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

Thomas W. Easterly
Commissioner

NOTICE OF 30-DAY PERIOD
FOR PUBLIC COMMENT

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

for Noble Americas South Bend Ethanol LLC in St. Joseph County

Significant Permit Modification No.: 141-35917-00033

The Indiana Department of Environmental Management (IDEM) has received an application from Noble Americas South Bend Ethanol LLC, located at 3201 W. Calvert St., South Bend, IN 46613, for a significant modification of its Part 70 Operating Permit issued on October 3, 2013. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow Noble Americas South Bend Ethanol LLC to make certain changes at its existing source. Noble Americas South Bend Ethanol LLC has applied to change the compliance determination requirements for natural gas-fired boilers.

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:

St. Joseph County Public Library
304 S. Main St.
South Bend, IN 46601

and

IDEM Northern Regional Office
300 N. Michigan Street, Suite 450
South Bend, IN 46601-1295

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 141-35917-00033 in all correspondence.

Comments should be sent to:

Doug Logan
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 4-5328
Or dial directly: (317) 234-5328
Fax: (317) 232-6749 attn: Doug Logan
E-mail: dlogan@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, at the IDEM Regional Office 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 Doug Logan of my staff at the above address.

Jenny Acker, Section Chief
Permits Branch
Office of Air Quality

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

Thomas W. Easterly
Commissioner

DRAFT

Ms. Jennifer Lozano
Noble Americas South Bend Ethanol LLC
3201 W. Calvert St.
South Bend, IN 46613

Re: 141-35917-00033
Significant Permit Modification to
Part 70 Renewal No.: T141-32025-00033

Dear Ms. Lozano:

Noble Americas South Bend Ethanol LLC was issued Part 70 Operating Permit Renewal No. T141-32025-00033 on October 3, 2013 for a stationary fuel-grade ethanol production plant located at 3201 West Calvert Street, South Bend, Indiana 46613. An application requesting changes to this permit was received on June 5, 2015. 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 C:	40 CFR 60, Subpart Ka, Standards of Performance for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984
Attachment D:	40 CFR 60, Subpart Kb, Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984
Attachment E:	40 CFR 60, Subpart VV, Standards of Performance for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry for which Construction, Reconstruction, or Modification Commenced After January 5, 1981, and on or Before November 7, 2006
Attachment F:	40 CFR 63, Subpart FFFF, National Emission Standards for Hazardous Air Pollutants: Miscellaneous Organic Chemical Manufacturing
Attachment G:	40 CFR 61, Subpart V, National Emission Standard for Equipment Leaks (Fugitive Emission Sources)
Attachment H:	40 CFR 63, Subpart DDDDD, National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters
Attachment I:	40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines
Attachment J:	40 CFR 60, Subpart Dc, Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units

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.

DRAFT

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.

If you have any questions on this matter, please contact Doug Logan, of my staff, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251 at 317-234-5328 or 1-800-451-6027, and ask for extension 4-5328.

Sincerely,

Jenny Acker, Section Chief
Permits Branch
Office of Air Quality

Attachments: Modified Permit and Technical Support Document
cc: File - St. Joseph County
St. Joseph County Health Department
U.S. EPA, Region 5
Compliance and Enforcement Branch
IDEM Northern Regional Office

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
Thomas W. Easterly
Commissioner

Part 70 Operating Permit Renewal

DRAFT

OFFICE OF AIR QUALITY

Noble Americas South Bend Ethanol LLC
3201 West Calvert Street
South Bend, Indiana 46613

(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.: T141-32025-00033	
Issued by: Original Signed Jenny Acker, Section Chief Permits Branch, Office of Air Quality	Issuance Date: October 3, 2013 Expiration Date: October 3, 2018

Significant Permit Modification No.: 141-34359-00033, issued November 19, 2014

Significant Permit Modification No.: 141-35917-00033	
Issued by: Jenny Acker, Section Chief, Permits Branch Office of Air Quality	 Issuance Date: Expiration Date: October 3, 2018

TABLE OF CONTENTS

SECTION A SOURCE SUMMARY

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

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 fuel-grade ethanol production plant.

Source Address:	3201 West Calvert Street, South Bend, Indiana 46613
General Source Phone Number:	574-233-3116
SIC Code:	2869, 2048
County Location:	St. Josepth
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Major Source, Section 112 of the Clean Air Act Not 1 of 28 listed source categories Nested Source with fossil fuel fired boilers totaling more than two hundred fifty million (250,000,000) British thermal units per hour heat input, is 1 of 28 Source Categories, within a non-listed source

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

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

(a) Noble Americas South Bend Ethanol LLC located at 3201 West Calvert Street, South Bend, Indiana, and

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

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

Separate Part 70 Operating Permits have been issued to Noble Americas South Bend Ethanol LLC and Linde LLC solely for administrative purposes. This conclusion was initially determined under Part 70 Operating Permit Renewal (T141-6956-00033) on March 17, 2008.

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) One (1) corn receiving operation, identified as EU-01, equipped with a baghouse, identified as D-0001, exhausting through Stack DC-0001, installed in 1982, consisting of one (1) rail hopper, identified as RH-0001, two (2) truck dumpers, identified as TD-0001 & TD-0002, and two (2) truck hoppers, identified as TH-0001 and TH-0002, two (2) belt

conveyors, identified as CV-0001 and CV-0002, five (5) drag conveyors, identified as CV-0003, CV-0004, CV-0005, CV-0006, and CV-0008, one (1) elevator, identified as EL-0001, and one (1) elevator, identified as EL-0002, installed in December 2003, capacity: 840 tons of yellow dent corn per hour.

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

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

(d) One (1) yeast propagation operation, identified as EU-04, installed in October 1982, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) yeast mixing tank, identified as T-320, one (1) yeast mixing tank agitator, identified as A-320, three (3) yeast preparation tanks, identified as T-322 through T-324, three (3) agitators, identified as A-322 through A-324, and four (4) pumps, identified as P-320, PC-3220, PC-3230, and P-322, capacity: 16,000 gallons per tank and 2,100 tank turnovers per year. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

(e) One (1) fermentation operation, identified as EU-05, installed in October 1982, exhausted through Stacks VT-005 through VT-019, VT-019a and BL-230, consisting of sixteen (16) fermenter agitators, identified as A-2002, A-2004, A-2009, A-2011, A-203, A-205, A-206, A-207, A-208, A-210, A-212, A-213, A-214, A-215, A-220 and A-221, eight (8) fermenter coolers, identified as EP-2002, EP-2003, EP-2004, EP-2005, EP-2006, EP-2007, EP-2008, EP-2020, eight (8) pumps, identified as P-202 through P-208, P-220, sixteen (16) fermenters identified as TF-2002, TF-2004, TF-2009, TF-2011, T-203, T-205, T-206, T-207, T-208, T-210, T-212, T-213, T-214, T-215, T-220 and T-221, one (1) blower, identified as BL-230, one (1) foam trap, identified as FT-230, one (1) CO_2 scrubber, identified as V-230 installed in 1984, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, one (1) scrubber pump, identified as P-230, one foam trap bleed pump, identified as P-231, capacity: 319,000 gallons per tank and 2,100 tank turnovers per year. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this operation are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an

organic chemical classified using the 1987 version of SIC code 2869.

