,000 lb/ton

Appendix A: Emission Calculations
March 2016 Modification Summary

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

Uncontrolled Potential to Emit of Modification (tons/year)									
Process, Emission Units, Stack	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	VOC	CO	Total HAPs	Hexane
Equipment Leaks - Non-Fuel Grade Distillation Process 3 (200 proof)	-	-	-	-	-	7.6	-	0.45	0.38
Storage Tank (T021)	-	-	-	-	-	0.13	-	0.13	7.77E-03
Increase from loading skids (EU083 & EU084)	-	-	-	-	-	9.1	-	0.62	0.45
Total for March 2016 Modification	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**16.8**	**0.00**	**1.20**	**0.84**

Controlled Potential to Emit of Modification (tons/year)									
Process, Emission Units, Stack	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	VOC	CO	HAPs	Hexane
Equipment Leaks - Non-Fuel Grade Distillation Process 3 (200 proof)	-	-	-	-	-	1.62	-	0.10	0.08
Storage Tank (T021)	-	-	-	-	-	0.13	-	0.13	7.77E-03
Increase from loading skids (EU083 & EU084)	-	-	-	-	-	0.18	-	1.25E-02	9.10E-03
Total for March 2016 Modification	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.93**	**0.00**	**0.24**	**0.10**

Limited Potential to Emit of Modification (tons/year)									
Process, Emission Units, Stack	PM	PM_{10}	$PM_{2.5}$	SO_2	NO_x	VOC	CO	HAPs	Hexane
Equipment Leaks - Non-Fuel Grade Distillation Process 3 (200 proof)	-	-	-	-	-	1.62	-	0.10	0.08
Storage Tank (T021)	-	-	-	-	-	0.13	-	0.13	7.77E-03
Increase from loading skids (EU083 & EU084)	-	-	-	-	-	0 (see note*)	-	0 (see note*)	0 (see note*)
Total for March 2016 Modification	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**1.75**	**0.00**	**0.23**	**0.09**

*When loading 200 proof non-fuel grade ethanol, the throughput limit is lower than the existing 190 proof ethanol; therefore there is no increase in PTE after issuance for these loading skids.

Appendix A: Emission Calculations
F007 Equipment Leaks

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

1. Fugitive VOC Emissions

Process Stream	Equipment Component Source	Product	Component Count	≥10,000 ppmv Emission Factor (lb/hr per component)	<10,000 ppmv Emission Factor (lb/hr per component)	Uncontrolled Rate		Subpart VV Control Effectiveness	Controlled Rate (lb/hr)	TOC Weight (%)	Emitted Water (lb/hr)	Controlled TOC	
						(lb/hr)	(tons/yr)					(lb/hr)	(tons/yr)
F007	Valves	Gas/Vapor	28	0.17243	0.00029	0.01	0.04	87.00%	0.00	100.00%	0.00	0.00	0.00
	Valves	Light Liquid	160	0.19669	0.00036	0.06	0.25	84.00%	0.01	100.00%	0.00	0.01	0.04
	Pump Seals	Light Liquid	5	0.53582	0.00412	0.02	0.09	69.00%	0.01	100.00%	0.00	0.01	0.03
	Compressors	Gas/Vapor	0	3.54564	0.197127	0.00	0.00		0.00	100.00%	0.00	0.00	0.00
	Relief Valves	Gas/Vapor	15	3.728655	0.0985635	1.48	6.48	87.00%	0.19	100.00%	0.00	0.19	0.84
	Sampling Connections	All	4	0.03308	0.03308	0.13	0.58	0.00%	0.13	100.00%	0.00	0.13	0.58
	Open Ended Lines	All	0	0.02635	0.00331	0.00	0.00		0.00	100.00%	0.00	0.00	0.00
	Flanges	All	160	0.24917	0.00018	0.03	0.13	0.00%	0.03	100.00%	0.00	0.03	0.13
	TOTAL					1.73	7.56		0.37		0.00	0.37	1.62

Notes:
Component count provided by source.
Emission factors are from Protocol for Equipment Leak Emission Estimates, EPA-453/R-95-017. Table 2-5 and Table 5-2
Emission factors from Table 2-5 were used instead of from Table 2-1 because an LDAR program has been implemented at the source
LDAR program screening data for existing units at this source indicates values of <10,000 ppmv.
1 kg = 2.205 pounds
Methodology:
Uncontrolled Rate (lb/hr) = Emission Factor (lb/hr per component) * Component Count
Uncontrolled Rate (tons/yr) = Uncontrolled Rate (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton
Controlled Rate (lb/hr) = Uncontrolled Rate (lb/hr) / (1 - Subpart VV Control Eff.)
Emitted Water (lb/hr) = Controlled Rate (lb/hr) / (1 - TOC Weight)
Controlled TOC (lb/hr) = Controlled Rate (lb/hr) * TOC Weight
Controlled TOC (tons/yr) = Controlled TOC (lb/hr) * 8760 hr/yr / 2000 lb/ton

2. Fugitive HAP Emissions

HAP	HAP Fraction	Uncontrolled Emissions (tons/yr)	Controlled Emissions (tons/yr)
Acetaldehyde	2.00E-04	1.51E-03	3.24E-04
Benzene	2.50E-03	1.89E-02	4.05E-03
Carbon Disulfide	2.00E-05	1.51E-04	3.24E-05
Cumene	1.00E-03	7.56E-03	1.62E-03
Ethylbenzene	5.00E-05	3.78E-04	8.10E-05
n-Hexane	5.00E-02	3.78E-01	8.10E-02
Methanol	2.00E-04	1.51E-03	3.24E-04
Toluene	5.00E-03	3.78E-02	8.10E-03
Xylenes	5.00E-04	3.78E-03	8.10E-04
Total HAPs		0.45	0.10

HAP fraction for gasoline vapors.

Methodology:
Uncontrolled HAP Emissions (tons/yr) = Uncontrolled TOC (tons/yr) * HAP Fraction
Fugitive HAP Emissions (tons/yr) = Controlled TOC (tons/yr) * HAP Fraction

Appendix A: Emission Calculations
Non-Fuel Grade Ethanol Loading Skids (EU083 and EU084) - 2016 Modification

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

1. Emission Factors: AP-42

Non-fuel grade ethanol will be shipped by either truck loading skid EU083 or railcar loading skid EU084.
Both railcars and trucks will be filled by submerged loading process.
Truck loading skid (EU083) and railcar loading skid (EU084) will both be controlled by flare CE019 which has a control efficiency of 98% for VOC and HAPs.

According to AP-42, Chapter 5.2 - Transportation and Marketing of Petroleum Liquids (01/95), the VOC emission factors for the truck and rail loading racks can be estimated from the following equation:

$$L = 12.46 \times (SPM)/T$$

where:

L = loading loss (lbs/kgal)
S = a saturation factor (see AP-42, Table 5.2-1)
P = true vapor pressure of the liquid loaded (psia)
M = molecular weight of vapors
T = temperature of the bulk liquid loaded (degree R)

Loading 200 proof ethanol

Previous Stored Liquid	*S	P (psia)	M (lb/mole lb)	T (degree R)	L (lb/kgal)
Denatured Ethanol (normal)	0.6	0.59	48.01	512.3	0.41
Denatured Ethanol (clean cargo)	0.5	0.59	48.01	512.3	0.35

Note: Denatured Ethanol P and M calculated in EPA Tanks 4.09.D. Mixture of 5/95 of Ethyl Acetate/200 Proof Ethanol

2. Potential to Emit VOC Uncontrolled/Unlimited (assuming all denatured ethanol loaded out):

Maximum Loading Rate for EU83: 24 kgal/hr (for truck loading)
PTE of VOC Before Control (tons/yr) = 24 kgal/hr * 0.41 lbs/kgal * 8760 hr/yr ÷ 2000 lb/ton = 43.58 tons/yr

Maximum Loading Rate for EU84: 40 kgal/hr (for railcar loading)
PTE of VOC Before Control (tons/yr) = 40 kgal/hr * 0.41 lbs/kgal * 8760 hr/yr ÷ 2000 lb/ton = 72.63 tons/yr

Worst case scenario is when loading all denatured ethanol to railcars.	**Worst Case Uncontrolled VOC emissions =**	**72.63**	**tons/yr**	After loading 200 proof ethanol
Worst case scenario when controlled by flare CE019 with an efficiency of 98%.	**Worst Case Controlled VOC emissions =**	**1.45**	**tons/yr**	

Worst case scenario is when loading all denatured ethanol to railcars.	Worst Case Uncontrolled VOC emissions =	63.53	tons/yr	Prior to loading 200 proof ethanol
Worst case scenario when controlled by flare CE019 with an efficiency of 98%.	Worst Case Controlled VOC emissions =	1.27	tons/yr	

Uncontrolled Increase =	**9.10**	**tons/yr**
Controlled Increase =	**0.18**	**tons/yr**

Notes:
Denatured ethanol from normal cargo has a VOC emission factor of 0.41 lbs/kgal, while denatured ethanol from clean cargo has a VOC emission factor of 0.35.
Therefore the emission factor for denatured ethanol (normal) was used as a worst case scenario.

Methodology:
Worse Case Controlled VOC Emissions (tons/yr) = Worse Case Uncontrolled VOC Emissions (tons/yr) x (1 - Control Efficiency)

Appendix A: Emission Calculations
Non-Fuel Grade Ethanol Loading Skids (EU083 and EU084) - 2016 Modification

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

3. VOC Emissions (Uncontrolled/Limited):

Annual 200 proof Non-Fuel Grade Ethanol Production Limit: 36,500 kgal/yr (for both railcar and truck loading)

Different scenarios to determine the worst case scenario:

(1) Assume all 200 proof non-fuel grade ethanol (normal) is loaded to trucks:
VOC (tons/yr) = 0.41 lbs/kgal * 36,500 kgal/yr / 2000 lb/ton = 7.57 tons/yr

(2) Assume all 200 proof non-fuel grade ethanol (normal) is loaded to dedicated railcars:
VOC (tons/yr) = 0.41 lbs/kgal * 36,500 kgal/yr / 2000 lb/ton = 7.57 tons/yr

Worst case scenario is when loading to trucks. **Worst Case Uncontrolled/Limited VOC emissions = 7.57 tons/yr**

4. VOC Emissions (Controlled/Limited):

Annual Non-Fuel Grade Ethanol Production Limit: 36,500 kgal/yr (for both railcar and truck loading)
Flare Control Efficiency: 98%

Different scenarios to determine the worst case scenario:

(1) Assume all 200 proof non-fuel grade ethanol (normal) is loaded to trucks:
VOC (tons/yr) = 0.41 lbs/kgal * 36,500 kgal/yr * (1 - 98%) / 2000 lb/ton = 0.15 tons/yr

(2) Assume all 200 proof non-fuel grade ethanol (normal) is loaded to dedicated railcars:
VOC (tons/yr) = 0.41 lbs/kgal * 36,500 kgal/yr * (1 - 98%) / 2000 lb/ton = 0.15 tons/yr

Worst case scenario is when loading to trucks.
Truck and Railcar emissions are controlled by enclosed flare CE019. **Worst Case Controlled/Limited VOC emissions = 0.15 tons/yr**

5. Potential to Emit HAPs:

HAP emissions are mainly from the ethanol since trucks and railcars will not handle gasoline prior to receiving High Grade Non-fuel Grade Ethanol.

HAP	HAP Fraction*	Unlimited PTE of HAP Before Control (tons/yr)	Unlimited PTE of HAP After Control (tons/yr)	Limited PTE of HAP After Control (tons/yr)
Acetaldehyde	2.00E-04	0.01	2.91E-04	3.03E-05
Benzene	2.50E-03	0.182	3.63E-03	3.78E-04
Carbon Disulfide	2.00E-05	0.00	2.91E-05	3.03E-06
Cumene	1.00E-03	0.073	1.45E-03	1.51E-04
Ethylbenzene	5.00E-05	0.00	7.26E-05	7.57E-06
n-Hexane	5.00E-02	3.63	7.26E-02	7.57E-03
Methanol	2.00E-04	0.01	2.91E-04	3.03E-05
Toluene	5.00E-03	0.36	7.26E-03	7.57E-04
Xylenes	5.00E-04	0.04	7.26E-04	7.57E-05
TOTAL HAPs	0.059	4.32	0.09	0.01

*HAP fraction for gasoline vapors.

