



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Michael R. Pence*  
Governor

*Thomas W. Easterly*  
Commissioner

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

TO: Interested Parties / Applicant

DATE: January 18, 2013

RE: Central Indiana Ethanol LLC / 053-325191-00062

FROM: Matthew Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

## Notice of Decision: Approval - Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures  
FNPER.dot12/03/07



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Mr. Norm Currey  
Central Indiana Ethanol, LLC  
2955 West Delphi Pike  
Marion, IN 46952

January 18, 2013

Re: Interim Significant Source Modification Petition Approval  
053-325191-00062

Dear Mr. Currey:

On January 4, 2013, the Office of Air Quality (OAQ) received an interim Significant Source Modification petition from Central Indiana Ethanol, LLC, located at 2955 West Delphi Pike, Marion, Indiana for construction of two (2) 48.16 MMBtu/hr natural gas fired boilers, one (1) non-fuel grade ethanol distillation process, one (1) truck loadout skid, one (1) railcar loadout skid, one (1) cooling tower, and five (5) storage tanks.

A public notice of the interim Significant Source Modification petition was published in The Marion Chronicle-Tribune on December 21, 2012. The public comment period ended on January 4, 2013. There were no comments received during the public comment period. This interim Significant Source Modification petition is in effect upon issuance and will expire on the effective date of the final Significant Source Modification permit.

The interim Significant Source Modification petition may be revoked after the effective date upon a written finding by the Indiana Department of Environmental Management (IDEM) that any of the reasons for denial in 326 IAC 2-13-1(h) exist or if the final Significant Source Modification permit is denied. The IDEM has reviewed this interim Significant Source Modification petition and has not found any such reason. The facilities subject to this approval may not operate until the final Significant Permit Modification is issued by OAQ.

The interim Significant Source Modification petition is federally enforceable. Detailed construction and operation conditions will be specified in the final Significant Source Modification permit 053-32519-00062. If you have any questions regarding this interim Significant Source Modification petition, please contact John Haney, OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251, or call at (800) 451-6027, and ask for John Haney or extension 4-5328, or dial (317) 234-5328.

Sincerely,

Jenny Acker, Section Chief  
Permits Branch  
Office of Air Quality

Enclosure: Interim Permit Evaluation

jeh

cc: File -- Grant County  
Grant County Health Department  
U.S. EPA, Region V  
Compliance and Enforcement Branch

**Indiana Department of Environmental Management  
Office of Air Quality**

RECEIVED  
State of Indiana

JAN 04 2013

**Interim Petition Checklist**

**Instructions:** (a) Please answer yes or no.  
(b) Enclosed this checklist with the completed interim petition package.

**Company Name:** Central Indiana Ethanol, LLC

**Location:** 2955 West Delphi Pike, Marion, Indiana 46952

Yes	1. Is the written interim petition prepared?
Yes	2. Is the written petition signed and dated?
Yes	3. Is the public notice drafted?
Yes	4. Is the filing and review fee enclosed? \$625 for TV, FESOP, and SSOA. \$500 for MSOP.
Yes	5. Is the account number written on the check or money order?
Yes	6. Is the Affidavit of Construction signed, dated, and notarized?
Yes	7. Is the proposed modification/revision described in detail?
Yes	8. Is the proposed modification/revision a modification or addition to an existing source?
Yes	9. Is the proposed modification/revision located in an attainment area for all the criteria pollutants?
No	10. Is the proposed modification/revision located in a nonattainment area? If yes, answer No. 11.
	11. Is the pollutant, which the nonattainment designation is based on, going to be emitted in this proposed modification/revision?
Yes	12. Are potential emissions calculated?
Yes	13. Is federal enforceability consent specifically indicated?
Yes	14. Are specific conditions, limitations, and/or restrictions included that preclude applicability of PSD?
No	15. Are specific conditions, limitations, and/or restrictions included that preclude applicability of NSPS?
No	16. Are specific conditions, limitations, and/or restrictions included that preclude applicability of NESHAP?
Yes	17. Are specific conditions, limitations, and/or restrictions included that assure compliance with all applicable state air pollution rules?
Yes	18. Has a regular modification/revision permit application been submitted to OAQ?
No	19. Has the proposed modification/revision commenced prior to the submission of the interim permit petition?
	20. The interim petition comment period has been decided to be: 14 calendar days

**Additional Comments:**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

**PETITION FOR INTERIM SIGNIFICANT PERMIT REVISION**

Source Name: Central Indiana Ethanol, LLC  
Source Address: 2955 West Delphi Pike, Marion, IN 46952  
Mailing Address: 2955 West Delphi Pike, Marion, IN 46952  
SIC/NAICS Code: 2869 / 325193

**Description of the Operation or Equipment:**

Central Indiana Ethanol, LLC (CIE), Plant ID 053-00062, operates a fuel-grade ethanol production facility located near Marion, Indiana, under Federally Enforceable State Operating Permit (FESOP) Renewal No. F053-30470-00062. CIE submitted an application to transfer the FESOP to a Title V operating permit on June 28, 2012. CIE is subject to Title V because of the U.S. Environmental Protection Agency's (EPA) decision to regulate greenhouse gas (GHG) emissions. The new Title V permit number will be T053-32070-00062. Emission sources at the facility include grain handling, fermentation, distillation, distillers' dried grains with solubles (DDGS) handling, DDGS drying, storage tanks, ethanol loadout, and fugitives.

CIE seeks to construct and operate a new non-fuel grade ethanol distillation process. CIE is not requesting a change in the overall facility production capacity. The proposed process will be limited by the existing 60 MMgal/yr production limit. CIE will continue to have a controlled potential to emit (PTE) less than 100 tons per year (tpy) for particulate matter less than ten microns in diameter (PM<sub>10</sub>), particulate matter less than two and a half microns in diameter (PM<sub>2.5</sub>), and sulfur dioxide (SO<sub>2</sub>). PTE of oxides of nitrogen (NO<sub>x</sub>), volatile organic compounds (VOC), and carbon monoxide (CO) are over 100 tpy.