(f) [RESERVED]

(g) One (1) beerwell, identified as EU-07, installed in December 1986, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) beerwell, identified as T-222, two (2) beerwell pumps, identified as P-222A and P-222B and two (2) beerwell agitators, identified as A-222A and A-222B, capacity: 1,750 gallons of beer per minute. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

(h) One (1) degasser and recovery column, identified as EU-08, installed in October 1982, exhausted through Stacks VT-022 and BL-601. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

Stack VT-022 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2, to control VOC emissions from the one (1) recovery column vent condenser, identified as E-409. The associated equipment consists of:

One (1) recovery column, identified as V-402, one (1) recovery column reflux tank, identified as V-404, two (2) beer preheaters, identified as EP-4501 A & B, one (1) recovery column condenser, identified as E-4404, one (1) recovery column reboiler #2, identified as E-MS-408, one (1) recovery column vent condenser, identified as E-409, one (1) preheater #2, identified as E-412, one (1) recovery column reboiler #1, identified as E-413, , one (1) auxiliary product cooler, identified as E-419, , two (2) recovery column feed pumps, identified as P-401 A & P-401 B, two (2) recovery column bottoms pumps, identified as P-402 A and P-402 B, two (2) recovery column reflux pumps, identified as P-404 A and P-404 B, one (1) fusel oil transfer pump, identified as P-4601, three (3) recovery column recirculation pumps #2, identified as P-407 A, P-407 B, and P-408.

Stack BL-601 routed to CO2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, associated equipment consists of:

One (1) degasser condenser, identified as E-403, one (1) degasser vent condenser, identified as E-410, and one (1) degasser, identified as V-401, capacity: 1,750 gallons of beer per minute.

(i) One (1) stillage concentration and evaporation process, identified as EU-09, installed in October 1982, consisting of four (4) centrifuges, identified as CF-5001, CF-5002, CF-5103, CF 5104, three (3) stillage tanks, identified as T-502, T-515 and T-516, consisting of: one (1) stillage preheater, identified as E-503, four (4) 1^{st} through 4^{th} stage heaters, identified as E-501, E-502, E-504, and E-505, five (5) vapor bodies, identified as T-504 and T-507 through T-510, one (1) 5^{th} and 6^{th} stage heater, identified as E-506, one (1) evaporation condensate tank, identified as T-506, exhausted through Stack VT-024 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2, one (1) lube oil console, identified as C-501C, one (1) gland seal condenser, identified as C-501E, one (1) evaporator concentrates tank, identified as T-

505, one (1) compressor, identified as C-501A, one (1) turbine, identified as C-501B, one (1) lube oil head tank, identified as C-501D, one (1) gland seal ejector, identified as C501F, one (1) evaporator concentrates tank agitator, identified as A 505, four (4) stage 1 thru stage 4 circulation pumps, identified as P-504, P-505, P-507 and P 508, one (1) scrubber pump, identified as P-511, two (2) stage 5 and 6 circulation pumps, identified as P-509 and P-510, two (2) evaporator condensate pumps, identified as P-506 and P-521 (spare), and two (2) evaporator concentrates pump, identified as P-516 and P-516A, capacity: 910 gallon per minute evaporator feed rate.

(j) One (1) distillers dried grain and solubles (DDGS) dryer operation, identified as EU-10, installed in October 1982, exhausted through five (5) dry cyclones, identified as CY-511 through CY-515, controlled by two (2) natural gas-fired regenerative thermal oxidizers (RTOs), consisting of the following equipment:

(1) Five (5) DDGS dyers, previously identified as D-511 through D-515, permitted in 2014 as follows:

(A) Two (2) DDGS first pass dryers, identified as D-513 and D-514, each equipped with a cyclone routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2.

(B) One (1) DDGS first pass dryers, identified as D-515, with product and emissions routed to the two (2) polishing dryers, identified as D-511 and D-512.

(C) Two (2) DDGS polishing dryers, identified as D-511 and D-512, each equipped with a cyclone routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2.

(2) Five (5) DDGS dryer steam traps, identified as TR-511, TR-521, TR-531, TR-541 and TR-551.

(3) Five (5) dryer feed screw conveyors, identified as CV-511 through CV-515.

(4) One (1) wet conveyor, identified as CV-5010.

(5) Two (2) inclined wet conveyor, identified as CV-502 and CV-506.

(6) One (1) first pass dryer feed conveyor, identified as CV-516, and one (1) polishing dryer feed conveyor identified as CV-504.

(7) One (1) first pass product incline conveyor, identified as CV-503, one (1) recycle conveyor, identified as CV-517, and one (1) recycle conveyor identified as CV-520.

(8) One (1) polishing dryers product conveyor, identified as CV-518 and one (1) first pass product conveyor, identified as CV-505.

(9) One (1) cooler cross-over conveyor, identified as CV-519.

(10) One (1) pug mill, identified as M-511.

(k) One (1) DDGS handling operation, identified as EU-11, installed in October 1982, consisting of two (2) bucket elevators, identified as EL-0601 and EL-0602, two (2) dust

suppression nozzles, identified as DN-0601 and DN-0602, and four (4) drag conveyors, identified as CV-0600 through CV-0603, capacity: 38.98 tons of DDGS product per hour.

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

(m) One (1) alcohol load-out operation, identified as EU-13, installed in October 1982, exhausted through Stack G-602, equipped with a load-out natural gas-fired flare, identified as G-602, rated at 0.100 million British thermal units per hour, two (2) bottom transfer loading arms, identified as G-604 and G-607, two (2) bottom transfer vapor recovery arms, identified as G-605 and G-608, two (2) truck/rail vapor recovery loading arms, identified as G-603 and G-606, two (2) product filters, identified as F-660 and F-661, and two (2) fuel grade alcohol load-out pumps, identified as P-610 and P-611, capacity: 72,000 gallons of ethanol per hour. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

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

Note: The Riley Stoker coal-fired boiler, identified as EU-14, last operated October 2012. Pursuant to Significant Source Modification 141-34355-00033 and Significant Permit Modification 141-34359-00033, the coal-fired boiler will be permanently shutdown and decommissioned. Future firing of the boiler by other non-coal fuels, e.g. biomass, will require the submittal of an application and IDEM approval.

(o) Two (2) natural gas-fired package boilers, identified as EU-15, rated at 220 million British thermal units per hour each, installed in October 1982, exhausted through Stack 001.

(p) One (1) distillers dried grains and solubles (DDGS) cooler system, identified as EU-18, equipped with a baghouse, identified as DC-503, installed in March 2000, exhausting through Stack DC-0503, controlled with two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2, consisting of one (1) fan, identified as BL-502, one (1) cooling coil, identified as CC-500, one (1) cooler inlet rotary valve, identified as RV-502, one (1) cooler, identified as RC-502, and five (5) conveyors, identified as CV-521, CV-522, CV-530, CV-531 and CV-532, DDGS capacity: 39.98 tons of DDGS per hour based on monthly DDGS production.

(q) Six (6) storage tanks, consisting of:

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

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

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

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

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

(6) Two (2) fixed roof corn oil storage tanks, installed in 2014.

(7) One (1) horizontal corrosion inhibitor tank, identified as T-602, with a capacity of 9,000 gallons.

(r) [RESERVED]

(s) Two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2, approved in 2014 for construction, with each RTO having a maximum heat input capacity of 8.0 MMBtu/hour, and exhausting to stack 5002.

(t) Two (2) natural gas-fired Rental boilers, identified as EU-21a and EU-21b, not to exceed a rating of 99.5 million British thermal units per hour each, approved in 2014 for construction, exhausted through Stack 001.

(u) One (1) corn oil recovery system, approved in 2014 for construction, consisting of separation equipment and corn oil loadout capability.

A.4 Specifically Regulated 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 which are specifically regulated, as defined in 326 IAC 2-7-1(21):

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

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

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

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

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

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

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

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

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

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

SECTION B GENERAL CONDITIONS

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

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

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

(a) This permit, T141-32025-00033, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(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. All 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) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

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

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

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

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, 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.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance

causes or is the primary contributor to an exceedance of any limitation on emissions. 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).