Methodology:
Unlimited PTE of HAP Before Control (tons/yr) = Worst Case VOC Emissions (tons/yr) * HAP Fraction
Unlimited PTE of HAP After Control (tons/yr) = Unlimited PTE of HAP Before Control (tons/yr) * (1 - Control Efficiency)
Limited PTE of HAP After Control (tons/yr) = Worst Case Limited VOC Emissions (tons/yr) * HAP Fraction

Appendix A: Emission Calculations
Non-Fuel Grade Ethanol Loading Skids (EU083 and EU084) - 2016 Modification

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

6. Potential to Emit (NO_x and CO) from Flare Combustion (CE019)

Maximum Loadout Rate: 40.00 kgal/hr
Limited Loadout Rate: 63,000 kgal/yr

Pollutant	NO_x	CO
Emission Factor (lb/kgal)	0.077	0.129
Unlimited PTE (tons/yr)	13.49	22.60
Limited PTE (tons/yr)	2.43	4.06

Note: The new throughput of the new 200 proof process will not exceed the existing limit; there is no increase in PTE for these pollutants.

Notes:
Particulate (PM, PM_{10}, and $PM_{2.5}$) and SO_2 emission factors are negligible due to the smokeless design and minimal H_2S levels.
Emission factors for NO_x and CO are based on the information provided by the flare manufacturer (MRW Technologies, Inc.)

Methodology:
Unlimited PTE (tons/yr) = Maximum Loadout Rate (kgal/hr) * Emission Factor (lb/kgal) * 8760 hr/yr ÷ 2000 lb/ton
Limited PTE (tons/yr) = Limited Loadout Rate (kgal/yr) * Emission Factor (lb/kgal) ÷ 2000 lb/ton

7. Potential to Emit (GHGs) from Flare Combustion (CE019)

eat Input Capaci (MMBtu/hr)	HHV (MMBtu/MMCF)	Throughput (MMCF/yr)
12.4	1020	106.49

	Greenhouse Gas		
	CO_2	CH_4	N_2O
Emission Factor (lb/MMCF)	120,000	2.3	2.2
Potential Emissions (tons/yr)	6,390	0.12	0.12
Summed Potential Emissions (tons/yr)	6,390		
CO_2e Total (tons/yr)	6,429		

Notes:
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.
The Global Warming Potentials (GWP) are from Table A-1 of 40 CFR Part 98 Subpart A.

Methodology:
Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) * 8760 hr/yr ÷ HHV (MMBtu/MMCF)
Potential Emissions (tons/yr) = Maximum Heat Input Capacity (MMCF/yr) * Emission Factor (lb/MMCF) ÷ 2000 lb/ton
CO_2e (tons/yr) = [CO_2 Potential Emissions (tons/yr) * CO_2 GWP (1)] + [CH_4 Potential Emissions (tons/yr) * CH_4 GWP (21)] + [N_2O Potential Emissions (tons/yr) * N_2O GWP (310)]

Appendix A: Emission Calculations
Natural Gas HAPs Combustion Emissions Summary
Proposed Emission Units

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

Pollutant	Emission Factor (lb/MMBtu)	Boilers (2 @ 58.8) 117.6 MMBtu/hr (lb/hr)	Boilers (2 @ 58.8) 117.6 MMBtu/hr (tons/yr)	Loadout Flare (CE019) 12.4 MMBtu/hr (lb/hr)	Loadout Flare (CE019) 12.4 MMBtu/hr (tons/yr)
2-Methylnaphthalene	2.35E-08	2.77E-06	1.21E-05	2.92E-07	1.28E-06
3-Methylchloranthrene	1.76E-09	2.08E-07	9.09E-07	2.19E-08	9.58E-08
7,12-Dimethylbenz(a)anthracene	1.57E-08	1.84E-06	8.08E-06	1.95E-07	8.52E-07
Acenaphthene	1.76E-09	2.08E-07	9.09E-07	2.19E-08	9.58E-08
Acenaphthlyene	1.76E-09	2.08E-07	9.09E-07	2.19E-08	9.58E-08
Anthracene	2.35E-09	2.77E-07	1.21E-06	2.92E-08	1.28E-07
Benz(a)anthracene	1.76E-09	2.08E-07	9.09E-07	2.19E-08	9.58E-08
Benzene	2.06E-06	2.42E-04	1.06E-03	2.55E-05	1.12E-04
Benzo(a)pyrene	1.18E-09	1.38E-07	6.06E-07	1.46E-08	6.39E-08
Benzo(b)fluoranthene	1.76E-09	2.08E-07	9.09E-07	2.19E-08	9.58E-08
Benzo(g,h,i)perylene	1.18E-09	1.38E-07	6.06E-07	1.46E-08	6.39E-08
Benzo(k)fluoranthene	1.76E-09	2.08E-07	9.09E-07	2.19E-08	9.58E-08
Chrysene	1.76E-09	2.08E-07	9.09E-07	2.19E-08	9.58E-08
Dibenzo(a,h)anthracene	1.18E-09	1.38E-07	6.06E-07	1.46E-08	6.39E-08
Dichlorobenzene	1.18E-06	1.38E-04	6.06E-04	1.46E-05	6.39E-05
Fluoranthene	2.94E-09	3.46E-07	1.51E-06	3.65E-08	1.60E-07
Fluorene	2.75E-09	3.23E-07	1.41E-06	3.40E-08	1.49E-07
Formaldehyde	7.35E-05	8.65E-03	3.79E-02	9.12E-04	3.99E-03
Hexane	1.76E-03	2.08E-01	9.09E-01	2.19E-02	9.58E-02
Indeno(1,2,3-cd)pyrene	1.76E-09	2.08E-07	9.09E-07	2.19E-08	9.58E-08
Napthalene	5.98E-07	7.03E-05	3.08E-04	7.42E-06	3.25E-05
Phenanathrene	1.67E-08	1.96E-06	8.58E-06	2.07E-07	9.05E-07
Pyrene	4.90E-09	5.76E-07	2.52E-06	6.08E-08	2.66E-07
Toluene	3.33E-06	3.92E-04	1.72E-03	4.13E-05	1.81E-04
Arsenic	1.96E-07	2.31E-05	1.01E-04	2.43E-06	1.06E-05
Beryllium	1.18E-08	1.38E-06	6.06E-06	1.46E-07	6.39E-07
Cadmium	1.08E-06	1.27E-04	5.55E-04	1.34E-05	5.86E-05
Chromium	1.37E-06	1.61E-04	7.07E-04	1.70E-05	7.45E-05
Cobalt	8.24E-08	9.68E-06	4.24E-05	1.02E-06	4.47E-06
Manganese	3.73E-07	4.38E-05	1.92E-04	4.62E-06	2.02E-05
Mercury	2.55E-07	3.00E-05	1.31E-04	3.16E-06	1.38E-05
Nickel	2.06E-06	2.42E-04	1.06E-03	2.55E-05	1.12E-04
Selenium	2.35E-08	2.77E-06	1.21E-05	2.92E-07	1.28E-06
TOTAL		**0.22**	**0.95**	**0.02**	**0.10**

Total Combustion Emissions (tons/yr) **1.05**

Notes:
Emission factors are from AP-42, 5th Edition, Section 1.4, "Natural Gas Combustion," 7/98.

Methodology:
Emissions (lb/hr) = Heat Input Capacity (MMBtu/hr) * Emission Factor (lb/MMBtu)
Emissions (tons/yr) = Emissions (lb/hr) * 8760 hr/yr ÷ 2,000 lb/ton

Appendix A: Emission Calculations
Grain Receiving and Handling, Hammermilling, & DDGS Handling Operations

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

1. Potential to Emit $PM/PM_{10}/PM_{2.5}$ - Captured Emissions

Baghouse ID	Process Description	Outlet Grain Loading (gr/dscf)	Maximum Air Flow Rate (scfm)	PTE of PM/PM_{10} After Control (lb/hr)	PTE of PM/PM_{10} After Control (tons/yr)	PTE of $PM_{2.5}$ After Control (lb/hr)	PTE of $PM_{2.5}$ After Control (tons/yr)	Control Efficiency (%)	PTE of PM/PM_{10} Before Control (lb/hr)	PTE of PM/PM_{10} Before Control (tons/yr)	PTE of $PM_{2.5}$ Before Control (lb/hr)	PTE of $PM_{2.5}$ Before Control (tons/yr)	Limited PTE of $PM/PM_{10}/PM_{2.5}$ (lb/hr)	Limited PTE of $PM/PM_{10}/PM_{2.5}$ (tons/yr)
CE001	Grain Receiving and Handling (EU001 - EU007, EU086)	0.005	39,000	1.67	7.32	0.28	1.24	99%	167.14	732.09	28.41	124.45	1.67	7.31
CE003	Hammermills (EU010, EU011, EU067)	0.005	28,000	1.20	5.26	0.20	0.89	99%	120.00	525.60	20.40	89.35	1.20	5.26
CE008	DDGS Handling and Loadout (EU040 - EU043)	0.005	3,750	0.16	0.70	0.03	0.12	99%	16.07	70.39	2.73	11.97	0.16	0.70

Allowable Emissions:
The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates greater than 30 tons per hour:

Grain Receiving and Handling (EU001 - EU005, EU064):
P = 420 tons/hr
limit = 55.0 x (420 ^0.11) - 40 = 66.9 lb/hr PM

This unit is capable of complying with 326 IAC 6-3-2 WITH controls.

Grain Receiving and Handling (EU006, EU007):
Hammermills (EU010, EU011, EU067):
P = 140 tons/hr
limit = 55.0 x (140 ^0.11) - 40 = 54.7 lb/hr PM

This unit is capable of complying with 326 IAC 6-3-2 WITH controls.

DDGS Handling and Loadout (EU040 - EU043):
P = 101 tons/hr
limit = 55.0 x (101 ^0.11) - 40 = 51.4 lb/hr PM

This unit is capable of complying with 326 IAC 6-3-2 WITHOUT controls.

Notes:
Assume all PM emissions equal PM_{10} emissions.
Assume controlled $PM_{2.5}$ emissions equal 17% PM/PM_{10} emissions (AP-42 Table 9.9.1-1, Reference 40).
The limited PTE emission limits have been established in order to render 326 IAC 2-2 (PSD) not applicable.

Methodology:
PTE of PM/PM_{10} After Control (lb/hr) = Grain Loading (gr/dscf) * Max. Air Flow Rate (scfm) * 60 min/hr ÷ 7000 lb/gr
PTE of PM/PM_{10} After Control (tons/yr) = PTE of PM/PM_{10} After Control (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton
PTE of $PM_{2.5}$ After Control (lb/hr) = PTE of PM/PM_{10} After Control (lb/hr) * 0.17
PTE of $PM_{2.5}$ After Control (tons/yr) = PTE of $PM_{2.5}$ After Control (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton
PTE Before Control (lb/hr) = PTE After Control (lb/hr) ÷ (1 - Control Efficiency)
PTE Before Control (tons/yr) = PTE After Control (tons/yr) ÷ (1 - Control Efficiency)
Limited PTE of $PM/PM_{10}/PM_{2.5}$ (tons/yr) = Limited PTE of PM/PM_{10} (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton

2. Potential to Emit $PM/PM_{10}/PM_{2.5}$ - Fugitive Emissions:

Unit ID	Unit Description	Annual Throughput Limit (tons/yr)	Uncontrolled PM Emission Factor (lb/ton)	Uncontrolled $PM_{10}/PM_{2.5}$ Emission Factor (lb/ton)	Baghouse ID	Capture Efficiency (%)	Fugitive PM Emissions (tons/yr)	Fugitive $PM_{10}/PM_{2.5}$ Emissions (tons/yr)
EU001	Grain Receiving	646,800	0.035	0.0078	CE001	80%	2.26	0.50

Notes:
Emission factors are from AP-42, Chapter 9.9.1-1 and AP-42, Chapter 9.9.1-2. Assume all the grain receiving and loadout is by hopper truck, which is the worst case scenario.
Assume all $PM_{2.5}$ emissions equal to PM_{10} emissions.

Methodology:
Fugitive Emissions (tons/yr) = Annual Throughput Limit (tons/yr) * Uncontrolled Emission Factor (lb/ton) * (1 - Capture Efficiency) ÷ 2000 lb/ton

Appendix A: Emission Calculations
DDGS Cooler

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

1. Potential to Emit $PM/PM_{10}/PM_{2.5}$

Baghouse ID	Process Description	Control Device	Outlet Grain Loading (gr/dscf)	Maximum Air Flow Rate (scfm)	PTE of PM/PM_{10} After Control (lb/hr)	PTE of PM/PM_{10} After Control (tons/yr)	PTE of $PM_{2.5}$ After Control (lb/hr)	PTE of $PM_{2.5}$ After Control (tons/yr)	Control Efficiency (%)	PTE of PM/PM_{10} Before Control (lb/hr)	PTE of PM/PM_{10} Before Control (tons/yr)	PTE of $PM_{2.5}$ Before Control (lb/hr)	PTE of $PM_{2.5}$ Before Control (tons/yr)	Limited PTE of $PM/PM_{10}/PM_{2.5}$ (lb/hr)	Limited PTE of $PM/PM_{10}/PM_{2.5}$ (tons/yr)
CE014	DDGS Cooler	Baghouse	0.002	30,299	0.52	2.28	0.09	0.39	99%	51.94	227.50	8.83	38.68	0.94	4.12

Allowable Emissions:
The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates greater than 30 tons per hour:

P = 34 tons/hr
limit = 55.0 x (34 ^0.11) - 40 = 41.1 lb/hr PM

This unit is capable of complying with 326 IAC 6-3-2 WITH controls.