The proposed process is a closed process, with no emissions to the atmosphere during normal operation. The proposed process does have safety pressure relief valves that would emit process gasses in the event the system becomes over pressurized. Over pressurization of the system is not expected during normal operation. The new process is not considered a source of emissions but it does require ancillary equipment which will be sources of air emissions. The emission units to be added to the facility are listed below:

- two 48.16 MMBtu/hour natural gas-fired boilers;
- one truck loadout skid with maximum loading rate of 24,000 gallons per hour;
- one railcar loadout skid with a maximum loading rate of 40,000 gallons per hour;
- one flare to control loadout emissions with a control efficiency of 98 percent;
- one cooling tower with a capacity of 21,000 gallons/minute;
- two storage tanks with a capacity of 500,000 gallons; and
- three storage tanks with a capacity of 24,000 gallons.

There will also be fugitive emissions associated with emission leaks from flanges and valves. The grain handling and fermentation processes at CIE will remain unchanged with the addition of the new process.

## Potential to Emit:

Table 1.0 that follows summarizes the limited potential emissions of criteria pollutants, greenhouse gases, and hazardous air pollutants (HAP) from the modification. Table 1.0 also presents the limited potential emissions from the facility before and after the proposed modification.

Description	PM/PM <sub>10</sub> /PM <sub>2.5</sub> (tpy)	SO <sub>2</sub> (tpy)	NO <sub>x</sub> (tpy)	VOC (tpy)	CO (tpy)	Acetaldehyde (tpy)	HAPs (tpy)	CO <sub>2e</sub> (tpy)
Natural Gas Boilers	0.78/3.14/3.14	0.25	41.36	2.28	34.74	-	0.78	49,366
Loadout/Flare	Neg.	Neg.	2.31	1.27	3.87	-	0.01	5,125
Storage Tanks	-	-	-	3.85	-	-	3.85 <sup>b</sup>	-
Fugitive (flanges & valves)	-	-	-	13.18	-	0.00264	0.78	-
Cooling Tower	5.76/5.76/5.76	-	-	-	-	-	-	-
<b>Total from Modification</b>	<b>6.54/8.90/8.90</b>	<b>0.25</b>	<b>43.67</b>	<b>20.58</b>	<b>38.61</b>	<b>0.00264</b>	<b>5.42</b>	<b>54,491</b>
Existing	85.76/73.88/52.71	37.27	91.15	95.22	97.50	9.85	12.88	121,718
<b>Total after Modification</b>	<b>92.30/82.78/61.61</b>	<b>37.52</b>	<b>134.82</b>	<b>115.80</b>	<b>136.11</b>	<b>9.85</b>	<b>18.30</b>	<b>176,209</b>

Notes:

<sup>a</sup>The largest single HAP remains acetaldehyde

<sup>b</sup>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 isobutyl ketone, and toluene.

PM<sub>10</sub> particulate matter less than 10 microns in aerodynamic diameter

PM<sub>2.5</sub> particulate matter less than 2.5 microns in aerodynamic diameter

tpy tons per year

SO<sub>2</sub> sulfur dioxide

NO<sub>x</sub> nitrogen oxides

VOC volatile organic compounds

CO carbon monoxide

HAP hazardous air pollutants

CO<sub>2e</sub> carbon dioxide equivalents

/ Neg. negligible

Calculations and methodologies are included in Attachment A.

The two largest storage tanks will hold non-fuel grade ethanol. The three smaller tanks will be capable of holding a variety of volatile organic liquids. The content of the smaller tanks will be dependent on consumer demand and product availability. In order to calculate the potential emissions of VOCs, as well as worst-case HAP emissions from the tanks, EPA's Tanks 4.09d program was used to estimate emissions for all possible volatile products that could be stored within the tanks. The tank content with the worst-case emissions was chosen to represent the potential emissions from the tanks for both VOCs and HAPs. The potential emissions of cumulative HAPs will not exceed 3.85 tpy from the tanks and will be limited to any single HAP or combination of these HAPs: benzene, chloroform, dimethyl phthalate, methyl isobutyl ketone, and toluene.

### Prevention of Significant Deterioration Requirements:

The potential to emit is less than the Prevention of Significant Deterioration (PSD) significant emission levels, therefore, PSD rules and requirements do not apply.

### New Source Performance Standards Requirements:

The two additional boilers fall under 40 CFR 60 Subpart Dc. Sections: §60.40c, 60.41c, and 60.48c.

All five tanks will be subject to 40 CFR 60 Subpart Kb. Sections: §60.110b, 60.111b, 60.112b, 60.113b, 60.115b, 60.116b, and 60.117b.

40 CFR 60 Subpart VVa will apply to the new process. Sections: §60.480a, 60.481a, 60.482-1a, 60.482-2a, 60.482-3a, 60.482-4a, 60.482-5a, 60.482-6a, 60.482-7a, 60.482-8a, 60.482-9a, 60.482-10a, 60.482-11a, 60.483-1a, 60.483-2a, 60.484a, 60.485a, 60.486a, 60.487a, 60.488a, and 60.489a.

**NESHAP Requirements:**

There is no applicable NESHAP rule applicable to this operation or equipment.

**State Rules & Requirements:**

The potential emissions of cumulative HAPs shall be limited to no more than 3.85 tpy from the tanks, and shall be limited to any single HAP or combination of these HAPs: benzene, chloroform, dimethyl phthalate, methyl isobutyl ketone, and toluene. The VOC emissions from the tank storage and tank filling shall be calculated using USEPA's TANKS program (version 4.0 or its updates) to show ongoing compliance. The new source will be limiting the distillation process using the existing 60 MMgal/yr production limit.

Proposed flare (CE019): 326 IAC 2-2 – limited to 0.129 pounds per 1,000 gallons for CO and 0.077 pounds per thousand gallons for NO<sub>x</sub>.

**Federal Enforceability:**

The company consents to the federal enforceability of this interim petition.