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

B.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, or Northern Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877**.**

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

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

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

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

(A) A description of the emergency;

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

(C) Corrective actions taken.

The notification which shall be submitted by the Permittee does not require 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 T141-32025-00033 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

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

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

(b) Provided that all terms and conditions are accurately reflected in this 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 by using ambient air quality modeling pursuant to 326 IAC 1-7-4. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

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

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

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

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

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

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification 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)][40 CFR 64][326 IAC 3-8]

(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) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(d) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

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 maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

(b) 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(12)][40 CFR 68]

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

C.15 Response to Excursions or Exceedances [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5][326 IAC 2-7-6]

(I) Upon detecting an excursion where a response step is required by the D Section, or an exceedance of a limitation, not subject to CAM, 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.

(II)

(a) CAM Response to excursions or exceedances.

(1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any

startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(2) 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, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.

(d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).

(e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:

(1) Failed to address the cause of the control device performance problems; or

(2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(h) CAM recordkeeping requirements.

(1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(a)(2) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements

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

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

(2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(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][326 IAC 2-2][326 IAC 2-3]

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. 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) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a “project” (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the “projected actual emissions” (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

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

(A) A description of the project.

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

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

(i) Baseline actual emissions;

(ii) Projected actual emissions;

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

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

(d) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A) and/or 326 IAC 2-3-2 (l)(6)(A)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:

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

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

C.19 General Reporting Requirements [326 IAC 2-7-5(3)(C)][326 IAC 2-1.1-11] [326 IAC 2-2][326 IAC 2-3][40 CFR 64][326 IAC 3-8]

(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.

On and after the date by which the Permittee must use monitoring that meets the requirements of 40 CFR Part 64 and 326 IAC 3-8, the Permittee shall submit CAM reports to the IDEM, OAQ.

A report for monitoring under 40 CFR Part 64 and 326 IAC 3-8 shall include, at a minimum, the information required under paragraph (a) of this condition and the following information, as applicable:

(1) Summary information on the number, duration and cause (including unknown cause, if applicable) of excursions or exceedances, as applicable, and the corrective actions taken;

(2) Summary information on the number, duration and cause (including unknown cause, if applicable) for monitor downtime incidents (other than downtime associated with zero and span or other daily calibration checks, if applicable); and

(3) A description of the actions taken to implement a QIP during the reporting period as specified in Section C-Response to Excursions or Exceedances. Upon completion of a QIP, the owner or operator shall include in the next summary report documentation that the implementation of the plan has been completed and reduced the likelihood of similar levels of excursions or exceedances occurring.

The Permittee may combine the Quarterly Deviation and Compliance Monitoring Report and a report pursuant to 40 CFR 64 and 326 IAC 3-8.

(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) 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.

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

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

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

(f) The report for project at an existing emissions unit shall be submitted no later than sixty (60) days after the end of the year and contain the following:

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

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

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

(4) Any other information that the Permittee wishes to include in this report such as an explanation as to why the emissions differ from the preconstruction projection.

Reports required in this part shall be submitted to:

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

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

Stratospheric Ozone Protection

C.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

Emissions Unit Description: PSD Emission Units

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

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

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

(d) One (1) yeast propagation operation, identified as EU-04, installed in October 1982, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) yeast mixing tank, identified as T-320, one (1) yeast mixing tank agitator, identified as A-320, four (4) yeast preparation tanks, identified as T-321 through T-324, four (4) agitators, identified as A-321 through A-324, one (1) cooler, identified as E-321 and three (3) pumps, identified as P-320 through P-322, capacity: 16,000 gallons per tank and 2,100 tank turnovers per year. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

(e) One (1) fermentation operation, identified as EU-05, installed in October 1982, exhausted through Stacks VT-005 through VT-019, VT-019a and BL-230, consisting of sixteen (16) fermenter agitators, identified as A-2002, A-2004, A-2009, A-2011, A-203, A-205, A-206, A-207, A-208, A-210, A-212, A-213, A-214, A-215, A-220 and A-221, eight (8) fermenter coolers, identified as EP-2002, EP-2003, EP-2004, EP-2005, EP-2006, EP-2007, EP-2008, EP-2020, eight (8) pumps, identified as P-202 through P-208, P-220, sixteen (16) fermenters identified as TF-2002, TF-2004, TF-2009, TF-2011, T-203, T-205, T-206, T-207, T-208, T-210, T-212, T-213, T-214, T-215, T-220 and T-221, one (1) blower, identified as BL-230, one (1) foam trap, identified as FT-230, one (1) CO_2 scrubber, identified as V-230 installed in 1984, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, one (1) scrubber pump, identified as P-230, one foam trap bleed pump, identified as P-231, capacity: 319,000 gallons per tank and 2,100 tank turnovers per year. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this operation are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

(h) One (1) degasser and recovery column, identified as EU-08, installed in October 1982, exhausted through Stacks VT-022 and BL-601. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these

facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

Stack VT-022 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2, to control VOC emissions from the one (1) recovery column vent condenser, identified as E-409. The associated equipment consists of:

One (1) recovery column, identified as V-402, one (1) recovery column reflux tank, identified as V-404, two (2) beer preheaters, identified as EP-4501 A & B, one (1) recovery column condenser, identified as E-4404, one (1) recovery column reboiler #2, identified as E-MS-408, one (1) recovery column vent condenser, identified as E-409, one (1) preheater #2, identified as E-412, one (1) recovery column reboiler #1, identified as E-413, , one (1) auxiliary product cooler, identified as E-419, , two (2) recovery column feed pumps, identified as P-401 A & P-401 B, two (2) recovery column bottoms pumps, identified as P-402 A and P-402 B, two (2) recovery column reflux pumps, identified as P-404 A and P-404 B, one (1) fusel oil transfer pump, identified as P-4601, three (3) recovery column recirculation pumps #2, identified as P-407 A, P-407 B, and P-408.

Stack BL-601 routed to CO2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, associated equipment consists of:

One (1) degasser condenser, identified as E-403, one (1) degasser vent condenser, identified as E-410, and one (1) degasser, identified as V-401, capacity: 1,750 gallons of beer per minute.

(i) One (1) stillage concentration and evaporation process, identified as EU-09, installed in October 1982, consisting of four (4) centrifuges, identified as CF-5001, CF-5002, CF-5103, CF 5104, three (3) stillage tanks, identified as T-502, T-515 and T-516, consisting of: one (1) stillage preheater, identified as E-503, four (4) 1st through 4th stage heaters, identified as E-501, E-502, E-504, and E-505, five (5) vapor bodies, identified as T-504 and T-507 through T-510, one (1) 5th and 6th stage heater, identified as E-506, one (1) evaporation condensate tank, identified as T-506, exhausted through Stack VT-024 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2, one (1) lube oil console, identified as C-501C, one (1) gland seal condenser, identified as C-501E, one (1) evaporator concentrates tank, identified as T-505, one (1) compressor, identified as C-501A, one (1) turbine, identified as C-501B, one (1) lube oil head tank, identified as C-501D, one (1) gland seal ejector, identified as C501F, one (1) evaporator concentrates tank agitator, identified as A 505, four (4) stage 1 thru stage 4 circulation pumps, identified as P-504, P-505, P-507 and P 508, one (1) scrubber pump, identified as P-511, two (2) stage 5 and 6 circulation pumps, identified as P-509 and P-510, two (2) evaporator condensate pumps, identified as P-506 and P-521 (spare), and two (2) evaporator concentrates pump, identified as P-516 and P-516A, capacity: 910 gallon per minute evaporator feed rate.