Notes:
Assume all PM emissions equal PM_{10} emissions.
Assume controlled $PM_{2.5}$ emissions equal 17% PM/PM_{10} emissions (AP-42 Table 9.9.1-1, Reference 40).
The limited PTE emission limits have been established in order to render 326 IAC 2-2 (PSD) not applicable.

Methodology:
PTE of PM/PM_{10} After Control (lb/hr) = Grain Loading (gr/dscf) * Max. Air Flow Rate (scfm) * 60 min/hr ÷ 7000 lb/gr
PTE of PM/PM_{10} After Control (tons/yr) = PTE of PM/PM_{10} After Control (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton
PTE of $PM_{2.5}$ After Control (lb/hr) = PTE of PM/PM_{10} After Control (lb/hr) * 0.17
PTE of $PM_{2.5}$ After Control (tons/yr) = PTE of $PM_{2.5}$ After Control (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton
PTE of $PM/PM_{10}/PM_{2.5}$ Before Control (lb/hr) = PTE of PM/PM_{10} After Control (lb/hr) ÷ (1 - Control Efficiency)
PTE of $PM/PM_{10}/PM_{2.5}$ Before Control (tons/yr) = PTE of PM/PM_{10} After Control (tons/yr) ÷ (1 - Control Efficiency)
Limited PTE of $PM/PM_{10}/PM_{2.5}$ (tons/yr) = Limited PTE of PM/PM_{10} (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton

2. Potential to Emit VOC:

Maximum DDGS Production: 297,840 tons/yr = 34 tons/hr
Limited DDGS Production: 210,000 tons/yr
VOC Emission Factor: 0.065 lbs/ton of DDGS (based on November 2007 stack testing)

Unlimited PTE of VOC (tons/yr) = 297,840 tons/yr * 0.065 lbs/ton ÷ 2000 lb/ton = 9.68 tons/yr
Limited PTE of VOC (tons/yr) = 210,000 tons/yr * 0.065 lbs/ton ÷ 2000 lb/ton = 6.83 tons/yr

3. Potential to Emit HAPs:

	Uncontrolled					Limited
	Acetaldehyde	Acrolein	Formaldehyde	Methanol	Total HAPs	Acetaldehyde
Emission Rate (lb/hr) *	7.50E-02	1.50E-02	1.50E-02	1.50E-02	0.12	7.50E-02
Potential to Emit (tons/yr)	0.33	0.07	0.07	0.07	0.53	0.33

* HAP emission rates were estimated by the source based on the stack testing results from a similar engineered site (Glacial Lakes Energy, MN) and scaled linearly based on production capacity.

Methodology:
Potential to Emit (tons/yr) = Emission Rate (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton

Appendix A: Emission Calculations
Corn Storage Bin EU066

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

Corn Storage Bin EU066 - No Control

Max Throughput	PM Emission Factor	PM_{10} Emission Factor	$PM_{2.5}$ Emission Factor	PM Emissions		PM_{10} Emisssions		$PM_{2.5}$ Emisssions	
(tons/hr)	(lb/ton)	(lb/ton)	(lb/ton)	lb/hr	tons/yr	lb/hr	tons/yr	lb/hr	tons/yr
420	0.035	0.0078	0.001326	14.70	64.39	3.28	14.35	0.56	2.44

Allowable Emissions:
The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates greater than 30 tons per hour:

P = 420 tons/hr
limit = 55.0 x (420 ^0.11) - 40 = 66.9 lb/hr PM

This unit is capable of complying with 326 IAC 6-3-2 WITHOUT controls.

Notes:
Emission factors are from AP-42, Chapter 9.9.1-1.
Assume $PM_{2.5}$ emissions equal 17% PM_{10} emissions (AP-42 Table 9.9.1-1, Reference 40).

Methodology:
PM Emissions (lb/hr) = Max Throughput (tons/hr) * PM Emission Factor (lbs/ton)
PM Emissions (tons/yr) = PM Emissions (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton
PM_{10} Emissions (lb/hr) = Max Throughput (tons/hr) * PM_{10} Emission Factor (lbs/ton)
PM_{10} Emissions (tons/yr) = PM_{10} Emissions (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton

Appendix A: Emission Calculations
Receiving and Transfer Operations

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

Potential to Emit $PM/PM_{10}/PM_{2.5}$ - Captured Emissions:

Process Description	Baghouse ID	Outlet Grain Loading (gr/dscf)**	Maximum Air Flow Rate (scfm)**	PTE of PM/PM_{10} After Control (lb/hr)	PTE of PM/PM_{10} After Control (tons/yr)	PTE of $PM_{2.5}$ After Control (lb/hr)	PTE of $PM_{2.5}$ After Control (tons/yr)	Control Efficiency (%)	PTE of $PM/PM_{10}/PM_{2.5}$ Before Control (lb/hr)	PTE of $PM/PM_{10}/PM_{2.5}$ Before Control (tons/yr)
Truck & Railcar Unloading Areas (EU070 & EU073) & Storage Bins (EU076 & EU077)	CE015	0.0000295	4,200	0.0011	0.0047	0.0002	0.0008	99.9%	1.06	4.65
Fork Truck Unloading Area (EU075 and EU085)	CE016	0.0000295	2,500	0.0006	0.0028	0.0001	0.0005	99.9%	0.63	2.77
	CE022	0.0000295	22,500	0.0057	0.0249	0.0010	0.0042	99.9%	5.69	24.92
Pneumatic Conveyance air lock to cook process (EU087)	CE017	0.0000295	650	0.0002	0.0007	0.0000	0.0001	99.9%	0.16	0.72
Truck Unloading Area (EU080)	CE018	0.0000295	1,300	0.0003	0.0014	0.00006	0.0002	99.9%	0.33	1.44

** Specifications of the control devices provided by the source.

Allowable Emissions:
The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates less than 30 tons per hour:

P = 25 tons/hr
limit = 4.1 x (25 ^0.67) = 35.4 lb/hr PM

Each unit is capable of complying with 326 IAC 6-3-2 WITHOUT controls.

Notes:
The raw material handled and transferred has been requested by the source as confidential information.
Assume all PM emissions equal PM_{10} emissions.
Assume controlled $PM_{2.5}$ emissions equal 17% PM/PM_{10} emissions (AP-42 Table 9.9.1-1, Reference 40).

Methodology:
PTE of PM/PM_{10} After Control (lb/hr) = Grain Loading (gr/dscf) * Max. Air Flow Rate (scfm) * 60 min/hr ÷ 7000 lb/gr
PTE of PM/PM_{10} After Control (tons/yr) = PTE of PM/PM_{10} After Control (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton
PTE of $PM_{2.5}$ After Control (lb/hr) = PTE of PM/PM_{10} After Control (lb/hr) * 0.17
PTE of $PM_{2.5}$ After Control (tons/yr) = PTE of $PM_{2.5}$ After Control (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton
PTE of $PM/PM_{10}/PM_{2.5}$ Before Control (lb/hr) = PTE of PM/PM_{10} After Control (lb/hr) ÷ (1 - Control Efficiency)
PTE of $PM/PM_{10}/PM_{2.5}$ Before Control (tons/yr) = PTE of PM/PM_{10} After Control (tons/yr) ÷ (1 - Control Efficiency)

Appendix A: Emission Calculations
Fermentation Scrubber CE005
Emission Units EU016 through EU020

Company Name: **Central Indiana Ethanol, LLC**
Address: **2955 West Delphi Pike, Marion, IN 46952**
Permit No.: **MSM 053-36973-00062 and SPM 053-36781-00062**
Reviewer: **Heath Hartley**

Scrubber VOC Control Efficiency = 99.60%
Scrubber HAP Control Efficiency = 50.00%

Controlled Emissions	lb/hr	tons/yr
VOC	1.31	5.74
Acetaldehyde	0.03	0.13
Acrolein	0.01	0.04
Formaldehyde	0.004	0.02
Methanol	0.01	0.04
Total HAPs (Controlled)	0.054	0.24

Uncontrolled Emissions	lb/hr	tons/yr
VOC	327.50	1,434.45
Acetaldehyde	0.06	0.26
Acrolein	0.02	0.09
Formaldehyde	0.008	0.04
Methanol	0.02	0.09
Total HAPs (Uncontrolled)	0.108	0.47

Limited Emissions	lb/hr	tons/yr
VOC	9.50	41.61
Acetaldehyde	1.88	8.23
Acrolein	0.02	0.09
Formaldehyde	0.008	0.04
Methanol	0.02	0.09
Total HAPs (Limited)	1.91	8.37

Notes:
Controlled VOC and acetaldehyde emission rates and VOC control efficiency are based on performance tests performed on April 8, 2009.
Controlled acrolein, methanol, and formaldehyde emission rates are based on performance tests at similar facilities.
The limited PTE emission limits for VOC, acetaldehyde, and total HAPs have been established in order to render 326 IAC 2-2 (PSD) not applicable.

Methodology:
Controlled Emissions (tons/yr) = Controlled Emissions (lb/hr) * 8760 hrs/yr ÷ 2000 lb/ton
Uncontrolled Emissions (lb/hr) = Controlled Emissions (lb/hr) ÷ (1 - Control Efficiency)
Uncontrolled Emissions (tons/yr) = Uncontrolled Emissions (lb/hr) * 8760 hrs/yr ÷ 2000 lb/ton
Limited Emissions (tons/yr) = Limited Emissions (lb/hr) * 8760 hrs/yr ÷ 2000 lb/ton

Appendix A: Emission Calculations
Fermentation Scrubber CE010
Emission Units EU016 through EU020

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

Scrubber VOC Control Efficiency = 99.96%
Scrubber HAP Control Efficiency = 50.00%

Controlled Emissions	lb/hr	tons/yr
VOC	0.009	0.04
Acetaldehyde	0.0002	0.001
Acrolein	0.01	0.04
Formaldehyde	0.004	0.02
Methanol	0.01	0.04
Total HAPs (Controlled)	0.024	0.11

Uncontrolled Emissions	lb/hr	tons/yr
VOC	22.50	98.55
Acetaldehyde	0.0004	0.002
Acrolein	0.02	0.09
Formaldehyde	0.008	0.04
Methanol	0.02	0.09
Total HAPs (Uncontrolled)	0.048	0.21

Limited Emissions	lb/hr	tons/yr
VOC	0.62	2.72
Acetaldehyde	0.114	0.50
Acrolein	0.02	0.09
Formaldehyde	0.008	0.04
Methanol	0.02	0.09
Total HAPs (Limited)	0.13	0.57

Notes:
Controlled VOC and acetaldehyde emission rates and VOC control efficiency are based on performance tests performed on April 8, 2009.
Controlled acrolein, methanol, and formaldehyde emission rates are based on performance tests at similar facilities.
The limited PTE emission limits for VOC, acetaldehyde, and total HAPs have been established in order to render 326 IAC 2-2 (PSD) not applicable.

Methodology:
Controlled Emissions (tons/yr) = Controlled Emissions (lb/hr) * 8760 hrs/yr ÷ 2000 lb/ton
Uncontrolled Emissions (lb/hr) = Controlled Emissions (lb/hr) ÷ (1 - Control Efficiency)
Uncontrolled Emissions (tons/yr) = Uncontrolled Emissions (lb/hr) * 8760 hrs/yr ÷ 2000 lb/ton
Limited Emissions (tons/yr) = Limited Emissions (lb/hr) * 8760 hrs/yr ÷ 2000 lb/ton

Appendix A: Emission Calculations
DDGS Dryers and TO/HRSG
Combustion Emissions

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

1. DDGS Dryers Combustion Emissions

Heat Input Capacity (MMBtu/hr)	HHV (MMBtu/MMCF)	Throughput (MMCF/yr)
90.0	1020	772.94

	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	81.7	5.5	84
Potential Emissions (tons/yr)	0.73	2.94	2.94	0.23	31.57	2.13	32.46

* 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.
** NO_x emission factor based on stack test results from a similar source. Central Indiana Ethanol, LLC will verify emission rate via stack test.