Signature:   
Printed Name: Ryan Dook  
Title or Position: President/CEO  
Phone Number: (765) 384-4005  
Date: 12-18-12

### Affidavit of Construction

I, Ryan Drook, being duly sworn upon my oath, depose and say:

1. I live in MARION County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of President/CEO for Central Indiana Ethanol, LLC.
3. By virtue of my position with Central Indiana Ethanol, LLC, I have personal knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of Central Indiana Ethanol, LLC.
4. I, the undersigned, have submitted an interim (significant permit revision) petition to the Office of Air Quality for the construction of an additional distillation process, truck and rail loadout skids with a flare, two boilers and five tanks.
5. Central Indiana Ethanol, LLC recognizes the following risks:
  - (a) own financial risk,
  - (b) that IDEM may require additional or different control technology for the final approval,
  - (c) that IDEM may deny issuance of the final approval, and
  - (d) any additional air permitting requirements.

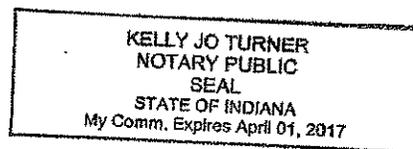
Further Affiant said not. I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature: Ryan Drook

Printed Name: Ryan Drook

Phone No.: (765) 384-4005

Date: 12-18-12



Subscribed and sworn to me, a notary public in and for Grant

County and State of Indiana on this 18<sup>th</sup> day of December 2012.

My Commission expires: 04/01/2017

Signature: Kelly J. Turner

Printed Name: Kelly J. Turner

**NOTICE OF 14-DAY PERIOD  
FOR PUBLIC COMMENT**

Proposed Approval of Interim Significant Permit Revision  
for **Central Indiana Ethanol, LLC**  
in **Grant County**

Notice is hereby given that the above company located at 2955 West Delphi Pike, Marion, Indiana, has made application to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for an interim permit to construct an additional process. Based on 8,760 hours per year of operation, the changes in facility emissions as a result of the proposed changes are: +6.54 for PM, +8.90 for PM<sub>10</sub>, +8.90 for PM<sub>2.5</sub>, +0.25 for SO<sub>2</sub>, +43.67 for NO<sub>x</sub>, +20.58 for VOC, +38.61 for CO, +5.42 for Total HAP, and +54,491 for CO<sub>2</sub>e. All values are listed in tons per year.

The company has submitted an application for a significant source modification. The OAQ shall review the application in accordance with the Permit Review Rules. Operation of the source cannot commence until a valid operating permit is issued. The construction of the proposed project is entirely at the applicant's own risk.

Notice is hereby given that there will be a period of 14 days from the date of publication of this notice during which any interested person may comment on why this interim permit should or should not be issued. Appropriate comments should be related to air quality issues, interpretation of the applicable state and federal rules, calculations made, technical issues, or the effect that the operation of this facility would have on any aggrieved individuals. A copy of the application and staff review is available for examination at the **Marion Public Library, 600 South Washington St, Marion, Indiana, 46953**. All comments, along with supporting documentation, should be submitted in writing to the IDEM, OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251.

Persons not wishing to comment at this time, but wishing to receive notice of future proceedings conducted related to this action, must submit a written request to the Office of Air Quality (OAQ), at the above address. All interested parties of record will receive a notice of the decision on this matter and will then have 15 days after receipt of the Notice of Decision to file a petition for administrative review. Procedures for filing such a petition will be enclosed with the Notice.

Questions should be directed to OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana, 46204-2251, or call (800) 451-6027 or (317) 233-0178.

Company Official's Signature:



Company Official's Printed Name:

Ryan Dook

Company Name:

Central Indiana Ethanol, LLC

# PUBLISHER'S AFFIDAVIT

Grant COUNTY  
STATE OF INDIANA }

Central Indiana Ethanol/14 Day Period for Comment  
Construct an additional process

Personally appeared before me, a notary public in and for said county and state, the undersigned Joyce Walker

Who being duly sworn says that (he or she) is of competent age and is Legal Invoice Clerk of the CHRONICLE-TRIBUNE, a daily newspaper which for at least five (5) consecutive years has been published in the city of Marion, county of Grant, State of Indiana, and which, during that time, has been a newspaper of general circulation, have a bona fide paid circulation, printed in the English language and entered, authorized and accepted by the post-office department of the United States of America as mailable matter of the second-class as defined by the Act of Congress of the United States of March 3, 1979, and that the printed matter attached hereto is a true copy, which was duly published in said newspaper 1 time(s), the date(s) of publication being as follows:

December 21, 2012

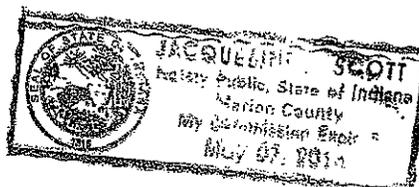
Joyce Walker  
AFFIANT

scribed and sworn to before me, this 21st day of December 2012

Jacqueline R. Scott  
Jacqueline R. Scott, Notary Public

My Commission Expires: May 7, 2014  
County Residence Grant

PUBLISHER'S FEE \$ 200.10



## NOTICE OF 14-DAY PERIOD FOR PUBLIC COMMENT Proposed Approval of Interim Significant Permit Revision for Central Indiana Ethanol, LLC in Grant County

Notice is hereby given that the above company located at 2955 West Delphi Pike, Marion, Indiana, has made application to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for an interim permit to construct an additional process. Based on 8,760 hours per year of operation, the changes in facility emissions as a result of the proposed changes are: +6.54 for PM, +8.90 for PM10, +8.90 for PM2.5, +0.25 for SO2, +43.67 for NOX, +20.58 for VOC, +38.61 for CO, +5.42 for Total HAP, and +54.491 for CO2e. All values are listed in tons per year.

The company has submitted an application for a significant source modification. The OAQ shall review the application in accordance with the Permit Review Rules. Operation of the source cannot commence until a valid operating permit is issued. The construction of the proposed project is entirely at the applicant's own risk.

Notice is hereby given that there will be a period of 14 days from the date of publication of this notice during which any interested person may comment on why this interim permit should or should not be issued. Appropriate comments should be related to air quality issues, interpretation of the applicable state and federal rules, calculations made, technical issues, or the effect that the operation of this facility would have on any aggrieved individuals. A copy of the application and staff review is available for examination at the Marion Public Library, 600 South Washington St, Marion, Indiana 46953. All comments, along with supporting documentation, should be submitted in writing to the IDEM, OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana 46204-2251.