(j) One (1) distillers dried grain and solubles (DDGS) dryer operation, identified as EU-10, installed in October 1982, exhausted through five (5) dry cyclones, identified as CY-511 through CY-515, controlled by two (2) natural gas-fired regenerative thermal oxidizers (RTOs), consisting of the following equipment:

(1) Five (5) DDGS dyers, previously identified as D-511 through D-515, permitted in 2014 as follows:

(A) Two (2) DDGS first pass dryers, identified as D-513 and D-514, each equipped with a cyclone routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2.

(B) One (1) DDGS first pass dryer, identified as D-515, with product and emissions routed to the two (2) polishing dryers, identified as D-511 and D-512.

(C) Two (2) DDGS polishing dryers, identified as D-511 and D-512, each equipped with a cyclone routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2.

(2) Five (5) DDGS dryer steam traps, identified as TR-511, TR-521, TR-531, TR-541 and TR-551.

(3) Five (5) dryer feed screw conveyors, identified as CV-511 through CV-515.

(4) One (1) wet conveyor, identified as CV-5010.

(5) Two (2) inclined wet conveyor, identified as CV-502 and CV-506.

(6) One (1) first pass dryer feed conveyor, identified as CV-516, and one (1) polishing dryer feed conveyor identified as CV-504.

(7) One (1) first pass product incline conveyor, identified as CV-503, one (1) recycle conveyor, identified as CV-517, and one (1) recycle conveyor identified as CV-520.

(8) One (1) polishing dryers product conveyor, identified as CV-518 and one (1) first pass product conveyor, identified as CV-505.

(9) One (1) cooler cross-over conveyor, identified as CV-519.

(10) One (1) pug mill, identified as M-511.

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

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

(m) One (1) alcohol load-out operation, identified as EU-13, installed in October 1982, exhausted through Stack G-602, equipped with a load-out natural gas-fired flare, identified as G-602, rated at 0.100 million British thermal units per hour, two (2) bottom transfer loading arms, identified as G-604 and G-607, two (2) bottom transfer vapor recovery arms, identified as G-605 and G-608, two (2) truck/rail vapor recovery loading arms, identified as G-603 and G-606, two (2) product filters, identified as F-660 and F-661, and two (2) fuel grade alcohol load-out pumps, identified as P-610 and P-611, capacity: 72,000 gallons of ethanol per hour. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

(o) Two (2) natural gas-fired package boilers , identified as EU-15, rated at 220 million British thermal units per hour each, installed in October 1982, exhausted through Stack 001.

(p) One (1) distillers dried grains and solubles (DDGS) cooler system, identified as EU-18, equipped with a baghouse, identified as DC-503, installed in March 2000, exhausting through Stack DC-0503, controlled with two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2, consisting of one (1) fan, identified as BL-502, one (1) cooling coil, identified as CC-500, one (1) cooler inlet rotary valve, identified as RV-502, one (1) cooler, identified as RC-502, and four (4) conveyors, identified as CV-522, CV-530, CV-531 and CV-532, DDGS capacity: 39.98 tons of DDGS per hour based on monthly DDGS production.

Insignificant Activities:

(a) Equipment powered by internal combustion engines of capacity equal to or less than 500,000 British

thermal units per hour, except where total capacity of equipment operated by one stationary source exceeds 2,000,000 British thermal units per hour, rated at a total of 2.431 million British thermal units per hour, consisting of:

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

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

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

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

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

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

The following emission limitations apply to the emission units listed in Section D.1 as the corn receiving operation, identified as EU-01, the corn handling operation, identified as EU-02, the corn milling operation, identified as EU-03, the yeast propagation operation, identified as EU-04, the fermentation operation, identified as EU-05, the degasser and recovery column, identified as EU-08, the evaporation process, identified as EU-09, the distillers dried grain and solubles (DDGS) dryer operation, identified as EU-10, the DDGS handling operation, identified as EU-11, the DDGS load-out operation, identified as EU-12, the alcohol load-out operation, identified as EU-13, and the two (2) natural gas-fired package boilers, identified as EU-15:

(a) SO_2 emissions shall be limited to:

(1) 1.2 pounds per million British thermal units,

(2) 412 pounds per hour, and

(3) 1,630 tons per year*.

(b) NO_X emissions shall be limited to:

(1) 0.7 pounds per million British thermal units,

(2) 240 pounds per hour, and

(3) 960 tons per year*.

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

(1) 20 pounds per hour, and

(2) 70 tons per year*.

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

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

Pursuant to 326 IAC 2-2, total emissions of CO from the two (2) natural gas-fired package boilers, identified as EU-15, shall not exceed 93.55 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

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

Compliance Determination Requirements

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

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

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

(b) PSD NO_X emissions = (TNG x 135.66 pounds of NOx/mmcf x 1 ton/2,000 pounds) + (TTNG x 100.0 pounds of NO_X/mmcf x 1 ton/2,000 pounds) + (HEGO x 1.80 mmBtu/hr x 4.41 pounds of NO_X/mmBtu x 1 ton/2,000 pounds) + (HFPO x 0.631 mmBtu/hr x 4.41 pounds of NO_X/mmBtu x 1 ton/2,000 pounds).

(c) PSD PM emissions = [(TNG x 1.9 pounds of PM/mmcf of natural gas)] x 1 ton/2,000 pounds +

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

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

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

[TDGS11 x 6.002E-03 pounds of PM/ton of DDGS processed through the DDGS dryers] x 1 ton/2,000 pounds +

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

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

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

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

where:

TTNG = Total throughput of natural gas (mmcf) to the space heaters

HEGO = Number of hours the emergency generator operated

HFPO = Number of hours the backup emergency fire pump operated

TNG = Throughput of natural gas (mmcf) to the two (2) package boilers (EU-15)

CE = Overall control efficiency (fraction) of the control device

TCR = Throughput of corn received (tons/month) to corn receiving operation (EU-01)

TCH = Throughput of corn handled (tons/month) to the corn handling operation (EU-02)

TCM = Throughput of corn milled (tons/month) to the corn milling operation (EU-03)

TDGS11 = Throughput of DDGS (tons/month) to DDGS handling operation (EU-11)

TDGS12 = Throughput of DDGS (tons/month) to DDGS load-out operation (EU-12)

K = 0.0001 tons/month for alcohol load-out operation (EU-13)

INSIG = PM emissions from other insignificant activities

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

D.1.4 Emissions Determination [326 IAC 2-2]

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

CO emissions (tons/yr) = [(TNG x 51.00 pounds of CO/mmcf of natural gas)] + [(TTNG x 84.0 pounds of CO/mmcf) + (HEGO x 1.80 mmBtu/hr x 0.95 pounds of CO/mmBtu) + (HFPO x 0.631 mmBtu/hr x 0.95 pounds of CO/mmBtu)] x 1 ton/2,000 pounds.

where:

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

TTNG = Total throughput of natural gas (mmcf) to the space heaters

HEGO = Number of hours the emergency generator operated

HFPO = Number of hours the backup emergency fire pump operated

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

D.1.5 Record Keeping Requirements

(a) To document the compliance status with Conditions D.1.1, D.1.2, D.1.3 and D.1.4 the Permittee shall maintain records of the following:

(1) Throughput of natural gas to space heaters,

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

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

(4) Throughput of DDGS, and

(5) Operational times of each of the five (5) DDGS dryers on a monthly basis.

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

D.1.6 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.1.1 using the equations in condition D.1.3(a), (b) and (c), and Condition D.1.2 using the equation in condition D.1.4, including supporting calculations and data used for determining compliance with the emission limits in conditions D.1.1 and D.1.2, shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reports 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.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Corn Receiving, Handling and Milling Operations

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

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

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

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

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

D.2.1 Prevention of Significant Deterioration (PSD) Minor Limit for PM/PM10/PM2.5 [326 IAC 2-2]

Pursuant to 326 IAC 2-2, the Permittee shall comply with the following limits:

(a) PM/PM10 emissions shall not exceed 0.32 pounds/hour for the one (1) corn receiving operation, identified as EU-01, and the one (1) corn handling operation, identified as EU-02.