2. TO / HRSG Combustion Emissions

Heat Input Capacity (MMBtu/hr)	HHV (MMBtu/MMCF)	Throughput (MMCF/yr)
135.0	1020	1,159.41

	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	80	5.5	84
Potential Emissions (tons/yr)	1.10	4.41	4.41	0.35	46.38	3.19	48.70

* 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.
** NO_x emission factor based on stack test results from a similar source. Central Indiana Ethanol, LLC will verify emission rate via stack test.

Notes:
Emission factors are from AP-42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3 (AP-42, 3/98).
Assume $PM_{2.5}$ emissions equal to PM_{10} emissions.
HAP emissions are included on the HAPs Combutions Emissions Summary sheet.

Methodology:
Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) * 8760 hr/yr ÷ HHV (MMBtu/MMCF)
Potential Emissions (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF) ÷ 2000 lb/ton

3. Combined Combustion Emissions - GHGs

	Greenhouse Gas		
	CO_2	CH_4	N_2O
Emission Factor (lb/MMCF)	120,000	2.3	2.2
Potential Emissions (tons/yr)	115,941	2.22	2.13
Summed Potential Emissions (tons/yr)	115,946		
CO_2e Total (tons/yr)	116,647		

Notes:
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.
The Global Warming Potentials (GWP) are from Table A-1 of 40 CFR Part 98 Subpart A.

Methodology:
Potential Emissions (tons/yr) = Combined Throughput (MMCF/yr) * Emission Factor (lb/MMCF) ÷ 2000 lb/ton
CO_2e (tons/yr) = [CO_2 Potential Emissions (tons/yr) * CO_2 GWP (1)] + [CH_4 Potential Emissions (tons/yr) * CH_4 GWP (21)] + [N_2O Potential Emissions (tons/yr) * N_2O GWP (310)]

Appendix A: Emission Calculations
DDGS Dryers and TO/HRSG
Combustion Emissions

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

Appendix A: Emission Calculations
DDGS Dryers and TO/HRSG
Process Emissions

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

4. Process Emissions

Particulate Emissions

Control ID	Emissions Units	Outlet Grain Loading (gr/dscf)	Maximum Air Flow Rate (scfm)	PTE of $PM/PM_{10}/PM_{2.5}$ After Control (lb/hr)	PTE of $PM/PM_{10}/PM_{2.5}$ After Control (tons/yr)	Control Efficiency (%)	PTE of $PM/PM_{10}/PM_{2.5}$ Before Control (lb/hr)	PTE of $PM/PM_{10}/PM_{2.5}$ Before Control (tons/yr)
CE006 / CE007	EU035, EU056	0.0137	33,360	3.92	17.16	90%	39.17	171.58

Allowable Emissions:
The following calculations determine PM compliance with 326 IAC 6-3-2 for process weight rates greater than 30 tons per hour:

P = 34 tons/hr
limit = 55.0 x (34 ^0.11) - 40 = 41.1 lb/hr PM

This unit is capable of complying with 326 IAC 6-3-2 WITHOUT controls.

Notes:
The $PM/PM_{10}/PM_{2.5}$ outlet grain loading is based on November 2007 stack test results.

Methodology:
PTE After Control (lb/hr) = Grain Loading (gr/dscf) * Max. Air Flow Rate (scfm) * 60 min/hr ÷ 7000 lb/gr
PTE After Control (tons/yr) = PTE After Control (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton
PTE Before Control (lb/hr) = PTE After Control (lb/hr) ÷ (1 - Control Efficiency)
PTE Before Control (tons/yr) = PTE Before Control (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton

CO, VOC, HAP, and NO_x Emissions

Control ID	Pollutant	PTE After Control		Control Efficiency	PTE Before Control	
		lb/hr	tons/yr	(%)	lb/hr	tons/yr
CE007	CO	13.99	61.28	90.0%	139.90	612.76
	VOC	1.09	4.77	99.62%	286.84	1,256.37
	Acetaldehyde	0.14	0.61	90%	1.40	6.13
	Acrolein	0.09	0.39	90%	0.90	3.94
	Formaldehyde	0.10	0.44	90%	1.00	4.38
	Methanol	0.07	0.31	90%	0.70	3.07
	Total HAPs	0.81	3.55	90%	8.10	35.48
	NO_x	9.64	42.22	---	---	---

Notes:
The CO and NO_x emission rates after controls are based on November 2007 stack test results.
The VOC and HAP after control (lb/hr) emission rates for the RTO are based on emission rates observed during the November 2007 stack test results.

Methodology:
PTE After Control (tons/yr) = PTE After Control (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton
PTE Before Control (lb/hr) = PTE After Control (lb/hr) ÷ (1 - Control Efficiency)
PTE Before Control (tons/yr) = PTE Before Control (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton

SO_2 Emissions

Unlimited Ethanol Production - Railcar Loading (gal/min)	Emission Factor (lb/gal)	Unlimited Emission Rate (lb/hr)	Unlimited Emission Rate (tons/yr)	Controlled Emission Rate (lb/hr)	Controlled Emission Rate (tons/yr)	Limited Ethanol Production (gal/yr)	Emission Factor (lb/gal)	Limited Emission Rate (lb/hr)	Limited Emission Rate (tons/yr)
800	0.001	48.00	210.24	0.29	1.27	64,900,000	0.001	7.41	32.45

Notes:
SO_2 emission factor based on testing at similar plant.
SO_2 emission rate after controls is based on November 2007 stack test results.

Methodology:
Unlimited Emission Rate (lb/hr) = Unlimited Production (gal/min) * Emission Factor (lb/gal) * 60 min/hr
Limited Emission Rate (lb/hr) = Limited Production (gal/yr) * Emission Factor (lb/gal) ÷ 8760 hr/yr
Emission Rate (tons/yr) = Emission Rate (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton

5. Combined Limited Emissions

Pollutant	Limited Emissions (lb/hr)	Limited Emissions (tons/yr)
$PM/PM_{10}/PM_{2.5}$	8.0	35.04
VOC	5.15	22.56
CO	21.0	91.98
SO_2	8.5	37.23
NO_x	19.7	86.29
Acetaldehyde	0.18	0.79
Total HAPs	0.53	2.32

Notes:
The limited PTE emission limits have been established in order to render 326 IAC 2-2 (PSD) not applicable.

Methodology:
Limited Emissions (tons/yr) = Limited Emissions (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton

Appendix A: Emission Calculations
Ethanol Loading Racks (EU045A and EU045B)

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

1. Emission Factors: AP-42

Denatured and blended ethanol will be shipped by either truck loading rack EU045A or railcar loading rack EU045B. The railcars and trucks may each be used to carry gasoline prior to filling with ethanol. Both railcars and trucks will be filled by submerged loading process. Truck loading rack (EU045A) and railcar loading rack (EU045B) will both be controlled by flare CE019 which has a control efficiency of 98% for VOC and HAPs when loading denatured ethanol and blended ethanol.

According to AP-42, Chapter 5.2 - Transportation and Marketing of Petroleum Liquids (01/95), the VOC emission factors for the truck and rail loading racks can be estimated from the following equation:

$$L = 12.46 \times (SPM)/T$$

where:

L = loading loss (lbs/kgal)
S = a saturation factor (see AP-42, Table 5.2-1)
P = true vapor pressure of the liquid loaded (psia)
M = molecular weight of vapors
T = temperature of the bulk liquid loaded (degree R)

Previous Stored Liquid	*S	P (psia)	M (lb/mole lb)	T (degree R)	L (lb/kgal)
Gasoline (normal)	1.0	6.2	62	512.3	9.35
Gasoline (clean cargo)	0.5	6.2	62	512.3	4.67
Denatured Ethanol (normal)	0.6	0.50	49.7	512.3	0.36
Denatured Ethanol (clean cargo)	0.5	0.50	49.7	512.3	0.30
Blended Ethanol (normal)	0.6	1.54	57.4	512.3	1.29
Blended Ethanol (clean cargo)	0.5	1.54	57.4	512.3	1.07

Note: Blended ethanol based on E70 specifications from TANKS 4.09.

Therefore, the emission factor for loading denatured ethanol to the trucks and railcars which stored gasoline previously
= L (gasoline, normal) - L (gasoline, clean cargo) + L (denatured ethanol, clean cargo) = 4.98 lb/kgal

Therefore, the emission factor for loading blended ethanol to the trucks and railcars which stored gasoline previously
= L (gasoline, normal) - L (gasoline, clean cargo) + L (blended ethanol, clean cargo) = 5.75 lb/kgal

2. Potential to Emit VOC Before Control (assuming all blended ethanol loaded out):

Maximum Loading Rate for EU45A: 36 kgal/hr (for truck loading)
PTE of VOC Before Control (tons/yr) = 36 kgal/hr * 5.75 lbs/kgal * 8760 hr/yr ÷ 2000 lb/ton = 906.60 tons/yr

Maximum Loading Rate for EU45B: 48 kgal/hr (for railcar loading)
PTE of VOC Before Control (tons/yr) = 48 kgal/hr * 5.75 lbs/kgal * 8760 hr/yr ÷ 2000 lb/ton = 1,208.80 tons/yr

Worst case scenario is when loading all blended ethanol to railcars.	**Worst Case Uncontrolled VOC emissions =**	**1,208.80**	**tons/yr**
Worst case scenario when controlled by flare CE019 with an efficiency of 98%.	**Worst Case Controlled VOC emissions =**	**24.18**	**tons/yr**

Notes:
Blended ethanol has a VOC emission factor of 5.75 lbs/kgal, while denatured ethanol has a VOC emission factor of 4.98.
Therefore the emission factor for blended ethanol was used as a worst case scenario.

Methodology:
Worse Case Controlled VOC Emissions (tons/yr) = Worse Case Uncontrolled VOC Emissions (tons/yr) ÷ (1 - Control Efficiency)

Appendix A: Emission Calculations
Ethanol Loading Racks (EU045A and EU045B)

Company Name: **Central Indiana Ethanol, LLC**
Address: **2955 West Delphi Pike, Marion, IN 46952**
Permit No.: **MSM 053-36973-00062 and SPM 053-36781-00062**
Reviewer: **Heath Hartley**

3. Limited VOC Emissions:

Annual Denatured and Blended Ethanol Production Limit:	64,900	kgal/yr	(for both railcar and truck loading)
Annual Denaturant Limit:	4,900	kgal/yr	(for both railcar and truck loading)
Maximum Amount of Blended Ethanol (based on denaturant limit and E70 blend):	16,333	kgal/yr	
Flare Control Efficiency:	98%		

Different scenarios to determine the worst case scenario:

(1) Assume all blended ethanol is loaded to trucks:
VOC (tons/yr) = 5.75 lbs/kgal * 16,333 kgal/yr * (1 - 98%) ÷ 2000 lb/ton = 0.94 tons/yr

(2) Assume all blended ethanol is loaded to dedicated railcars:
VOC (tons/yr) = 1.07 lbs/kgal * 16,333 kgal/yr * (1 - 98%) ÷ 2000 lb/ton = 0.18 tons/yr

(3) Assume all denatured ethanol is loaded to trucks:
VOC (tons/yr) = 4.98 lbs/kgal * 64,900 kgal/yr * (1 - 98%) ÷ 2000 lb/ton = 3.23 tons/yr

(4) Assume all denatured ethanol is loaded to dedicated railcars:
VOC (tons/yr) = 0.30 lbs/kgal * 64,900 kgal/yr * (1 - 98%) ÷ 2000 lb/ton = 0.20 tons/yr

Worst case scenario is when loading all denatured ethanol to trucks.
Truck and Railcar emissions are controlled by enclosed flare CE019. **Worst Case Limited VOC emissions = 3.23 tons/yr**

4. Potential to Emit HAPs:

HAP emissions are mainly from the unloading process for trucks and railcars which may have been used to ship gasoline previously.

HAP	HAP Fraction*	Unlimited PTE of HAP Before Control (tons/yr)	Unlimited PTE of HAP After Control (tons/yr)	Limited PTE of HAP After Control (tons/yr)
Benzene	2.50E-03	3.02	0.06	8.07E-03
Carbon Disulfide	2.00E-05	0.02	4.84E-04	6.46E-05
Cumene	1.00E-04	0.12	2.42E-03	3.23E-04
Ethyl benzene	5.00E-05	0.06	1.21E-03	1.61E-04
n-Hexane	5.00E-02	60.44	1.21	1.61E-01
Toluene	5.00E-03	6.04	0.12	1.61E-02
Xylene	5.00E-04	0.60	0.01	1.61E-03
TOTAL HAPs	---	70.32	1.41	0.19

* This is the HAP fraction for gasoline vapors.