Persons not wishing to comment at this time, but wishing to receive notice of future proceedings conducted related to this action, must submit a written request to the Office of Air Quality (OAQ), at the above address. All interested parties of record will receive a notice of the decision on this matter and will then have 15 days after receipt of the Notice of Decision to file a petition for administrative review. Procedures for filing such a petition will be enclosed with the Notice.

Questions should be directed to OAQ, 100 North Senate Avenue, MC 61-53, Room 1003, Indianapolis, Indiana 46204-2251, or call (800) 451-8027 or (317) 233-0478.

Company Official Name: Ryan Drook  
Company Name: Central Indiana Ethanol, LLC  
December 21, 2012

## Central Indiana Ethanol Loadout Flare (CE019)

### Emission Factors

AP-42 Chapter 5.2, VOC emission factors for truck and rail loadout racks can be estimated using the following equation:

$$L = 12.46 \times (SPM)/T$$

L = loading loss (lb/kgal)

S = saturation factor

P = true vapor pressure of the liquid loaded (psia)

M = molecular weight of vapors (lb/mole lb)

T = temperature of the bulk liquid loaded (degree R)

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

### VOC Uncontrolled Emissions

Max. Loading Rate for EU083, truck loadout:

24 kgal/hr

Max. Loading Rate for EU084, rail loadout:

40 kgal/hr

	Pollutant	VOC
	Emission Factor (lb/kgal)	0.36
Truck Loadout (EU083)	Uncontrolled Emissions (lb/hr)	8.70
	Uncontrolled Emissions (ton/yr)	38.12
Rail Loadout (EU084)	Uncontrolled Emissions (lb/hr)	14.51
	Uncontrolled Emissions (ton/yr)	63.53

Rail Loadout will be used as a worst case scenario for the VOC uncontrolled emissions.

### VOC Emissions Calculated Based on Maximum Annual Capacity of 60 Million Gallons per Year

	Pollutant	VOC
Loadout (EU083 or EU084)	Controlled Emissions (ton/yr)	10.88

### VOC Controlled Emissions Using Flare and No Restriction on Annual Throughput

	Pollutant	VOC
Truck Loadout (EU083)	Controlled Emissions (lb/hr)	0.17
	Controlled Emissions (ton/yr)	0.75
Rail Loadout (EU084)	Controlled Emissions (lb/hr)	0.29
	Controlled Emissions (ton/yr)	1.27

Rail Loadout will be used as a worst case scenario for the VOC controlled emissions.

### VOC Limited Emissions (based on flare and annual throughput limit)

Annual Production Limit from new process:

60,000 kgal/yr

Max. Amount of product that can be loaded by truck (limited by max pumping rate)

210,240 kgal/yr

Max. Amount of product that can be loaded by rail (limited by max pumping rate)

350,400 kgal/yr

Flare Control Efficiency:

98%

Scenario	Pollutant	VOC
Product loaded to truck	Limited Emissions (lb/hr)	0.17
	Limited Emissions (ton/yr)	0.22
Product loaded to dedicated railcar	Limited Emissions (lb/hr)	0.29
	Limited Emissions (ton/yr)	0.22

Limited hourly emission rate is the same as controlled hourly since no hourly restriction is proposed.

Blended ethanol loading to trucks will be used as a worst case scenario for the VOC limited emissions.

### HAP Emissions

Pollutant	Benzene	Carbon Disulfide	Cumene	Ethyl benzene	n-Hexane	Toluene	Xylene	Total HAP
HAP Fraction	0.25%	0.002%	0.01%	0.01%	5.00%	0.50%	0.05%	
Uncontrolled Emissions (lb/hr)	3.63E-02	2.90E-04	1.45E-03	7.25E-04	7.25E-01	7.25E-02	7.25E-03	0.84
Uncontrolled Emissions (ton/yr)	1.56E-01	1.27E-03	6.35E-03	3.18E-03	3.18E+00	3.18E-01	3.18E-02	3.70
Controlled Emissions (lb/hr)	7.25E-04	5.80E-06	2.90E-05	1.45E-05	1.45E-02	1.45E-03	1.45E-04	0.017
Controlled Emissions (ton/yr)	3.18E-03	2.54E-05	1.27E-04	6.35E-05	6.35E-02	6.35E-03	6.35E-04	7.39E-02
Limited Emissions (lb/hr)	7.25E-04	5.80E-06	2.90E-05	1.45E-05	1.45E-02	1.45E-03	1.45E-04	0.017
Limited Emissions (ton/yr)	5.44E-04	4.35E-06	2.18E-05	1.09E-05	1.09E-02	1.09E-03	1.09E-04	1.27E-02

HAP fraction for gasoline vapors.

Emission rates are based on worst case rail loadout emissions.

### NOx and CO Emissions from the Flare

Max. Heat Input Capacity:

10 MMBtu/hr

Max. Hourly Loadout Rate (rail rate):

40.00 kgal/hr

Annual Limited Loadout Rate:

60,000 kgal/yr

Pollutant	NOx	CO
Emission Factor (lb/kgal)	0.077	0.129
Unlimited Emissions (lb/hr)	3.08	5.16
Unlimited Emissions (ton/yr)	13.49	22.60
Limited Emissions (ton/yr)	2.31	3.87

Emission factors are based on information from the flare manufacturer (MRW Technologies, Inc.). PM, PM<sub>10</sub>, PM<sub>2.5</sub> and SO<sub>2</sub> emissions are negligible due to smokeless design and minimal H<sub>2</sub>S levels.

CO<sub>2</sub>e                    1,170 lbs/yr  
CO<sub>2</sub>e                    5,125 tons/yr

**Central Indiana Ethanol  
Boilers (EU081 & EU082)**

Combined Heat Input: 96.32 MMBtu/hr  
 Boiler Rated Capacity 48.16 MMBtu/hr  
 Boiler Output Rating 1200 horsepower

Pollutant	PM	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	CO <sub>2e</sub>
Emission Factor (lb/MMCF)	1.9	7.6	7.6	0.6	100	5.5	84	see GHG
Emission Factor (lb/MMBtu)	0.002	0.007	0.007	0.001	0.098	0.005	0.082	worksheet
Emissions (lb/hr)	0.18	0.72	0.72	0.06	9.44	0.52	7.93	11,271
Emissions (ton/yr)	0.79	3.14	3.14	0.25	41.36	2.27	34.74	49,366

NO<sub>x</sub> emission factor is for small boiler with no control.