(b) PM2.5 emissions shall not exceed 0.093 pounds/hour for the one (1) corn receiving operation, identified as EU-01, and the one (1) corn handling operation, identified as EU-02.

(c) PM/PM10 emissions shall not exceed 0.20 pounds/hour for the one (1) corn milling operation, identified as EU-03.

(d) PM2.5 emissions shall not exceed 0.058 pounds/hour for the one (1) corn milling operation, identified as EU-03.

Compliance with these limits, in combination with the limits in Conditions D.2.1, D.3.1, D.4.3, D.5.2, D.6.1, and D.7.3 shall limit the net emissions increase from the 2014 optimization modification to less than twenty-five (25) tons PM, fifteen (15) tons PM_{10}, ten (10) tons $PM_{2.5}$, forty (40) tons SO_2, forty (40) tons NOx, forty (40) tons VOC, and one-hundred (100) tons CO per twelve (12) consecutive month period, and therefore, render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2014 modification.

D.2.2 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

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

D.2.3 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and their 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

D.2.4 Particulate Control

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

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

D.2.5 Testing Requirements [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Condition D.2.1, not later than one hundred and eighty (180) days after initial startup of the new RTOs, the Permittee shall perform PM/PM10/PM2.5 testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing. PM10 and PM2.5 includes filterable and condensable PM.

(b) In order to demonstrate compliance with Condition D.2.2, the Permittee shall perform PM testing for the two (2) baghouses (D-0001 and D-0112) controlling PM emissions from the corn receiving, handling and milling operations (EU-01, EU-02 and EU-03), utilizing methods as approved by the Commissioner at least once every five (5) years from the date of this valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

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

D.2.6 Visible Emissions Notations

(a) Visible emission notations of the corn receiving, handling and milling facilities (EU-01, EU-02 and EU-03) Stack DC-0001, DC-0002, DC-0112 and BV-0112 exhausts shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) If abnormal emissions are observed, the Permittee shall take 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.2.7 Broken or Failed Bag Detection

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

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

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

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

D.2.8 Record Keeping Requirements

(a) To document the compliance status with Condition D.2.6, the Permittee shall maintain a daily record of visible emission notations of the corn receiving, handling and milling stack exhausts DC-0001, DC-0002, DC-0112 and BV-0112. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the corn receiving, handling and milling operations did not operate that day).

(b) 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

Emissions Unit Description: Yeast Propagation and Fermentation

(d) One (1) yeast propagation operation, identified as EU-04, installed in October 1982, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) yeast mixing tank, identified as T-320, one (1) yeast mixing tank agitator, identified as A-320, three (3) yeast preparation tanks, identified as T-322 through T-324, three (3) agitators, identified as A-322 through A-324, and four (4) pumps, identified as P-320, PC-3220, PC-3230, and P-322, capacity: 16,000 gallons per tank and 2,100 tank turnovers per year. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

(e) One (1) fermentation operation, identified as EU-05, installed in October 1982, exhausted through Stacks VT-005 through VT-019, VT-019a and BL-230, consisting of sixteen (16) fermenter agitators, identified as A-2002, A-2004, A-2009, A-2011, A-203, A-205, A-206, A-207, A-208, A-210, A-212, A-213, A-214, A-215, A-220 and A-221, eight (8) fermenter coolers, identified as EP-2002, EP-2003, EP-2004, EP-2005, EP-2006, EP-2007, EP-2008, EP-2020, eight (8) pumps, identified as P-202 through P-208, P-220, sixteen (16) fermenters identified as TF-2002, TF-2004, TF-2009, TF-2011, T-203, T-205, T-206, T-207, T-208, T-210, T-212, T-213, T-214, T-215, T-220 and T-221, one (1) blower, identified as BL-230, one (1) foam trap, identified as FT-230, one (1) CO_2 scrubber, identified as V-230 installed in 1984, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, one (1) scrubber pump, identified as P-230, one foam trap bleed pump, identified as P-231, capacity: 319,000 gallons per tank and 2,100 tank turnovers per year. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this operation are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

(g) One (1) beerwell, identified as EU-07, installed in December 1986, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) beerwell, identified as T-222, two (2) beerwell pumps, identified as P-222A and P-222B and two (2) beerwell agitators, identified as A-222A and A-222B, capacity: 1,750 gallons of beer per minute. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

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

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

D.3.1 Prevention of Significant Deterioration (PSD) Minor Limit for VOC [326 IAC 2-2]

Pursuant to 326 IAC 2-2, the Permittee shall comply with the following limits:

(a) VOC emissions shall not exceed 0.015 pounds/hour for the one (1) yeast propagation operation and accumulator vent, identified as EU-04.

(b) VOC emissions from the CO2 scrubber, identified as V-230, shall not exceed 6.01 pounds/hour.

Compliance with these limits, in combination with the limits in Conditions D.2.1, D.3.1, D.4.3, D.5.2, D.6.1, and D.7.3 shall limit the net emissions increase from the 2014 optimization modification to less than twenty-five (25) tons PM, fifteen (15) tons PM_{10}, ten (10) tons $PM_{2.5}$, forty (40) tons SO_2, forty (40) tons NOx, forty (40) tons VOC, and one-hundred (100) tons CO per

twelve (12) consecutive month period, and therefore, render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2014 modification.

D.3.2 Volatile Organic Compounds (VOC) [326 IAC 2-2]

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

D.3.3 LAER Requirements CO2 Scrubber (VOC) [326 IAC 2-3][326 IAC 2-2][326 IAC 2-1.1][326 IAC 2-7][326 IAC 8-1-6]

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

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

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

D.3.4 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and their 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

D.3.5 VOC

(a) In order to comply with Conditions D.3.1 and D.3.3, the scrubber for VOC control shall be in operation and control emissions from the yeast propagator tanks (EU-04), the fermentation operation (EU-05), and the beerwell (EU-07), at all times that these emission units are in operation.

(b) In order to comply with the LAER for VOC in Condition D.3.3(b), and HAP limit in 40 CFR Part 63, Subpart FFFF, the bisulfite solution shall be applied at a minimum feed rate of 3.2 gallons per hour into the scrubbing water of the CO_2 Scrubber (V-230) until a rate is established through the latest compliance stack test.

D.3.6 Testing Requirements [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Condition D.3.1, not later than one hundred and eighty (180) days after initial startup of the new RTOs, the Permittee shall perform VOC testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(b) In order to demonstrate compliance with Condition D.3.3(b), with the application of the bisulfite solution into the scrubbing water of the CO_2 Scrubber, the Permittee shall perform testing of the overall VOC control efficiency of the scrubber utilizing methods as approved by the Commissioner 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.3.7 Scrubber Parametric Monitoring

(a) The Permittee shall record the pressure drop across the scrubber (V-230) used in conjunction with the yeast propagation operation (EU-04), the fermentation process (EU-05), and the beerwell (EU-07) at least once per day when these operations and processes are in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pressure drop between 15 and 28 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 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 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.3.8 Scrubber Flow Rate

(a) The Permittee shall monitor and record the flow rate of the scrubber CO_2 scrubber (V-230) at least once per day the yeast propagation operation (EU-04), the fermentation process (EU-05), and the beerwell (EU-07) are in operation. The Permittee shall determine the minimum flow rate from the latest valid stack test that demonstrates compliance with limits in Condition D.3.5(a). 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. 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 record the bisulfite solution feed rate into the scrubbing water used in conjunction with the CO_2 scrubber (V-230) at least once per day the yeast propagation operation (EU-04), the fermentation process (EU-05), and the beerwell (EU-07) are in operation. The Permittee shall determine the minimum flow rate from the latest valid stack test that demonstrates compliance with limits in Condition D.3.5(b). 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. 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 instrument used for determining the flow rate shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.3.9 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 the yeast propagation operation (EU-04), the fermentation process (EU-05), and the beerwell (EU-07). 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 Requirement [326 IAC 2-7-5(3)][326 IAC 2-7-19]

D.3.10 Record Keeping Requirements

(a) To document the compliance status with Condition D.3.7, the Permittee shall maintain a daily record of the pressure drop across the scrubber (V-230). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the yeast propagation operation and fermentation process did not operate that day).