Methodology:
Unlimited PTE of HAP Before Control (tons/yr) = Worse Case VOC Emissions (tons/yr) * HAP Fraction
Unlimited PTE of HAP After Control (tons/yr) = Unlimited PTE of HAP Before Control (tons/yr) * (1 - Control Efficiency)
Limited PTE of HAP After Control (tons/yr) = Worse Case Limited VOC Emissions (tons/yr) * HAP Fraction

Appendix A: Emission Calculations
Ethanol Loading Racks (EU045A and EU045B)

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

5. Potential to Emit (NO_x and CO) from Flare Combustion (CE019)

Maximum Loadout Rate:	48.00	kgal/hr
Limited Loadout Rate:	64,900	kgal/yr

Pollutant	NO_x	CO
Emission Factor (lb/kgal)	0.077	0.129
Unlimited PTE (tons/yr)	16.19	27.12
Limited PTE (tons/yr)	2.50	4.19

Notes:
Particulate (PM, PM_{10}, and $PM_{2.5}$) and SO_2 emission factors are negligible due to the smokeless design and minimal H_2S levels.
Emission factors for NO_x and CO are based on the information provided by the flare manufacturer (MRW Technologies, Inc.)

Methodology:
Unlimited PTE (tons/yr) = Maximum Loadout Rate (kgal/hr) * Emission Factor (lb/kgal) * 8760 hr/yr ÷ 2000 lb/ton
Limited PTE (tons/yr) = Limited Loadout Rate (kgal/yr) * Emission Factor (lb/kgal) ÷ 2000 lb/ton

6. Potential to Emit (GHGs) from Flare Combustion (CE019)

Heat Input Capacity (MMBtu/hr)	HHV (MMBtu/MMCF)	Throughput (MMCF/yr)
10.0	1020	85.88

	Greenhouse Gas		
	CO_2	CH_4	N_2O
Emission Factor (lb/MMCF)	120,000	2.3	2.2
Potential Emissions (tons/yr)	5,153	0.10	0.09
Summed Potential Emissions (tons/yr)	5,153		
CO_2e Total (tons/yr)	5,184		

Notes:
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.
The Global Warming Potentials (GWP) are from Table A-1 of 40 CFR Part 98 Subpart A.

Methodology:
Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) * 8760 hr/yr ÷ HHV (MMBtu/MMCF)
Potential Emissions (tons/yr) = Maximum Heat Input Capacity (MMCF/yr) * Emission Factor (lb/MMCF) ÷ 2000 lb/ton
CO_2e (tons/yr) = [CO_2 Potential Emissions (tons/yr) * CO_2 GWP (1)] + [CH_4 Potential Emissions (tons/yr) * CH_4 GWP (21)] + [N_2O Potential Emissions (tons/yr) * N_2O GWP (310)]

Appendix A: Emission Calculations
190 Proof Non-Fuel Grade Ethanol Loading Skids (EU083 and EU084) BEFORE 2016 MODIFICATION
Uncontrolled Potential to Emit

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

1. Emission Factors: AP-42

Non-fuel grade ethanol will be shipped by either truck loading skid EU083 or railcar loading skid EU084.
Both railcars and trucks will be filled by submerged loading process.
Truck loading skid (EU083) and railcar loading skid (EU084) will both be controlled by flare CE019 which has a control efficiency of 98% for VOC and HAPs.

According to AP-42, Chapter 5.2 - Transportation and Marketing of Petroleum Liquids (01/95), the VOC emission factors for the truck and rail loading racks can be estimated from the following equation:

$$L = 12.46 \times (SPM)/T$$

where:

L = loading loss (lbs/kgal)
S = a saturation factor (see AP-42, Table 5.2-1)
P = true vapor pressure of the liquid loaded (psia)
M = molecular weight of vapors
T = temperature of the bulk liquid loaded (degree R)

Previous Stored Liquid	*S	P (psia)	M (lb/mole lb)	T (degree R)	L (lb/kgal)
Denatured Ethanol (normal)	0.6	0.50	49.7	512.3	0.36
Denatured Ethanol (clean cargo)	0.5	0.50	49.7	512.3	0.30

2. Potential to Emit VOC Uncontrolled/Unlimited (assuming all denatured ethanol loaded out):

Maximum Loading Rate for EU83: 24 kgal/hr (for truck loading)
PTE of VOC Before Control (tons/yr) = 24 kgal/hr * 0.36 lbs/kgal * 8760 hr/yr ÷ 2000 lb/ton = 38.12 tons/yr

Maximum Loading Rate for EU84: 40 kgal/hr (for railcar loading)
PTE of VOC Before Control (tons/yr) = 40 kgal/hr * 0.36 lbs/kgal * 8760 hr/yr ÷ 2000 lb/ton = 63.53 tons/yr

Worst case scenario is when loading all denatured ethanol to railcars.	**Worst Case Uncontrolled VOC emissions =**	**63.53**	**tons/yr**
Worst case scenario when controlled by flare CE019 with an efficiency of 98%.	**Worst Case Controlled VOC emissions =**	**1.27**	**tons/yr**

Notes:
Denatured ethanol from normal cargo has a VOC emission factor of 0.36 lbs/kgal, while denatured ethanol from clean cargo has a VOC emission factor of 0.30. Therefore the emission factor for denatured ethanol (normal) was used as a worst case scenario.

Methodology:
Worse Case Controlled VOC Emissions (tons/yr) = Worse Case Uncontrolled VOC Emissions (tons/yr) ÷ (1 - Control Efficiency)

Appendix A: Emission Calculations
Non-Fuel Grade Ethanol Loading Skids (EU083 and EU084)
Limited VOC Emissions
Potential to Emit HAPs

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

3. VOC Potential Emissions (Uncontrolled):

Annual Non-Fuel Grade Ethanol Production Limit: 60,000 kgal/yr (for both railcar and truck loading)

Different scenarios to determine the worst case scenario:

(1) Assume all denatured ethanol (normal) is loaded to trucks:
VOC (tons/yr) = 0.36 lbs/kgal * 60,000 kgal/yr ÷ 2000 lb/ton = 10.88 tons/yr

(2) Assume all denatured ethanol (normal) is loaded to dedicated railcars:
VOC (tons/yr) = 0.30 lbs/kgal * 60,000 kgal/yr ÷ 2000 lb/ton = 9.07 tons/yr

Worst case scenario is when loading to trucks. **Worst Case Limited VOC emissions = 10.88 tons/yr**

4. VOC Potential Emissions (Controlled):

Annual Non-Fuel Grade Ethanol Production Limit: 60,000 kgal/yr (for both railcar and truck loading)
Flare Control Efficiency: 98%

Different scenarios to determine the worst case scenario:

(1) Assume all denatured ethanol (normal) is loaded to trucks:
VOC (tons/yr) = 0.36 lbs/kgal * 60,000 kgal/yr * (1 - 98%) ÷ 2000 lb/ton = 0.22 tons/yr

(2) Assume all denatured ethanol (normal) is loaded to dedicated railcars:
VOC (tons/yr) = 0.30 lbs/kgal * 60,000 kgal/yr * (1 - 98%) ÷ 2000 lb/ton = 0.18 tons/yr

Worst case scenario is when loading to trucks.
Truck and Railcar emissions are controlled by enclosed flare CE019. **Worst Case Limited VOC emissions = 0.22 tons/yr**

5. Potential to Emit HAPs:

HAP emissions are mainly from the unloading process for trucks and railcars which may have been used to ship gasoline previously.

HAP	HAP Fraction*	Unlimited PTE of HAP Before Control (tons/yr)	Unlimited PTE of HAP After Control (tons/yr)	Limited PTE of HAP After Control (tons/yr)
Benzene	2.50E-03	0.16	3.18E-03	5.44E-04
Carbon Disulfide	2.00E-05	0.001	2.54E-05	4.35E-06
Cumene	1.00E-04	0.01	1.27E-04	2.18E-05
Ethyl benzene	5.00E-05	0.003	6.35E-05	1.09E-05
n-Hexane	5.00E-02	3.18	6.35E-02	1.09E-02
Toluene	5.00E-03	0.32	6.35E-03	1.09E-03
Xylene	5.00E-04	0.03	6.35E-04	1.09E-04
TOTAL HAPs	0.058	3.70	0.07	0.01

* This is the HAP fraction for gasoline vapors.

Methodology:
Unlimited PTE of HAP Before Control (tons/yr) = Worse Case VOC Emissions (tons/yr) * HAP Fraction
Unlimited PTE of HAP After Control (tons/yr) = Unlimited PTE of HAP Before Control (tons/yr) * (1 - Control Efficiency)
Limited PTE of HAP After Control (tons/yr) = Worse Case Limited VOC Emissions (tons/yr) * HAP Fraction

Appendix A: Emission Calculations
Non-Fuel Grade Ethanol Loading Skids (EU083 and EU084)
Potential to Emit (NO_x, CO)

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

6. Potential to Emit (NO_x and CO) from Flare Combustion (CE019)

Maximum Loadout Rate:	40.00	kgal/hr
Limited Loadout Rate:	60,000	kgal/yr

Pollutant	NO_x	CO
Emission Factor (lb/kgal)	0.077	0.129
Unlimited PTE (tons/yr)	13.49	22.60
Limited PTE (tons/yr)	2.31	3.87

Notes:
Particulate (PM, PM_{10}, and $PM_{2.5}$) and SO_2 emission factors are negligible due to the smokeless design and minimal H_2S levels.
Emission factors for NO_x and CO are based on the information provided by the flare manufacturer (MRW Technologies, Inc.)

Methodology:
Unlimited PTE (tons/yr) = Maximum Loadout Rate (kgal/hr) * Emission Factor (lb/kgal) * 8760 hr/yr ÷ 2000 lb/ton
Limited PTE (tons/yr) = Limited Loadout Rate (kgal/yr) * Emission Factor (lb/kgal) ÷ 2000 lb/ton

7. Potential to Emit (GHGs) from Flare Combustion (CE019)

Heat Input Capacity (MMBtu/hr)	HHV (MMBtu/MMCF)	Throughput (MMCF/yr)
12.4	1020	106.49

	Greenhouse Gas		
	CO_2	CH_4	N_2O
Emission Factor (lb/MMCF)	120,000	2.3	2.2
Potential Emissions (tons/yr)	6,390	0.12	0.12
Summed Potential Emissions (tons/yr)	6,390		
CO_2e Total (tons/yr)	6,429		

Notes:
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.
The Global Warming Potentials (GWP) are from Table A-1 of 40 CFR Part 98 Subpart A.

Methodology:
Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) * 8760 hr/yr ÷ HHV (MMBtu/MMCF)
Potential Emissions (tons/yr) = Maximum Heat Input Capacity (MMCF/yr) * Emission Factor (lb/MMCF) ÷ 2000 lb/ton
CO_2e (tons/yr) = [CO_2 Potential Emissions (tons/yr) * CO_2 GWP (1)] + [CH_4 Potential Emissions (tons/yr) * CH_4 GWP (21)] + [N_2O Potential Emissions (tons/yr) * N_2O GWP (310)]

Appendix A: Emission Calculations
Internal Combustion Engines
Diesel Fire Pump

Company Name: **Central Indiana Ethanol, LLC**
Address: **2955 West Delphi Pike, Marion, IN 46952**
Permit No.: **MSM 053-36973-00062 and SPM 053-36781-00062**
Reviewer: **Heath Hartley**

A. Emission Factors

Emission factors from NSPS, Subpart IIII (Table 4) for model year 2008 and earlier between 225 and 450 KW (300 and 600 hp)

NO_x + NMHC	10.5	g/kwh =	7.8	g/hp-hr
CO	3.5	g/kwh =	2.6	g/hp-hr
PM	0.54	g/kwh =	0.4	g/hp-hr

Emission factors from AP-42, Chapter 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-1 (10-96)

SO_x	0.00205	lb/hp-hr	0.0005125	lb/hp-hr	LSD fuel assume 75% reduction in emissions
PM_{10}	0.00220	lb/hp-hr			
CO_2	1.15	lb/hp-hr			
TOC	0.0025141	lb/hp-hr			

The HAP emission factors are from AP-42, Chapter 3.3, Gasoline and Diesel Industrial Engines, Table 3.3-2 (10-96).