HAP emissions are included on the HAP Emissions Summary sheet.

Emission factors are from AP-42 1.4-1 and 1.4-2 (7/98).

PM emission factor is filterable PM only.

PM<sub>10</sub> and PM<sub>2.5</sub> is total PM.

Conversion factor 33,446 Btu/Hp  
 Boiler Efficiency 80 %

Central Indiana Ethanol  
Natural Gas Combustion HAP Emissions Summary

Pollutant	Emission Factor (lb/MMSCF)	Emission Factor (lb/MMBtu)	TO/HRSG		DOGS Dryers (2 @ 45)		Ethanol Loadout Flare		Biomethanator Flare		Insignificant Combustion		Loadout Flare (CE019)		Boilers (2 @ 48 each)	
			135 MMBtu/hr (lb/hr)	(ton/yr)	80 MMBtu/hr (lb/hr)	(ton/yr)	10 MMBtu/hr (lb/hr)	(ton/yr)	6 MMBtu/hr (lb/hr)	(ton/yr)	2.5 MMBtu/hr (lb/hr)	(ton/yr)	10 MMBtu/hr (lb/hr)	(ton/yr)	96 MMBtu/hr (lb/hr)	(ton/yr)
2-Methylnaphthalene	2.40E-05	2.35E-08	3.18E-06	1.29E-05	2.1E-06	9.3E-06	2.35E-07	1.03E-09	1.41E-07	6.16E-07	5.88E-08	2.58E-07	2.35E-07	1.03E-06	2.27E-06	9.93E-06
3-Methylchloranthrene	1.80E-06	1.76E-09	2.38E-07	1.04E-06	1.6E-07	7.0E-07	1.76E-08	7.73E-08	1.09E-08	4.84E-08	4.41E-09	1.93E-08	1.76E-08	7.73E-08	1.70E-07	7.45E-07
7,12-Dimethylbenz(a)anthracene	1.60E-05	1.57E-08	2.12E-06	9.28E-06	1.4E-06	6.2E-06	1.57E-07	6.87E-07	9.41E-08	4.12E-07	3.92E-06	1.72E-07	1.57E-07	6.87E-07	1.51E-06	6.82E-06
Acenaphthene	1.80E-06	1.76E-09	2.38E-07	1.04E-06	1.6E-07	7.0E-07	1.76E-08	7.73E-08	1.09E-08	4.84E-08	4.41E-09	1.93E-08	1.76E-08	7.73E-08	1.70E-07	7.45E-07
Acenaphthylene	1.80E-06	1.76E-09	2.38E-07	1.04E-06	1.6E-07	7.0E-07	1.76E-08	7.73E-08	1.09E-08	4.84E-08	4.41E-09	1.93E-08	1.76E-08	7.73E-08	1.70E-07	7.45E-07
Anthracene	2.40E-06	2.35E-09	3.18E-07	1.29E-06	2.1E-07	9.3E-07	2.35E-08	1.03E-07	1.41E-08	6.16E-08	5.88E-09	2.58E-08	2.35E-08	1.03E-07	2.27E-07	9.93E-07
Benzo(a)anthracene	1.80E-06	1.76E-09	2.38E-07	1.04E-06	1.6E-07	7.0E-07	1.76E-08	7.73E-08	1.09E-08	4.84E-08	4.41E-09	1.93E-08	1.76E-08	7.73E-08	1.70E-07	7.45E-07
Benzene	2.10E-03	2.06E-06	2.78E-04	1.22E-03	1.9E-04	8.1E-04	2.06E-05	9.02E-05	1.24E-05	5.41E-05	5.15E-06	2.25E-05	2.06E-05	9.02E-05	1.96E-04	8.68E-04
Benzo(a)pyrene	1.20E-06	1.18E-09	1.59E-07	6.96E-07	1.1E-07	4.6E-07	1.18E-08	5.15E-08	7.06E-09	3.09E-08	2.94E-09	1.29E-08	1.18E-08	5.15E-08	1.13E-07	4.96E-07
Benzo(b)fluoranthene	1.80E-06	1.76E-09	2.38E-07	1.04E-06	1.6E-07	7.0E-07	1.76E-08	7.73E-08	1.09E-08	4.84E-08	4.41E-09	1.93E-08	1.76E-08	7.73E-08	1.70E-07	7.45E-07
Benzo(g,h)perylene	1.20E-06	1.18E-09	1.59E-07	6.96E-07	1.1E-07	4.6E-07	1.18E-08	5.15E-08	7.06E-09	3.09E-08	2.94E-09	1.29E-08	1.18E-08	5.15E-08	1.13E-07	4.96E-07
Benzo(k)fluoranthene	1.80E-06	1.76E-09	2.38E-07	1.04E-06	1.6E-07	7.0E-07	1.76E-08	7.73E-08	1.09E-08	4.84E-08	4.41E-09	1.93E-08	1.76E-08	7.73E-08	1.70E-07	7.45E-07
Chrysene	1.80E-06	1.76E-09	2.38E-07	1.04E-06	1.6E-07	7.0E-07	1.76E-08	7.73E-08	1.09E-08	4.84E-08	4.41E-09	1.93E-08	1.76E-08	7.73E-08	1.70E-07	7.45E-07
Dibenz(a,h)anthracene	1.20E-06	1.18E-09	1.59E-07	6.96E-07	1.1E-07	4.6E-07	1.18E-08	5.15E-08	7.06E-09	3.09E-08	2.94E-09	1.29E-08	1.18E-08	5.15E-08	1.13E-07	4.96E-07