(b) To document the compliance status with Condition D.3.8(a), the Permittee shall maintain a daily record of the water flow rate in the scrubber V-230. The Permittee shall include in its daily record when a water flow rate reading is not taken and the reason for the lack of a water flow rate reading (e.g., the process did not operate that day).

(c) To document the compliance status with Condition D.3.8(b), the Permittee shall maintain a daily record of the bisulfite solution feed rate into the scrubbing water of the CO_2 scrubber V-230. The Permittee shall include in its daily record when a bisulfite solution feed rate reading is not taken and the reason for the lack of a bisulfite solution feed rate reading (e.g., the process did not operate that day).

(d) 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

Emissions Unit Description: Degasser, Evaporation, DDGS Dryer, and DGGS Cooler Operations

(h) One (1) degasser and recovery column, identified as EU-08, installed in October 1982, exhausted through Stacks VT-022 and BL-601. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

Stack VT-022 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2, to control VOC emissions from the one (1) recovery column vent condenser, identified as E-409. The associated equipment consists of:

One (1) recovery column, identified as V-402, one (1) recovery column reflux tank, identified as V-404, two (2) beer preheaters, identified as EP-4501 A & B, one (1) recovery column condenser, identified as E-4404, one (1) recovery column reboiler #2, identified as E-MS-408, one (1) recovery column vent condenser, identified as E-409, one (1) preheater #2, identified as E-412, one (1) recovery column reboiler #1, identified as E-413, , one (1) auxiliary product cooler, identified as E-419, , two (2) recovery column feed pumps, identified as P-401 A & P-401 B, two (2) recovery column bottoms pumps, identified as P-402 A and P-402 B, two (2) recovery column reflux pumps, identified as P-404 A and P-404 B, one (1) fusel oil transfer pump, identified as P-4601, three (3) recovery column recirculation pumps #2, identified as P-407 A, P-407 B, and P-408.

Stack BL-601 routed to CO2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, associated equipment consists of:

One (1) degasser condenser, identified as E-403, one (1) degasser vent condenser, identified as E-410, and one (1) degasser, identified as V-401, capacity: 1,750 gallons of beer per minute.

Note: CO_2 scrubber, identified as V-230, and associated requirements can be found in Section D.3.

(i) One (1) stillage concentration and evaporation process, identified as EU-09, installed in October 1982, consisting of four (4) centrifuges, identified as CF-5001, CF-5002, CF-5103, CF 5104, three (3) stillage tanks, identified as T-502, T-515 and T-516, consisting of: one (1) stillage preheater, identified as E-503, four (4) 1^{st} through 4^{th} stage heaters, identified as E-501, E-502, E-504, and E-505, five (5) vapor bodies, identified as T-504 and T-507 through T-510, one (1) 5^{th} and 6^{th} stage heater, identified as E-506, one (1) evaporation condensate tank, identified as T-506, exhausted through Stack VT-024 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2, one (1) lube oil console, identified as C-501C, one (1) gland seal condenser, identified as C-501E, one (1) evaporator concentrates tank, identified as T-505, one (1) compressor, identified as C-501A, one (1) turbine, identified as C-501B, one (1) lube oil head tank, identified as C-501D, one (1) gland seal ejector, identified as C501F, one (1) evaporator concentrates tank agitator, identified as A 505, four (4) stage 1 thru stage 4 circulation pumps, identified as P-504, P-505, P-507 and P 508, one (1) scrubber pump, identified as P-511, two (2) stage 5 and 6 circulation pumps, identified as P-509 and P-510, two (2) evaporator condensate pumps, identified as P-506 and P-521 (spare), and two (2) evaporator concentrates pump, identified as P-516 and P-516A, capacity: 910 gallon per minute evaporator feed rate.

(j) One (1) distillers dried grain and solubles (DDGS) dryer operation, identified as EU-10, installed in October 1982, exhausted through five (5) dry cyclones, identified as CY-511 through CY-515, controlled by two (2) natural gas-fired regenerative thermal oxidizers (RTOs), consisting of the following equipment:

(1) Five (5) DDGS dyers, previously identified as D-511 through D-515, permitted in 2014 as follows:

(A) Two (2) DDGS first pass dryers, identified as D-513 and D-514, each equipped with a

cyclone routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2.

(B) One (1) DDGS first pass dryer, identified as D-515, with product and emissions routed to the two (2) polishing dryers, identified as D-511 and D-512.

(C) Two (2) DDGS polishing dryers, identified as D-511 and D-512, each equipped with a cyclone routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2.

(2) Five (5) DDGS dryer steam traps, identified as TR-511, TR-521, TR-531, TR-541 and TR-551.

(3) Five (5) dryer feed screw conveyors, identified as CV-511 through CV-515.

(4) One (1) wet conveyor, identified as CV-5010.

(5) Two (2) inclined wet conveyor, identified as CV-502 and CV-506.

(6) One (1) first pass dryer feed conveyor, identified as CV-516, and one (1) polishing dryer feed conveyor identified as CV-504.

(7) One (1) first pass product incline conveyor, identified as CV-503, one (1) recycle conveyor, identified as CV-517, and one (1) recycle conveyor identified as CV-520.

(8) One (1) polishing dryers product conveyor, identified as CV-518 and one (1) first pass product conveyor, identified as CV-505.

(9) One (1) cooler cross-over conveyor, identified as CV-519.

(10) One (1) pug mill, identified as M-511.

(p) One (1) distillers dried grains and solubles (DDGS) cooler system, identified as EU-18, equipped with a baghouse, identified as DC-503, installed in March 2000, exhausting through Stack DC-0503, controlled with two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2, consisting of one (1) fan, identified as BL-502, one (1) cooling coil, identified as CC-500, one (1) cooler inlet rotary valve, identified as RV-502, one (1) cooler, identified as RC-502, and five (5) conveyors, identified as CV-521, CV-522, CV-530, CV-531 and CV-532, DDGS capacity: 39.98 tons of DDGS per hour based on monthly DDGS production.

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

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

D.4.1 LAER Requirements [326 IAC 2-1.1][326 IAC 2-2][326 IAC 2-3][326 IAC 2-7][326 IAC 8-1-6]

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

(b) The Permittee shall ensure that the two (2) RTOs are designed to achieve an overall VOC control efficiency of ninety-eight percent (98%) and that actual control efficiency achieved is no less than ninety-five percent (95%).

(c) In accordance with 326 IAC 2-3, operation of the two (2) RTOs within the prescribed overall control efficiency and compliance with the limit in (b) shall constitute compliance with the lowest achievable emission reduction (LAER) requirements for the five (5) DDGS

dryers (EU-10), the evaporation process (EU-09) and the recovery column vent condenser, identified as E-409 (part of EU-08).