B. Limited Emissions

Rated Capacity (hp):	300
Limited Hours of Operation:	500

Pollutant	PM	$PM_{10}/PM_{2.5}$	SO_2	VOC	CO	NO_x	GHGs as CO_2e
Unlimited Emissions (tpy)	0.07	0.17	0.04	0.19	0.43	1.29	86.25
Limited Emissions (tpy)	0.07	0.17	0.04	0.19	0.43	1.29	86.25

C. HAP Emissions

Pollutant	Emission Factor (lb/hp-hr)	Unlimited/ Limited Emissions (tons/yr)
Acetaldehyde	5.37E-06	4.03E-04
Acrolein	6.48E-07	4.86E-05
Benzene	6.53E-06	4.90E-04
1,3-Butadiene	2.74E-07	2.05E-05
Formaldehyde	8.26E-06	6.20E-04
Naphthalene	5.94E-07	4.45E-05
Toluene	2.86E-06	2.15E-04
Xylenes	2.00E-06	1.50E-04
Total PAH HAPs	1.18E-06	8.82E-05
Total HAPs	2.77E-05	2.08E-03

Notes:
Since the fire pump is for emergency use only, the unlimited emissions have been calculated as operating 500 hours per year.
Assume all $PM_{2.5}$ emissions equal to PM_{10} emissions.
Reduction of 75% based upon average fuel sulfur content through year 2005 of 2000 ppm and required use of Low Sulfur Diesel (LSD) with a maximum sulfur content of 500 ppm. EPA 420-R-04-0007: Final Regulatory Analysis: Control of Emissions from Nonroad Diesel Engines, page 3-91.

Methodology:
Unlimited/Limited Emissions (tons/yr) = Capacity (hp) * Emission Factor (g/hp-hr) * Limited Operation (hr/yr) ÷ 453.54 g/lb ÷ 2000 lb/ton
Unlimited/Limited Emissions (tons/yr) = Capacity (hp) * Emission Factor (lb/hp-hr) * Limited Operation (hr/yr) ÷ 2000 lb/ton

Appendix A: Emission Calculations
Biomethanator Flare CE013

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

Max. Heat Input MMBtu/hr	HHV (MMBtu/MMCF)	Throughput (MMCF/yr)
6.00	1020	51.53

The methanator flare only operates when the DDGS dryers are down.

	PM	PM_{10}	$PM_{2.5}$	SO_2	VOC	CO	NO_x	HAP
Emission Factor (lb/MMBtu)	-	-	-	-	0.052	0.37	0.068	-
Potential Emissions (tons/yr)	negl.	negl.	negl.	negl.	1.37	9.72	1.79	see note

	Greenhouse Gas		
	CO_2	CH_4	N_2O
Emission Factor (lb/MMCF)	120,000	2.3	2.2
Potential Emissions (tons/yr)	3,092	0.06	0.06
Summed Potential Emissions (tons/yr)	3,092		
CO_2e Total (tons/yr)	3,111		

Notes:
The Permittee stated that particulate emissions from this flare are negligible due to the smokeless design.
The Permittee stated that SO_2 emissions are negligible due to negligible sulfur presence in the gas stream.
Emission factors for NO_x and CO are from AP-42, Chapter 13.5, Table 13.5-1 (01/95).
The emission factor for VOC is derived from the emission factor for THC (0.14 lb/MMBtu) in AP-42, Chapter 13.5, Table 13.5-1 (01/95).
Per Table 13.5-2, the composition of the flare includes 63% non-VOC pollutants (methane and ethane). VOC = 37% * 0.14 = 0.052
HAP emissions are included on the HAPs Combutions Emissions Summary sheet.
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.
The Global Warming Potentials (GWP) are from Table A-1 of 40 CFR Part 98 Subpart A.

Methodology:
Potential Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) * 8760 hr/yr ÷ HHV (MMBtu/MMCF)
Potential Emissions (tons/yr) = Max. Heat Input (MMBtu/hr) * Emission Factor (lb/MMBtu) * 8760 hr/yr ÷ 2000 lb/ton
Potential Emissions-GHGs (tons/yr) = Maximum Heat Input Capacity (MMCF/yr) * Emission Factor (lb/MMCF) ÷ 2000 lb/t
CO_2e (tons/yr) = [CO_2 Potential Emissions (tons/yr) * CO_2 GWP (1)] + [CH_4 Potential Emissions (tons/yr) * CH_4 GWP (21)] + [N_2O Potential Emissions (tons/yr) * N_2O GWP (310)]

Appendix A: Emissions Calculations
Natural Gas Combustion Only (MMBtu/hr <100)
Space Heaters

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

Max. Heat Input MMBtu/hr	HHV (MMBtu/MMCF)	Throughput (MMCF/yr)
2.50	1020	21.47

	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)	0.02	0.08	0.08	0.01	1.07	0.06	0.90

* 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:
All emission factors are based on normal firing.
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.
HAP emissions are included on the HAPs Combutions Emissions Summary sheet.

Methodology:
Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) * 8760 hr/yr ÷ HHV (MMBtu/MMCF)
Potential Emissions (tons/yr) = Max. Heat Input (MMBtu/hr) * Emission Factor (lb/MMBtu) * 8760 hr/yr ÷ 2000 lb/ton

	Greenhouse Gas		
	CO_2	CH_4	N_2O
Emission Factor (lb/MMCF)	120,000	2.3	2.2
Potential Emissions (tons/yr)	1,288	0.02	0.02
Summed Potential Emissions (tons/yr)	1,288		
CO_2e Total (tons/yr)	1,296		

Notes:
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.
The Global Warming Potentials (GWP) are from Table A-1 of 40 CFR Part 98 Subpart A.

Methodology:
Potential Emissions-GHGs (tons/yr) = Maximum Heat Input Capacity (MMCF/yr) * Emission Factor (lb/MMCF) ÷ 2000 lb/ton
CO_2e (tons/yr) = [CO_2 Potential Emissions (tons/yr) * CO_2 GWP (1)] + [CH_4 Potential Emissions (tons/yr) * CH_4 GWP (21)] + [N_2O Potential Emissions (tons/yr) * N_2O GWP (310)]

Appendix A: Emissions Calculations
Natural Gas Combustion Only (MMBtu/hr <100)
Space Heaters (EPCO Plant)

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

Max. Heat Input MMBtu/hr	HHV (MMBtu/MMCF)	Throughput (MMCF/yr)
0.63	1020	5.41

Three (3) heaters @ 210,000 Btu/hr each

	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	0.02	0.02	0.002	0.27	0.01	0.23

* 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:
All emission factors are based on normal firing.
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.
HAP emissions are included on the HAPs Combutions Emissions Summary sheet.

Methodology:
Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) * 8760 hr/yr ÷ HHV (MMBtu/MMCF)
Potential Emissions (tons/yr) = Max. Heat Input (MMBtu/hr) * Emission Factor (lb/MMBtu) * 8760 hr/yr ÷ 2000 lb/ton

	Greenhouse Gas		
	CO_2	CH_4	N_2O
Emission Factor (lb/MMCF)	120,000	2.3	2.2
Potential Emissions (tons/yr)	325	0.01	0.01
Summed Potential Emissions (tons/yr)	325		
CO_2e Total (tons/yr)	327		

Notes:
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.
The Global Warming Potentials (GWP) are from Table A-1 of 40 CFR Part 98 Subpart A.

Methodology:
Potential Emissions-GHGs (tons/yr) = Maximum Heat Input Capacity (MMCF/yr) * Emission Factor (lb/MMCF) ÷ 2000 lb/ton
CO_2e (tons/yr) = [CO_2 Potential Emissions (tons/yr) * CO_2 GWP (1)] + [CH_4 Potential Emissions (tons/yr) * CH_4 GWP (21)] + [N_2O Potential Emissions (tons/yr) * N_2O GWP (310)]

Appendix A: Emissions Calculations
Natural Gas Combustion Only (MMBtu/hr <100)
Boilers EU081 & EU082

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

Max. Heat Input MMBtu/hr	HHV (MMBtu/MMCF)	Throughput (MMCF/yr)
117.60	1020	1,009.98

Each boiler has a capacity of 58.8 MMBtu/hr.

	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)	0.96	3.84	3.84	0.30	50.50	2.78	42.42

* 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:
All emission factors are based on normal firing.
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.
HAP emissions are included on the HAPs Combutions Emissions Summary sheet.

Methodology:
Throughput (MMCF/yr) = Heat Input Capacity (MMBtu/hr) * 8760 hr/yr ÷ HHV (MMBtu/MMCF)
Potential Emissions (tons/yr) = Max. Heat Input (MMBtu/hr) * Emission Factor (lb/MMBtu) * 8760 hr/yr ÷ 2000 lb/ton

	Greenhouse Gas		
	CO_2	CH_4	N_2O
Emission Factor (lb/MMCF)	120,000	2.3	2.2
Potential Emissions (tons/yr)	60,599	1.16	1.11
Summed Potential Emissions (tons/yr)	60,601		
CO_2e Total (tons/yr)	60,967		

Notes:
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.
The Global Warming Potentials (GWP) are from Table A-1 of 40 CFR Part 98 Subpart A.

Methodology:
Potential Emissions-GHGs (tons/yr) = Maximum Heat Input Capacity (MMCF/yr) * Emission Factor (lb/MMCF) ÷ 2000 lb/ton
CO_2e (tons/yr) = [CO_2 Potential Emissions (tons/yr) * CO_2 GWP (1)] + [CH_4 Potential Emissions (tons/yr) * CH_4 GWP (21)] + [N_2O Potential Emissions (tons/yr) * N_2O GWP (310)]

Appendix A: Emission Calculations
Fugitive Emissions From Roads

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

1. Paved Roads

$E= [k * (sL/2)^{0.91} * (W)^{1.02}][1-(P/4N)]$ AP-42, Section 13.2.1.3, Eqn. 2

Factor	Description		PM	PM_{10}	$PM_{2.5}$
k =	PM Particle size multiplier (lb/VMT)	Table 13.2.1-1	0.011	0.002	0.0005
sL =	Road surface silt loading (g/m^2)	Table 13.2.1-3	2.90	2.90	2.90
P =	Number of "wet" days in an averaging period		120	120	120
N =	Number of days in the averaging period		365	365	365
W =	Average vehicle weight (tons)		29	29	29
E =	Emission factor (lb/VMT, vehicle miles traveled)		0.44	0.09	0.02

Emissions from Paved Roads

Activity	No. of Trucks (trucks/yr)	Miles Traveled per Truck (miles/truck)	Annual Mileage (VMT/yr)	Uncontrolled PM Emissions (tpy)	Controlled PM Emissons* (tpy)	Uncontrolled PM_{10} Emissions (tpy)	Controlled PM_{10} Emissions* (tpy)	Uncontrolled $PM_{2.5}$ Emissions (tpy)	Controlled $PM_{2.5}$ Emissions* (tpy)
Grain Receiving	25,872	0.84	21,732	4.77	2.39	0.95	0.48	0.23	0.12
DDGS Loadout	8,400	0.84	7,056	1.55	0.77	0.31	0.15	0.08	0.04
Ethanol Loadout	8,112	0.84	6,814	1.50	0.75	0.30	0.15	0.07	0.04
Denaturant Delivery	375	0.84	315	0.07	0.03	0.01	0.01	0.00	0.002
TOTAL				7.89	3.94	1.58	0.79	0.39	0.19

* Periodic sweeping will be done to provide control (50%) to $PM/PM_{10}/PM_{2.5}$ emissions.