Dichlorobenzene	1.20E-03	1.18E-06	1.59E-04	6.96E-04	1.1E-04	4.6E-04	1.18E-05	5.15E-05	7.06E-06	3.09E-05	2.94E-06	1.29E-05	1.18E-05	5.15E-05	1.13E-04	4.96E-04
Fluoranthene	3.00E-06	2.94E-09	3.97E-07	1.74E-06	2.6E-07	1.2E-06	2.94E-08	1.29E-07	1.76E-08	7.73E-08	7.33E-09	3.22E-08	2.94E-08	1.29E-07	1.29E-07	5.15E-07
Fluorene	2.80E-06	2.75E-09	3.71E-07	1.62E-06	2.5E-07	1.1E-06	2.75E-08	1.20E-07	1.65E-08	7.21E-08	6.86E-09	3.01E-08	2.75E-08	1.20E-07	2.64E-07	1.16E-06
Formaldehyde	7.50E-02	7.35E-05	9.93E-03	4.36E-02	6.6E-03	2.9E-02	7.35E-04	3.22E-03	4.41E-04	1.93E-03	1.84E-04	8.05E-04	7.35E-04	3.22E-03	7.08E-03	3.10E-02
Hexane	1.80E+00	1.76E-03	2.38E-01	1.04E+00	1.6E-01	7.0E-01	1.76E-02	7.73E-02	1.09E-02	4.84E-02	4.41E-03	1.93E-02	1.76E-02	7.73E-02	1.70E-01	7.45E-01
Indene(1,2,3-cd)pyrene	1.80E-06	1.76E-09	2.38E-07	1.04E-06	1.6E-07	7.0E-07	1.76E-08	7.73E-08	1.09E-08	4.84E-08	4.41E-09	1.93E-08	1.76E-08	7.73E-08	1.70E-07	7.45E-07
Naphthalene	6.10E-04	5.98E-07	8.07E-05	3.54E-04	5.4E-05	2.4E-04	5.98E-05	2.62E-05	3.99E-06	1.57E-05	1.50E-06	6.55E-06	5.98E-06	2.62E-05	5.76E-05	2.52E-04
Phenanthrene	1.70E-05	1.67E-08	2.25E-06	8.86E-06	1.5E-06	6.8E-06	1.67E-07	7.30E-07	1.00E-07	4.38E-07	4.17E-08	1.83E-07	1.67E-07	7.30E-07	1.61E-06	7.08E-06
Pyrene	5.00E-06	4.90E-09	6.62E-07	2.90E-06	4.4E-07	1.9E-06	4.90E-08	2.15E-07	2.94E-08	1.29E-07	1.23E-08	5.37E-08	4.90E-08	2.15E-07	4.72E-07	2.07E-06
Toluene	3.40E-03	3.33E-06	4.50E-04	1.87E-03	3.0E-04	1.3E-03	3.33E-05	1.46E-04	2.00E-05	8.76E-05	8.33E-06	3.55E-05	3.33E-05	1.46E-04	3.21E-04	1.41E-03
Asenic	2.00E-04	1.96E-07	2.65E-05	1.16E-04	1.8E-05	7.7E-05	1.96E-06	8.59E-06	1.18E-06	5.15E-06	4.90E-07	2.15E-06	1.96E-06	8.59E-06	1.89E-05	6.27E-05
Beryllium	1.20E-05	1.18E-08	1.59E-06	6.96E-06	1.1E-06	4.6E-06	1.18E-07	5.15E-07	7.06E-08	3.09E-07	2.94E-08	1.29E-07	1.18E-07	5.15E-07	1.13E-06	4.66E-06
Cadmium	1.10E-03	1.08E-06	1.49E-04	6.38E-04	9.7E-05	4.3E-04	1.08E-05	4.72E-05	6.47E-06	2.83E-05	2.70E-06	1.18E-05	1.08E-05	4.72E-05	1.04E-04	4.56E-04
Chromium	1.40E-03	1.37E-06	1.85E-04	8.12E-04	1.2E-04	5.4E-04	1.37E-05	6.01E-05	8.24E-06	3.81E-05	3.43E-06	1.50E-05	1.37E-05	6.01E-05	1.32E-04	5.78E-04
Cobalt	8.40E-05	8.24E-08	1.11E-05	4.87E-05	7.4E-06	3.2E-05	8.24E-07	3.61E-06	4.94E-07	2.16E-06	2.08E-07	9.02E-07	8.24E-07	3.81E-06	7.93E-06	3.47E-05
Manganese	3.80E-04	3.73E-07	5.03E-05	2.20E-04	3.4E-05	1.5E-04	3.73E-06	1.63E-05	2.24E-06	9.79E-06	9.31E-07	4.08E-06	3.73E-06	1.63E-05	3.59E-05	1.57E-04
Mercury	2.60E-04	2.55E-07	3.44E-05	1.51E-04	2.3E-05	1.0E-04	2.55E-06	1.12E-05	1.53E-06	6.70E-06	6.37E-07	2.79E-06	2.55E-06	1.12E-05	2.46E-05	1.08E-04
Nickel	2.10E-03	2.06E-06	2.78E-04	1.22E-03	1.9E-04	8.1E-04	2.06E-05	9.02E-05	1.24E-05	5.41E-05	5.15E-06	2.25E-05	2.06E-05	9.02E-05	1.96E-04	8.68E-04
Selenium	2.40E-05	2.35E-08	3.18E-06	1.29E-05	2.1E-06	9.3E-06	2.35E-07	1.03E-09	1.41E-07	6.16E-07	5.88E-08	2.58E-07	2.35E-07	1.03E-06	2.27E-06	9.93E-06
Totals			0.25	1.89	0.17	0.73	0.02	0.98	0.01	0.05	0.005	0.02	0.02	0.08	0.19	0.78

Emission factors are from AP-42 4.4-3 and 4.4-7 (786).