D.4.2 BACT Requirements (VOC) [326 IAC 8-1-6][326 IAC 2-2-3]

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

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

(a) Whenever the thermal oxidizer is in service:

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

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

Note: In lieu of operating one (1) dedicated RTO for the control VOCs from the DDGS cooler system, the Permittee has opted to route the DDGS cooler system exhaust to the two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2.

D.4.3 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

Pursuant to 326 IAC 2-2 (PSD), the Permittee shall comply with the following:

(a) PM/PM10 emissions shall not exceed 0.09 pounds/hour for the one (1) DDGS cooler baghouse, identified as DC-503.

(b) PM2.5 emissions shall not exceed 0.026 pounds/hour for the one (1) DDGS cooler baghouse, identified as DC-503.

(c) Total VOC emissions shall not exceed 3.99 pounds/hour for the two (2) RTOs, identified as RTO-1 and RTO-2.

Compliance with these limits, in combination with the limits in Conditions D.2.1, D.3.1, D.4.3, D.5.2, D.6.1, and D.7.3 shall limit the net emissions increase from the 2014 optimization modification to less than twenty-five (25) tons PM, fifteen (15) tons PM_{10}, ten (10) tons $PM_{2.5}$, forty (40) tons SO_2, forty (40) tons NOx, forty (40) tons VOC, and one-hundred (100) tons CO per twelve (12) consecutive month period, and therefore, render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2014 modification.

D.4.4 PM PSD Minor Limit [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and Part 70 Operating Permit No. T141-6956-00033, the PM emissions from the one (1) distillers dried grains and solubles (DDGS) cooler system (EU-18) shall be less than 5.70 pounds per hour. Compliance with this emission limit renders the requirements of 326 IAC 2-2 not applicable to the distillers dried grains and solubles (DDGS) cooler system.

D.4.5 PM10 PSD Minor Limit [326 IAC 2-2]

Pursuant to 326 IAC 2-2 and Part 70 Operating Permit No. T141-6956-00033, the PM_{10} emissions from the distillers dried grains and solubles (DDGS) cooler system (EU-18) shall be less than 3.42 pounds per hour. Compliance with this emission limit renders the requirements of 326 IAC 2-2 not applicable to the distillers dried grains and solubles (DDGS) cooler system.

D.4.6 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

Pursuant to 326 IAC 6.5-1-2(a), particulate matter (PM) emissions from the two (2) regenerative thermal oxidizers (RTOs) and the one (1) DDGS cooler baghouse, identified as EU-18, shall each not exceed 0.03 grains per dry standard cubic foot of exhaust air.

D.4.7 DDGS Dryer Operations

(a) The Permittee shall operate no more than one (1) of the first pass dryers (D-513 or D-514), and one (1) of the polishing dryers (D-511 or D-512), at a time, when one (1) of the two (2) RTOs (RTO-1 or RTO-2) is out-of-service.

(b) The Permitte shall not operate the first pass dryer D-515 when one (1) of the two (2) RTOs (RTO-1 or RTO-2) is out-of-service.

D.4.8 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these facilities and their 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

D.4.9 Volatile Organic Compounds (VOC)

Pursuant to 326 IAC 2-3, the Permittee shall operate the RTOs to achieve compliance with Condition D.4.1 and Condition D.4.2.

D.4.10 Particulate Control

(a) In order to comply with Conditions D.1.1(a)(4)(B) and D.4.5 at least one (1) of the two (2) RTOs for particulate control shall be in operation and control emissions from the DDGS dryer operation (EU10) at all times that one (1) or more of the DDGS dryers are in operation.

(b) In order to comply with Conditions D.4.3, D.4.4, and D.4.5, the baghouse for particulate control shall be in operation and control emissions from the distillers dried grains and solubles (DDGS) cooler system (EU-18) at all times that the distillers dried grains and solubles (DDGS) cooler system is in operation.

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

D.4.11 Testing Requirements [326 IAC 2-1.1-11]

(a) Within one hundred eighty (180) days of the startup of the RTOs (RTO-1 and RTO-2) in order to demonstrate compliance with Condition D.4.1, D.4.2, and D.4.3, the Permittee shall perform overall VOC control efficiency testing and outlet emissions rate of one (1) of the two (2) RTOs utilizing methods as approved by the Commissioner at least every 2.5 years from the date of the most recent valid compliance demonstration, such that each individual RTO shall be tested every five (5) years. 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 ninety (90) days after startup of the RTO's (RTO-1 and RTO-2) as stated in Condition D.4.6, in order to demonstrate compliance with Condition D.4.2, the Permittee shall perform VOC testing of the DDGS cooler system utilizing methods as approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

D.4.12 Thermal Oxidizer Temperature

(a) A continuous monitoring system shall be calibrated, maintained, and operated on the thermal oxidizers for measuring operating temperatures. For the purposes of this condition continuous shall mean no less than once per minute. The outputs of these systems shall be recorded as a 3-hour average. The Permittee shall operate the thermal oxidizers at or above the 3-hour average temperature of 1,600°F.

(b) The Permittee shall determine the 3-hour average temperature from the most recent valid stack test that demonstrates compliance with limit in Condition D.4.1(b) and D.4.2, as approved by IDEM.

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

D.4.13 Thermal Oxidizer Parametric Monitoring

(a) The Permittee shall determine the appropriate duct pressure or fan amperage from the most recent valid stack test that demonstrates compliance with the limit in Conditions D.4.1 and D.4.2, as approved by IDEM.

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

(c) When, for any one reading, the duct pressure or fan amperage is outside the above mentioned range, the Permittee shall take a reasonable response. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A 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.

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

D.4.14 Baghouse Parametric Monitoring

The Permittee shall record the pressure drop across the baghouse (DC-503) used in conjunction with the distillers dried grains and solubles (DDGS) cooler system (EU-18), at least once per day when this process is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range, the Permittee shall take reasonable response. The normal range for this unit is a pressure drop between 0.5 and 9+.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 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 annually or as established by the manufacturer's specifications whichever is more frequent.

D.4.15 Broken or Failed Bag Detection

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

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

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

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

D.4.16 Record Keeping Requirements

(a) To document the compliance status with Condition D.4.12, the Permittee shall maintain records of the continuous operating temperature required under Condition D.4.12.

(b) To document the compliance status with Condition D.4.13, the Permittee shall maintain a daily record of the duct pressure or fan amperage of the thermal oxidizers controlling the degasser and recovery column, evaporation process and the DDGS dryer operation. The Permittee shall include in its daily record when a duct pressure or fan amperage reading is not taken and the reason for the lack of a duct pressure or fan amperage reading (e.g., the degasser and recovery column, evaporation process and the DDGS dryer operation did not operate that day).

(c) To document the compliance status with Condition D.4.2, when one (1) RTO is out of service, the Permittee shall maintain records of the dryers in operation.

(d) To document the compliance status with Condition D.4.14, the Permittee shall maintain a daily record of the pressure drop across the baghouse (DC-503) controlling the distillers dried grains and solubles (DDGS) cooler system (EU-18). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the distillers dried grains and solubles (DDGS) cooler system did not operate that day).

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

D.4.17 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.4.2 shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reports 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

Emissions Unit Description: DDGS Handling and Alcohol Load Out Handling

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

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

(m) One (1) alcohol load-out operation, identified as EU-13, installed in October 1982, exhausted through Stack G-602, equipped with a load-out natural gas-fired flare, identified as G-602, rated at 0.100 million British thermal units per hour, two (2) bottom transfer loading arms, identified as G-604 and G-607, two (2) bottom transfer vapor recovery arms, identified as G-605 and G-608, two (2) truck/rail vapor recovery loading arms, identified as G-603 and G-606, two (2) product filters, identified as F-660 and F-661, and two (2) fuel grade alcohol load-out pumps, identified as P-610 and P-611, capacity: 72,000 gallons of ethanol per hour. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

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

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

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

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

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

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

(c) The VOC emissions from the load-out natural gas-fired flare, identified as G-602, shall not exceed 2.62 pounds per hour.