2. Unpaved Roads

$E = k * (s/12)^a * (W/3)^b * [(365-P)/365]$ AP-42, Section 13.2.2.2, Eqns. 1a and 2

Factor	Description	PM	PM_{10}	$PM_{2.5}$
k =	Particle size multiplier (dimensionless)	4.9	1.5	0.15
s =	surface material silt content (%) (Table 13.2.2-1)	8.5	8.5	8.5
W =	mean vehicle weight (tons)	5.0	5.0	5.0
a =	Equation constants (Table 13.2.2-2)	0.7	0.9	0.9
b =	Equation constants (Table 13.2.2-2)	0.45	0.45	0.45
P =	Number of days with at least 0.01 in of precipitation	120	120	120
E =	Emission Factor (lb/VMT)	3.25	0.93	0.09

Total length of unpaved maintenance roads = 0.20 miles

Emission Area	No. of Trucks (trucks/yr)	Miles Traveled per Truck (miles/truck)	Annual Mileage (VMT/yr)	Uncontrolled PM Emissions (tpy)	Controlled PM Emissions (tpy)	Uncontrolled PM_{10} Emissions (tpy)	Controlled PM_{10} Emissions (tpy)	Uncontrolled $PM_{2.5}$ Emissions (tpy)	Controlled $PM_{2.5}$ Emissions (tpy)
Maintenance Roads	730	0.40	292	0.47	0.24	0.14	0.07	0.01	0.01

Methodology:
Annual Mileage (VMT/yr) = No. of Trucks (trucks/yr) * Miles Traveled (miles/truck)
Uncontrolled Emissions (tons/yr) = Annual Mileage (VMT/yr) * Emission Factor (lb/VMT) ÷ 2000 lb/ton

Appendix A: Emission Calculations
Fugitive Emissions From Roads
EPCO Plant

Company Name: **Central Indiana Ethanol, LLC**
Address: **2955 West Delphi Pike, Marion, IN 46952**
Permit No.: **MSM 053-36973-00062 and SPM 053-36781-00062**
Reviewer: **Heath Hartley**

1. Paved Roads

$E = [k * (sL/2)^{0.91} * (W)^{1.02}][1-(P/4N)]$ AP-42, Section 13.2.1.3, Eqn. 2

Factor	Description		PM	PM_{10}	$PM_{2.5}$
k =	PM Particle size multiplier (lb/VMT)	Table 13.2.1-1	0.011	0.002	0.0005
sL =	Road surface silt loading (g/m^2)	Table 13.2.1-3	2.90	2.90	2.90
P =	Number of "wet" days in an averaging period		120	120	120
N =	Number of days in the averaging period		365	365	365
W =	Average vehicle weight (tons)		29	29	29
E =	Emission factor (lb/VMT, vehicle miles traveled)		0.44	0.09	0.02

Emissions from Paved Roads

Activity	No. of Trucks (trucks/yr)	Miles Traveled per Truck (miles/truck)	Annual Mileage (VMT/yr)	Uncontrolled PM Emissions (tpy)	Controlled PM Emissons* (tpy)	Uncontrolled PM_{10} Emissions (tpy)	Controlled PM_{10} Emissions* (tpy)	Uncontrolled $PM_{2.5}$ Emissions (tpy)	Controlled $PM_{2.5}$ Emissions* (tpy)
EPCO Trucks**	5,475	0.84	4,599	1.01	0.50	0.20	0.10	0.05	0.02
TOTAL				1.01	0.50	0.20	0.10	0.05	0.02

* Periodic sweeping will be done to provide control (50%) to $PM/PM_{10}/PM_{2.5}$ emissions.
** Based on 15 trucks per day

Methodology:
Annual Mileage (VMT/yr) = No. of Trucks (trucks/yr) * Miles Traveled (miles/truck)
Uncontrolled Emissions (tons/yr) = Annual Mileage (VMT/yr) * Emission Factor (lb/VMT) ÷ 2000 lb/ton

Appendix A: Emission Calculations
Equipment Leaks

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

1. Fugitive VOC Emissions

Process Stream	Equipment Component Source	Product	Component Count	Emission Factor (lb/hr per component)	Uncontrolled Rate (lb/hr)	Uncontrolled Rate (tons/yr)	Subpart VV Control	Controlled Rate (lb/hr)	TOC Weight (%)	Emitted Water (lb/hr)	Controlled TOC (lb/hr)	Controlled TOC (tons/yr)
F003	Valves	Gas/Vapor	74	0.01316	0.97	4.27	87.00%	0.13	100.00%	0.00	0.13	0.55
	Valves	Light Liquid	346	0.00889	3.07	13.47	84.00%	0.49	100.00%	0.00	0.49	2.15
	Pump Seals	Light Liquid	21	0.04388	0.92	4.04	69.00%	0.29	100.00%	0.00	0.29	1.25
	Compressors	Gas/Vapor	0	0.50274	0.00	0.00		0.00	100.00%	0.00	0.00	0.00
	Relief Valves	Gas/Vapor	15	0.22932	3.44	15.07	87.00%	0.45	100.00%	0.00	0.45	1.96
	Sampling Connections	All	14	0.03308	0.46	2.03	0.00%	0.46	100.00%	0.00	0.46	2.03
	Open Ended Lines	All	0	0.00375	0.00	0.00		0.00	100.00%	0.00	0.00	0.00
	Flanges	All	297	0.00404	1.20	5.25	0.00%	1.20	100.00%	0.00	1.20	5.25
	TOTAL				10.07	44.11		3.01		0.00	3.01	13.20

Notes:
Component count provided by source.
Emission factors are from Protocol for Equipment Leak Emission Estimates, EPA-453/R-95-017. Table 2-1 and Table 5-2
1 kg = 2.205 pounds

Methodology:
Uncontrolled Rate (lb/hr) = Emission Factor (lb/hr per component) * Component Count
Uncontrolled Rate (tons/yr) = Uncontrolled Rate (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton
Controlled Rate (lb/hr) = Uncontrolled Rate (lb/hr) ÷ (1 - Subpart VV Control)
Emitted Water (lb/hr) = Controlled Rate (lb/hr) ÷ (1 - TOC Weight)
Controlled TOC (lb/hr) = Controlled Rate (lb/hr) * TOC Weight
Controlled TOC (tons/yr) = Controlled TOC (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton

2. Fugitive HAP Emissions

HAP	HAP Fraction	Uncontrolled Emissions (tons/yr)	Controlled Emissions (tons/yr)
Acetaldehyde	2.00E-04	8.82E-03	2.64E-03
Benzene	2.50E-03	1.10E-01	3.30E-02
Carbon Disulfide	2.00E-05	8.82E-04	2.64E-04
Cumene	1.00E-03	4.41E-02	1.32E-02
Ethylbenzene	5.00E-05	2.21E-03	6.60E-04
n-Hexane	5.00E-02	2.21E+00	6.60E-01
Methanol	2.00E-04	8.82E-03	2.64E-03
Toluene	5.00E-03	2.21E-01	6.60E-02
Xylenes	5.00E-04	2.21E-02	6.60E-03
Total HAPs		2.62	0.78

Methodology:
Uncontrolled HAP Emissions (tons/yr) = Uncontrolled TOC (tons/yr) * HAP Fraction
Controlled HAP Emissions (tons/yr) = Controlled TOC (tons/yr) * HAP Fraction

Appendix A: Emission Calculations
Cooling Tower

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

1. Process Description

Type of Cooling Tower:	Induced Draft	
Circulation Flow Rate:	33,000	gal/min
Total Drift:	0.005%	of the circulating flow
Total Dissolved Solids:	2,500	ppm
Density:	8.345	lbs/gal

Note: The information above was provided by the cooling tower manufacturer for the same units located at a similar source.

2. Potential to Emit

Assume all the dissolved solids become PM_{10} emissions.

Assume all PM and $PM_{2.5}$ emissions equal PM_{10} emissions.

PTE of $PM/PM_{10}/PM_{2.5}$ (lb/hr) = 33,000 gal/min * 60 min/hr * 0.005% * 8.345 lbs/gal * 2,500 ppm * 1/1,000,000 ppm = 2.07 lbs/hr

PTE of $PM/PM_{10}/PM_{2.5}$ (tons/yr) = PTE of $PM/PM_{10}/PM_{2.5}$ (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton = 9.05 tons/yr

Appendix A: Emission Calculations
Cooling Tower
EPCO Plant

Company Name: **Central Indiana Ethanol, LLC**
Address: **2955 West Delphi Pike, Marion, IN 46952**
Permit No.: **MSM 053-36973-00062 and SPM 053-36781-00062**
Reviewer: **Heath Hartley**

1. Process Description

Type of Cooling Tower:	Induced Draft	
Circulation Flow Rate:	900	gal/min
Total Drift:	0.005%	of the circulating flow
Total Dissolved Solids:	2,500	ppm
Density:	8.345	lbs/gal

Note: The information above was provided by the cooling tower manufacturer for the same units located at a similar source.

2. Potential to Emit

Assume all the dissolved solids become PM_{10} emissions.
Assume all PM and $PM_{2.5}$ emissions equal PM_{10} emissions.

PTE of $PM/PM_{10}/PM_{2.5}$ (lb/hr) = 33,000 gal/min * 60 min/hr * 0.005% * 8.345 lbs/gal * 2,500 ppm * 1/1,000,000 ppm = 0.06 lbs/hr
PTE of $PM/PM_{10}/PM_{2.5}$ (tons/yr) = PTE of $PM/PM_{10}/PM_{2.5}$ (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton = 0.25 tons/yr

Appendix A: Emission Calculations
Corn Oil Separation Unit and Storage Tank (EU061 and EU062)

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

Potential to Emit (PTE) for Corn Oil Separation Unit (EU061):

The thin stillage will be processed through a separation process to collect and store excess corn oil. The separation process will be enclosed resulting in no emissions. Loadout and Truck Traffic emissions are negligible based on low annual throughput.

Potential to Emit (PTE) for Storage Tank (EU062):

These values were provided by the source based on analytical testing.

Pollutant	PTE (lb/hr)	PTE (tons/yr)	HAP?	VOC?
Acetaldehyde	0.0002	8.76E-04	Y	Y
Acetic Acid	0.0390	0.17	N	Y
Acrolein	0.0001	4.38E-04	Y	Y
Ethanol	0.0430	0.19	Y	Y
Ethylacetate**	0.0140	0.06	N	Y
Formaldehyde	0.0002	8.76E-04	Y	Y
Formic Acid	0.0030	0.01	N	Y
2-furaldehyde	0.0001	4.38E-04	N	Y
Lactic Acid	0.0090	0.04	N	Y
Methanol**	0.0140	0.06	Y	Y
Phosphorous**	0.0080	0.04	Y	N
Total VOC	**0.123**	**0.54**		
Total HAP	**0.066**	**0.29**		

** Concentration was reported as less than the detection limit; therefore, the value is half the detection limit.

Appendix A: Emission Calculations
Storage Tanks

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

Emissions were calculated using Tanks 4.0.9d software and submitted by the source.

Tank ID	Volume (gal)	Type	Emissions (lb/yr)	Emissions (lb/hr)	Emissions (ton/yr)
T001	100,000	190 Proof	120	0.01	0.06
T002	100,000	200 Proof	660	0.08	0.33
T003	100,000	Denaturant	5,200	0.59	2.60
T004	750,000	Undenatured Ethanol	710	0.08	0.36
T005	750,000	Undenatured Ethanol	710	0.08	0.36
T006	2,300	Fuel Additive	1,180	0.13	0.59
T007	1,000	Diesel Storage	negl.	negl.	negl.
T008	350	Gasoline Storage	59.50	0.01	0.03
T009	1,000	Diesel Storage	1.21	0.0001	0.001
T010	1,000	E-85 Storage	24.67	0.003	0.01
Emissions Total From Existing Tanks			**8,665**	**0.99**	**4.33**

Appendix A: Emission Calculations
Storage Tanks

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

Volatile Organic Compound (VOC) Emissions From Storage Tanks (Working and Breathing Losses) Using US EPA TANKS Version 4.09 program*

VOC emissions from storage tanks were determined by using US EPA TANKS Version 4.09 program.

Storage Tank ID	Product Stored	Tank Type	Tank Color/Shade	Tank (ft x ft x ft) Dimensions	Maximum Liquid Volume (gallons)	Turnovers per year	Product Throughput (gallons/yr)	VOC Working Losses (lbs/yr)	VOC Breathing Losses (lbs/yr)	Total VOC Losses (lbs/yr)	VOC Working Losses (tons/yr)	VOC Breathing Losses (tons/yr)	Total VOC Losses (tons/yr)
T013	Non-fuel grade ethanol				500,000		0			263	0.000	0.000	0.132
T014	Non-fuel grade ethanol				500,000	0	0			263	0.000	0.000	0.132
T018	MIBK	VFRT	White/White	18x10x18	10,000	60	600,000	158.43	9.41	167.84	0.08	0.00	0.084
T019	Tbutyl	VFRT	White/White	16x6x15	3,000	200	600,000	110.23	5.41	115.64	0.06	0.00	0.058
T020	Methyl Alcohol	VFRT	White/White	6x4x5	500	25	12,500	9.85	3.24	13.09	0.00	0.00	0.007
									Totals	**822.87**		**Totals**	**0.411**

Internal Floating Roof Tanks

Storage Tank ID	Product Stored	Tank Type	Tank Color/Shade	Diameter (ft)	Maximum Liquid Volume (gallons)	Turnovers per year	Product Throughput (gallons/yr)	VOC Rim Seal Losses (lbs/yr)	VOC Withdrawal Losses (lbs/yr)	Deck Fitting Losses (lbs/yr)	Deck Seam Loss (lbs/yr)	Total VOC Losses (lbs/yr)	VOC Rim Seal Losses (tons/yr)	VOC Withdrawal Losses (lbs/yr)	Deck Fitting Losses (tons/yr)	Deck Seam Loss (tons/yr)	Total VOC Losses (tons/yr)
T015	Isopropanol	Internal Floating Roof	White/White	12	29,000	62.07	1,800,030	7.15	35.97	92.85	0.00	135.97	0.004	0.018	0.046	0.00	0.068
T016	Methanol	Internal Floating Roof	White/White	12	29,000	62.07	1,800,030	12.29	36.29	159.63	0.00	208.21	0.006	0.018	0.080	0.00	0.104
T017	Methanol	Internal Floating Roof	White/White	12	29,000	62.07	1,800,030	12.29	36.29	159.63	0.00	208.21	0.006	0.018	0.080	0.00	0.104
T021 NEW	Non-fuel grade ethanol 200 proof	Internal Floating Roof	Gray/Light	31	250,000	100.00	25,000,000	4.87	179.53	77.06	0.00	261.46	0.002	0.090	0.039	0.00	0.131
											Totals	**552.4**				**Totals**	**0.28**

negl. = negligible
**ND = Not Determined. Emissions from VFD05 are already accounted for through the other tanks. This tank holds only off-specification fuel that are found in the other tanks.