**Central Indiana Ethanol  
Combustion GHG Emissions**

**Emission Calculation Method**

Fuel Usage based on maximum burner capacity/burner specific fuel consumption and annual operating hours (8,760 hr).  
 Emission factors are derived from 40 CFR 98 Subpart C, Tables C-1 and C-2 (EF kg/MMBtu \* 2.2046 lb/kg = EF lb/MMBtu) for natural gas and biogas.  
 GHG Emissions (lbs) = Fuel Usage (MMBtu) x Emission Factor (lb/MMBtu)  
 GWP's are 40 CFR 98 Subpart A, Table A-1 and are as follows:  
 CO2 1  
 CH4 21  
 N2O 310

Emission Unit ID	Description	Burner Capacity MMBtu/hr	Fuel Usage		Emission Factors (lb/MMBtu)			GHG emissions (lbs/yr)			CO <sub>2</sub> e GHG emissions (lbs/yr)		
			Fuel Type	Annual Use (MMBtu)	CO2	CH4	N2O	CO2	CH4	N2O	CO2	CH4	N2O
CE007	TO/HRSRG	135	natural gas	1,182,600	116.89	2.20E-03	2.40E-04	138,231,621	2,607.16	284.37	138,231,621	54,760	88,154
EU035	DDGS Dryer	45	natural gas	394,200	116.89	2.20E-03	2.40E-04	46,077,207	869.05	94.79	46,077,207	18,250	29,385
EU056	DDGS Dryer	45	natural gas	394,200	116.89	2.20E-03	2.40E-04	46,077,207	869.05	94.79	46,077,207	18,250	29,385
EU081	Boiler #1	48.16	natural gas	421,895	116.89	2.20E-03	2.40E-04	49,314,555	930.11	101.45	49,314,555	19,532	31,449
EU082	Boiler #2	48.16	natural gas	421,895	116.89	2.20E-03	2.40E-04	49,314,555	930.11	101.45	49,314,555	19,532	31,449
---	Space Heaters	2.50	natural gas	21,900	116.89	2.20E-03	2.40E-04	2,559,845	48.28	5.27	2,559,845	1,014	1,632
CE013	Biomethanator Flare	6	biogas	52,560	114.79	7.05E-03	1.51E-03	6,033,548	370.80	79.62	6,033,548	7,787	24,683
CE009	Loadout Flare	10	natural gas	87,600	116.89	2.20E-03	2.40E-04	10,239,379	193.12	21.06	10,239,379	4,058	6,530
CE019	Loadout Flare	10	natural gas	87,600	116.89	2.20E-03	2.40E-04	10,239,379	193.12	21.06	10,239,379	4,058	6,530
Combustion Emission (lbs/yr CO <sub>2</sub> e)											358,087,296	147,227	249,197
Combustion Emission (tons/yr CO <sub>2</sub> e)											179,044	74	125
Total Combustion CO <sub>2</sub> e (tons/yr)											179,242		

Emission Unit ID	Description	Burner Capacity MMBtu/hr	Maximum Operating Hours	GHG emissions (lbs/yr)			GHG emissions (tons)			CO <sub>2</sub> e GHG emissions (lb/yr)			CO <sub>2</sub> e GHG emissions (tons)		
				CO2	CH4	N2O	CO2	CH4	N2O	CO2	CH4	N2O	CO2	CH4	N2O
CE007	TO/HRSRG	135	8,760	15,779.87	0.30	0.03	69,115.8	1.30	0.14	15,779.87	6.25	10.06	69,115.81	27.38	44.08
EU035	DDGS Dryer	45	8,760	5,259.96	0.10	0.01	23,038.6	0.43	0.05	5,259.96	2.08	3.35	23,038.60	9.13	14.69
EU056	DDGS Dryer	45	8,760	5,259.96	0.10	0.01	23,038.6	0.43	0.05	5,259.96	2.08	3.35	23,038.60	9.13	14.69
EU081	Boiler #1	48.16	8,760	5,629.52	0.11	0.01	24,657.3	0.47	0.05	5,629.52	2.23	3.59	24,657.28	9.77	15.72
EU082	Boiler #2	48.16	8,760	5,629.52	0.11	0.01	24,657.3	0.47	0.05	5,629.52	2.23	3.59	24,657.28	9.77	15.72
---	Space Heaters	2.50	8,760	282.22	0.01	0.00	1,279.9	0.02	0.00	282.22	0.12	0.19	1,279.92	0.51	0.82
CE013	Biomethanator Flare	6	8,760	688.76	0.04	0.01	3,016.8	0.19	0.04	688.76	0.89	2.82	3,016.77	3.89	12.34
CE009	Loadout Flare	10	8,760	1,168.88	0.02	0.00	5,119.7	0.10	0.01	1,168.88	0.46	0.75	5,119.69	2.03	3.26
CE019	Loadout Flare	10	8,760	1,168.88	0.02	0.00	5,119.7	0.10	0.01	1,168.88	0.46	0.75	5,119.69	2.03	3.26
Combustion Emission (tons/yr)							166,804	3	0	Combustion Emission (tons/yr CO <sub>2</sub> e)			179,044	74	125

**Central Indiana Ethanol  
Equipment Leaks (F003)**

**VOC Emissions (existing sources F003)**

Equipment Component Source	Valves	Valves	Pump Seals	Pressure-Relief	Sampling	Flanges	Total VOC
Product	Gas/Vapor	Light Liquid	Light Liquid	Valves	Connections	All	
Component Count	74	346	21	15	14	297	
Emission Factor (kg/hr-source)	0.00597	0.00403	0.0199	0.104	0.0150	0.00183	
Emission Factor (lb/hr-source)	0.01315	0.00888	0.0438	0.229	0.0330	0.00403	
Subpart VV Control Effectiveness	87%	84%	89%	87%	0%	0%	
Uncontrolled Rate (lb/hr)	0.97	3.07	0.92	3.44	0.46	1.20	10.06
Uncontrolled Rate (ton/yr)	4.26	13.45	4.03	15.05	2.03	5.24	44.07
Emissions (lb/hr)	0.13	0.49	0.29	0.45	0.46	1.20	3.01
Emissions (ton/yr)	0.55	2.15	1.25	1.95	2.03	5.24	13.18

Component count provided by source.

Emission factors and control effectiveness are from EPA Protocol for Equipment Leak Emission Estimates Tables 2-1 and 5-2 (11/95).