Tank T021

HAP	HAP Fraction	Uncontrolled PTE (tons/yr)
Acetaldehyde	2.00E-04	2.61E-05
Benzene	2.50E-03	3.27E-04
Carbon Disulfide	2.00E-05	2.61E-06
Cumene	1.00E-03	1.31E-04
Ethylbenzene	5.00E-05	6.54E-06
n-Hexane	5.00E-02	6.54E-03
Methanol	2.00E-04	2.61E-05
Toluene	5.00E-03	6.54E-04
Xylenes	5.00E-04	6.54E-05
Total HAPs		0.01

Total VOC Losses (lbs/yr)	**1375.26**
Total VOC Losses (tons/yr)	**0.688**

Methodology
**Includes any vapor loss between underground tank and gas pump
The gasoline throughput was provided by the source.
PTE of VOC (tons/yr) = [Gasoline Throughput (kgal/yr)] * [Emission Factor (lb/kgal)] * [ton/2000 lb]

The throughput of the proposed tanks is based on an annual capacity of 60 million gallons of non-fuel grade ethanol.
The total worst-case single HAP from tanks 13-20 is 1.95 tons per year.

Appendix A: Emission Calculations
Equipment Leaks

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

1. Fugitive VOC Emissions

Process Stream	Equipment Component Source	Product	Component Count	Emission Factor (lb/hr per component)	Uncontrolled Rate (lb/hr)	Uncontrolled Rate (tons/yr)	Subpart VV Control	Controlled Rate (lb/hr)	TOC Weight (%)	Emitted Water (lb/hr)	Controlled TOC (lb/hr)	Controlled TOC (tons/yr)
F006	Valves	Gas/Vapor	19	0.01316	0.25	1.10	87.00%	0.03	100.00%	0.00	0.03	0.14
	Valves	Light Liquid	87	0.00889	0.77	3.39	84.00%	0.12	100.00%	0.00	0.12	0.54
	Pump Seals	Light Liquid	5	0.04388	0.22	0.96	69.00%	0.07	100.00%	0.00	0.07	0.30
	Compressors	Gas/Vapor	0	0.50274	0.00	0.00		0.00	100.00%	0.00	0.00	0.00
	Relief Valves	Gas/Vapor	4	0.22932	0.92	4.02	87.00%	0.12	100.00%	0.00	0.12	0.52
	Sampling Connections	All	4	0.03308	0.13	0.58	0.00%	0.13	100.00%	0.00	0.13	0.58
	Open Ended Lines	All	0	0.00375	0.00	0.00		0.00	100.00%	0.00	0.00	0.00
	Flanges	All	74	0.00404	0.30	1.31	0.00%	0.30	100.00%	0.00	0.30	1.31
	TOTAL				2.59	11.35		0.77		0.00	0.77	3.39

Notes:
Component count provided by source.
Emission factors are from Protocol for Equipment Leak Emission Estimates, EPA-453/R-95-017. Table 2-1 and Table 5-2
1 kg = 2.205 pounds

Methodology:
Uncontrolled Rate (lb/hr) = Emission Factor (lb/hr per component) * Component Count
Uncontrolled Rate (tons/yr) = Uncontrolled Rate (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton
Controlled Rate (lb/hr) = Uncontrolled Rate (lb/hr) ÷ (1 - Subpart VV Control)
Emitted Water (lb/hr) = Controlled Rate (lb/hr) ÷ (1 - TOC Weight)
Controlled TOC (lb/hr) = Controlled Rate (lb/hr) * TOC Weight
Controlled TOC (tons/yr) = Controlled TOC (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton

2. Fugitive HAP Emissions

HAP	HAP Fraction	Uncontrolled Emissions (tons/yr)	Controlled Emissions (tons/yr)
Acetaldehyde	2.00E-04	2.27E-03	6.78E-04
Benzene	2.50E-03	2.84E-02	8.48E-03
Carbon Disulfide	2.00E-05	2.27E-04	6.78E-05
Cumene	1.00E-03	1.13E-02	3.39E-03
Ethylbenzene	5.00E-05	5.67E-04	1.70E-04
n-Hexane	5.00E-02	5.67E-01	1.70E-01
Methanol	2.00E-04	2.27E-03	6.78E-04
Toluene	5.00E-03	5.67E-02	1.70E-02
Xylenes	5.00E-04	5.67E-03	1.70E-03
Total HAPs		0.67	0.20

Methodology:
Fugitive HAP Emissions (tons/yr) = Controlled TOC (tons/yr) * HAP Fraction

Appendix A: Emission Calculations
Cooling Tower

Company Name: Central Indiana Ethanol, LLC
Address: 2955 West Delphi Pike, Marion, IN 46952
Permit No.: MSM 053-36973-00062 and SPM 053-36781-00062
Reviewer: Heath Hartley

1. Process Description

Type of Cooling Tower:	Induced Draft	
Circulation Flow Rate:	21,000	gal/min
Total Drift:	0.005%	of the circulating flow
Total Dissolved Solids:	2,500	ppm
Density:	8.345	lbs/gal

Note: The information above was provided by the cooling tower manufacturer for the same units located at a similar source.

2. Potential to Emit

Assume all the dissolved solids become PM_{10} emissions.

Assume all PM and $PM_{2.5}$ emissions equal PM_{10} emissions.

PTE of $PM/PM_{10}/PM_{2.5}$ (lb/hr) = 33,000 gal/min * 60 min/hr * 0.005% * 8.345 lbs/gal * 2,500 ppm * 1/1,000,000 ppm =	1.31	lbs/hr
PTE of $PM/PM_{10}/PM_{2.5}$ (tons/yr) = PTE of $PM/PM_{10}/PM_{2.5}$ (lb/hr) * 8760 hr/yr ÷ 2000 lb/ton =	5.76	tons/yr

Indiana Department of Environmental Management
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Michael R. Pence
Governor

Carol S. Comer
Commissioner

May 4, 2016

Mr. Mark Sevier
Central Indiana Ethanol, LLC
2955 West Delphi Pike
Marion, IN 46952

Re: Public Notice
Central Indiana Ethanol, LLC
Permit Level: Title V Significant Permit Modification
Permit Number: 053-36781-00062

Dear Mr. Sevier:

Enclosed is a copy of your draft Title V Significant Permit Modification, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Marion Chronicle Tribune in Marion, Indiana publish the abbreviated version of the public notice no later than May 7, 2016. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the Marion Public Library, 600 South Washington Street in Marion, Indiana. As a reminder, you are obligated by 326 IAC 2-1.1-6(c) to place a copy of the complete permit application at this library no later than ten (10) days after submittal of the application or additional information to our department. We highly recommend that even if you have already placed these materials at the library, that you confirm with the library that these materials are available for review and request that the library keep the materials available for review during the entire permitting process.

Please review the enclosed documents carefully. This is your opportunity to comment on the draft permit and notify the OAQ of any corrections that are needed before the final decision. Questions or comments about the enclosed documents should be directed to Heath Hartley, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 2-8217 or dial (317) 232-8217.

Sincerely,

Vivian Haun

Vivian Haun
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter 2/17/2016

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ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

May 4, 2016

Marion Chronicle Tribune
610 South Adams
Marion, IN 46953

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Central Indiana Ethanol, LLC, Grant County, Indiana.

Since our agency must comply with requirements which call for a Notice of Public Comment, we request that you print this notice one time, no later than May 7, 2016.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call Vivian Haun at 800-451-6027 and ask for extension 3-6878 or dial 317-233-6878.

Sincerely,

Vivian Haun

Vivian Haun
Permit Branch
Office of Air Quality

Permit Level: Title V Significant Permit Modification
Permit Number: 053-36781-00062

Enclosure
PN Newspaper.dot 8/27/2015

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

May 4, 2016

To: Marion Public Library

From: Matthew Stuckey, Branch Chief
Permits Branch
Office of Air Quality

Subject: **Important Information to Display Regarding a Public Notice for an Air Permit**

Applicant Name: Central Indiana Ethanol, LLC
Permit Number: 053-36781-00062

Enclosed is a copy of important information to make available to the public. This proposed project is regarding a source that may have the potential to significantly impact air quality. Librarians are encouraged to educate the public to make them aware of the availability of this information. The following information is enclosed for public reference at your library:

- Notice of a 30-day Period for Public Comment
- Request to publish the Notice of 30-day Period for Public Comment
- Draft Permit and Technical Support Document

You will not be responsible for collecting any comments from the citizens. Please refer all questions and request for the copies of any pertinent information to the person named below.

Members of your community could be very concerned in how these projects might affect them and their families. **Please make this information readily available until you receive a copy of the final package.**

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. Questions pertaining to the permit itself should be directed to the contact listed on the notice.

Enclosures
PN Library.dot 2/16/2016

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

Notice of Public Comment

May 4, 2016
Central Indiana Ethanol, LLC
053-36781-00062

Dear Concerned Citizen(s):

You have been identified as someone who could potentially be affected by this proposed air permit. The Indiana Department of Environmental Management, in our ongoing efforts to better communicate with concerned citizens, invites your comment on the draft permit.

Enclosed is a Notice of Public Comment, which has been placed in the Legal Advertising section of your local newspaper. The application and supporting documentation for this proposed permit have been placed at the library indicated in the Notice. These documents more fully describe the project, the applicable air pollution control requirements and how the applicant will comply with these requirements.

If you would like to comment on this draft permit, please contact the person named in the enclosed Public Notice. Thank you for your interest in the Indiana's Air Permitting Program.

Please Note: *If you feel you have received this Notice 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. If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure
PN AAA Cover.dot 2/17/2016

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AFFECTED STATE NOTIFICATION OF PUBLIC COMMENT PERIOD
DRAFT INDIANA AIR PERMIT

May 4, 2016

A 30-day public comment period has been initiated for:

Permit Number: **053-36781-00062**
Applicant Name: **Central Indiana Ethanol, LLC**
Location: **Marion, Grant County, Indiana**

The public notice, draft permit and technical support documents can be accessed via the **IDEM Air Permits Online** site at:
http://www.in.gov/ai/appfiles/idem-caats/

Questions or comments on this draft permit should be directed to the person identified in the public notice by telephone or in writing to:

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

Questions or comments regarding this email notification or access to this information from the EPA Internet site can be directed to Chris Hammack at chammack@idem.IN.gov or (317) 233-2414.

Mail Code 61-53

IDEM Staff	VHAUN 5/4/2016 Central Indiana Ethanol, LLC 053-36781-00062 DRAFT		
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: **CERTIFICATE OF MAILING ONLY**

AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING

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1		Mark Sevier Central Indiana Ethanol, LLC 2955 W Delphi Pike Marion IN 46952 (Source CAATS)									
2		Ryan Drook President Central Indiana Ethanol, LLC 2955 W Delphi Pike Marion IN 46952 *(RO CAATS)*									
3		Marion City Council and Mayors Office 301 S. Branson Street Marion IN 46952-4052 *(Local Official)*									
4		Grant County Commissioners 401 South Adams Marion IN 46953 *(Local Official)*									
5		Ms. Mary Shipley 10968 E 100 S Marion IN 46953 *(Affected Party)*									
6		Grant County Health Department 401 S. Adams St, Courthouse Complex Marion IN 46953-2031 *(Health Department)*									
7		Mr. Thomas Lee Clevenger 4005 South Franks Lane Selma IN 47383 *(Affected Party)*									
8		Marion Public Library 600 S Washington St Marion IN 46953 *(Library)*									
9		Ginny King Marathon Petroleum Company 539 S Main St Findley OH 45870 *(Attorney)*									
10		Tony DeMarco BCA Environmental Consultants 616 S 4th Street Elkhart IN 46516 *(Consultant)*									
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