**HAP Emissions (existing source F003)**

Pollutant	Acetaldehyde	Methanol	Benzene	Carbon Disulfide	Cumene	Ethyl benzene	n-Hexane	Toluene	Xylene	Total HAP
HAP Fraction	2.00E-04	2.00E-04	2.50E-03	2.00E-05	1.00E-03	5.00E-05	5.00E-02	5.00E-03	5.00E-04	
Emissions (lb/hr)	6.02E-04	6.02E-04	7.52E-03	6.02E-05	3.01E-03	1.50E-04	1.50E-01	1.50E-02	1.50E-03	1.79E-01
Emissions (ton/yr)	2.64E-03	2.64E-03	3.30E-02	2.64E-04	1.32E-02	6.59E-04	6.59E-01	6.59E-02	6.59E-03	7.84E-01

**VOC Emissions (proposed sources)**

Equipment Component Source	Valves	Valves	Pump Seals	Pressure-Relief	Sampling	Flanges	Total VOC
Product	Gas/Vapor	Light Liquid	Light Liquid	Gas/Vapor	All	All	
Component Count	74	346	21	15	14	297	
Emission Factor (kg/hr-source)	0.00597	0.00403	0.0199	0.104	0.0150	0.00183	
Emission Factor (lb/hr-source)	0.01315	0.00888	0.0438	0.229	0.0330	0.00403	
Subpart VV Control Effectiveness	87%	84%	89%	87%	0%	0%	
Uncontrolled Rate (lb/hr)	0.97	3.07	0.92	3.44	0.46	1.20	10.06
Uncontrolled Rate (ton/yr)	4.26	13.45	4.03	15.05	2.03	5.24	44.07
Emissions (lb/hr)	0.13	0.49	0.29	0.45	0.46	1.20	3.01
Emissions (ton/yr)	0.55	2.15	1.25	1.96	2.03	5.24	13.18

Component count is the same as the existing process count.

Emission factors and control effectiveness are from EPA Protocol for Equipment Leak Emission Estimates Tables 2-1 and 5-2 (11/95).

**HAP Emissions (proposed sources)**

Pollutant	Acetaldehyde	Methanol	Benzene	Carbon Disulfide	Cumene	Ethyl benzene	n-Hexane	Toluene	Xylene	Total HAP
HAP Fraction	2.00E-04	2.00E-04	2.50E-03	2.00E-05	1.00E-03	5.00E-05	5.00E-02	5.00E-03	5.00E-04	
Emissions (lb/hr)	6.02E-04	6.02E-04	7.52E-03	6.02E-05	3.01E-03	1.50E-04	1.50E-01	1.50E-02	1.50E-03	0.18
Emissions (ton/yr)	2.64E-03	2.64E-03	3.30E-02	2.64E-04	1.32E-02	6.59E-04	6.59E-01	6.59E-02	6.59E-03	0.78

## Central Indiana Ethanol Cooling Tower

	Existing	Proposed
Type of Cooling Tower:	Induced Draft	Induced Draft
Circulation Flow Rate (gal/min):	33,000	21,000
Total Drift (% of the circulating flow):	0.005%	0.005%
Total Dissolved Solids (ppm):	2,500	2,500
Density (lb/gal):	8.345	8.345

The above information was provided by the cooling tower manufacturer for similar units at a similar source.

Pollutant	PM	PM <sub>10</sub>	PM <sub>2.5</sub>
<b>Existing Cooling Tower</b>			
Emissions (lb/hr)	2.07	2.07	2.07
Emissions (ton/yr)	9.05	9.05	9.05
<b>Proposed Cooling Tower</b>			
Emissions (lb/hr)	1.31	1.31	1.31
Emissions (ton/yr)	5.76	5.76	5.76

**Central Indiana Ethanol  
Existing and Proposed Storage Tanks  
Potential VOC Emissions**

**Existing**

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
<b>Emissions Total From Existing Tanks</b>			<b>8,665</b>	<b>0.99</b>	<b>4.33</b>

**Proposed**

T013	500,000	Non-fuel grade ethanol	263.15	0.03	0.13
T014	500,000	Non-fuel grade ethanol	263.15	0.03	0.13
T015	24,000	Liquid Storage	2,389.39	0.27	1.19
T016	24,000	Liquid Storage	2,389.39	0.27	1.19
T017	24,000	Liquid Storage	2,389.39	0.27	1.19
<b>Emissions Total From Proposed Tanks</b>			<b>7,694</b>	<b>0.88</b>	<b>3.85</b>

<b>Emissions From Existing and Proposed Tanks</b>			<b>16,360</b>	<b>1.87</b>	<b>8.18</b>
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Emissions were calculated using Tank's software.

Proposed tanks worst-case HAP emissions is based on highest HAP for each liquid being considered for storage by tank.  
 The total worst-case single HAP emission from the proposed tanks (tpy) : 1.95  
 The worst-case single HAP is not acetaldehyde.  
 The worst-case HAP emission is conservatively assumed to be the same as the potential VOC emissions.  
 The throughput of the proposed tanks is based on an annual capacity of 60 million gallons of non-fuel grade ethanol.



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Michael R. Pence*  
**Governor**

*Thomas W. Easterly*  
**Commissioner**

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

## SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

**TO:** Norm Currey  
Central Indiana Ethanol, LLC  
2955 W Delphi Pike  
Marion, IN 46952

**DATE:** January 18, 2013

**FROM:** Matt Stuckey, Branch Chief  
Permits Branch  
Office of Air Quality

**SUBJECT:** Final Decision  
Interim  
053-32519I-00062

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:  
Ann Curnow ( Natural Resource Group LLC)  
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at [jbrush@idem.IN.gov](mailto:jbrush@idem.IN.gov).

Final Applicant Cover letter.dot 11/30/07

# Mail Code 61-53

IDEM Staff	CDENNY 1/18/2013 Central Indiana Ethanol, LLC 053-32519-00062 (final)		Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
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1		Norm Currey Central Indiana Ethanol, LLC 2955 W Delphi Pike Marion IN 46952 (Source CAATS)										
2		Ryan Drook President/CEO 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		Mr. Colin OBrien Natural Resources Defense Council 1152 15th St NW, Suite 300 Washington DC 20005 (Affected Party)										
9		Ginny King Marathon Petroleum Company 539 S Main St Findley OH 45870 (Attorney)										
10		Ann Curnow Natural Resource Group LLC 80 S 8th Street 1000 IDS Center Minneapolis MN 55402 (Consultant)										
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