D.5.2 Prevention of Significant Deterioration (PSD) Minor Limit [326 IAC 2-2]

Pursuant to 326 IAC 2-2 (PSD), the Permittee shall comply with the following:

(a) PM/PM10 emissions shall not exceed 0.05 pounds/hour for the one (1) DDGS loadout baghouse, identified as D-0601.

(b) PM2.5 emissions shall not exceed 0.015 pounds/hour for the one (1) DDGS loadout baghouse, identified as D-0601.

(c) The load-out natural gas-fired flare, identified as G-602, shall not exceed 4,034 hours of loadout per twelve (12) consecutive month period, with compliance determined at the end of each month.

(d) VOC emissions from the one (1) alcohol load-out operation, identified as EU-13, shall not exceed 0.10 pound per one thousand (1,000) gallons of loading, with compliance determined at the end of each month.

Compliance with these limits, in combination with the limits in Conditions D.2.1, D.3.1, D.4.3, D.5.2, D.6.1, and D.7.3 shall limit the net emissions increase from the 2014 optimization modification to less than twenty-five (25) tons PM, fifteen (15) tons PM_{10}, ten (10) tons $PM_{2.5}$, forty (40) tons SO_2, forty (40) tons NOx, forty (40) tons VOC, and one-hundred (100) tons CO per twelve (12) consecutive month period, and therefore, render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2014 modification.

D.5.3 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

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

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

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

A Preventive Maintenance Plan is required for these facilities and their 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

D.5.5 Particulate Control

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

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

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

(a) In order to demonstrate compliance with Condition D.5.2, not later than one hundred and eighty (180) days after initial startup of the new RTOs, the Permittee shall perform VOC testing of the flare utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(b) In order to demonstrate compliance with Condition D.5.2, not later than one hundred and eighty (180) days after initial startup of the new RTOs, the Permittee shall perform PM/PM10/PM2.5 of the testing of the DDGS loadout baghouse (DC-0601)utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing. PM10 and PM2.5 includes filterable and condensable PM.

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

D.5.7 Visible Emissions Notations

(a) Visible emission notations of the DDGS load-out operation (EU-12) Stack DC-0601 exhaust shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

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

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

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

(e) If abnormal emissions are observed, the Permittee shall take 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.5.8 Flare Pilot Flame

In order to comply with Conditions D.5.1 and D.5.2, the Permittee shall:

(a) Maintain a flare pilot flame when the associated emission unit is in operation and continuously 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 associated emission unit is in operation.

(b) Maintain records of temperature or other parameters sufficient to demonstrate the presence of a pilot flame when the one (1) alcohol load-out operation, identified as EU-13, is in operation.

D.5.9 Broken or Failed Bag Detection

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

(b) For a single compartment baghouse controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emission unit. Operations may continue only if the event

qualifies as an emergency and the Permittee satisfies the requirements of the emergency provisions of this permit (Section B - Emergency Provisions).

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

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

D.5.10 Record Keeping Requirements

(a) To document the compliance status with Condition D.5.7, the Permittee shall maintain a daily record of visible emission notations of the DDGS load-out operation stack exhaust DC-0601. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g., the DDGS load-out operation did not operate that day).

(b) To document the compliance status with Condition D.5.2(c), the Permittee shall maintain records of the hours of operation for the load-out natural gas-fired flare for each month and each compliance period.

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

D.5.11 Reporting Requirements

A quarterly report of the information to document the compliance status with Conditions D.5.2(c) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting Requirements contains the Permittee's obligation with regard to the reports 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

Emissions Unit Description: Riley-Stoker and Package Boilers

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

Note: The Riley Stoker coal-fired boiler, identified as EU-14, last operated October 2012. Pursuant to Significant Source Modification 141-34355-00033 and Significant Permit Modification 141-34359-00033, the coal-fired boiler will be permanently shutdown and decommissioned. Future firing of the boiler by other non-coal fuels, e.g. biomass, will require the submittal of an application and IDEM approval.

(o) Two (2) natural gas-fired package boilers, identified as EU-15, rated at 220 million British thermal units per hour each, installed in October 1982, exhausted through Stack 001.

(t) Two (2) natural gas-fired Rental boilers, identified as EU-21a and EU-21b, not to exceed a rating of 99.5 million British thermal units per hour each, approved in 2014 for construction, exhausted through Stack 001.

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

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

D.6.1 Prevention of Significant Deterioration (PSD) Minor Limit PM/PM10/PM2.5/SO2/NOx/VOC/CO [326 IAC 2-2]

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

(a) Natural gas usage, total, for EU-15 and EU-21a and EU-21b shall not exceed 3,641.13 million cubic feet per twelve (12) consecutive month period, with compliance determined at the end of each month.

(b) NOx emissions from the natural gas combustion shall not exceed 135.66 pounds per million cubic feet (lb/mmscf).

(c) CO emissions from the natural gas combustion shall not exceed 51.00 pounds per million cubic feet (lb/mmscf).

Compliance with these limits, in combination with the limits in Conditions D.2.1, D.3.1, D.4.3, D.5.2, D.6.1, and D.7.3 shall limit the net emissions increase from the 2014 optimization modification to less than twenty-five (25) tons PM, fifteen (15) tons PM_{10}, ten (10) tons $PM_{2.5}$, forty (40) tons SO_2, forty (40) tons NOx, forty (40) tons VOC, and one-hundred (100) tons CO per twelve (12) consecutive month period, and therefore, render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable to the 2014 modification.

D.6.2 Prevention of Significant Deterioration (PSD) Minor Limit Coal-Fired Boiler [326 IAC 2-2]

Pursuant to 326 IAC 2-2 (PSD), and in order to render the requirements of 326 IAC 2-2 (PSD) not applicable to this modification (Significant Source Modification (SSM) No. 141-34355-00033 and Significant Permit Modification (SPM) No. 141-34359-00033), prior to startup of the two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2, the Permittee shall decommission and permanently shut down the Riley-Stoker coal-fired boiler.

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

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

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

A Preventive Maintenance Plan is required for these facilities and their 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

D.6.5 Testing Requirements [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Condition D.6.1(b) and D.6.1(c), not later than one hundred and eighty (180) days after initial startup of the two (2) new natural gas-fired Rental boilers, identified as EU-21a and EU-21b, the Permittee shall perform NOx and CO testing utilizing methods as approved by the Commissioner. This test shall be repeated at least once every five years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with Section C - Performance Testing.

(b) In order to demonstrate compliance with Condition D.6.1(b) and D.6.1(c), not later than one hundred and eighty (180) days after restart of the existing boilers, identified as EU-15, the Permittee shall perform NOx and CO testing for the two (2) natural gas-fired package boilers, identified as EU-15, utilizing methods as approved by the Commissioner at least once every five (5) years from the date of this 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

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 records of the natural gas usage for each month and each compliance period.

(b) 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 Requirements contains the Permittee's obligation with regard to the reports 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

Emissions Unit Description : [RESERVED]

SECTION D.8 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Storage Tanks

(r) Six (6) storage tanks, consisting of:

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

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

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

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

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

(6) Two (2) fixed roof corn oil storage tanks, installed in 2014.

(7) One (1) horizontal corrosion inhibitor tank, identified as T-602, with a capacity of 9,000 gallons.

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

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

D.8.1 Petroleum Liquid Storage Facility [326 IAC 8-4-3]

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

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

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

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

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

D.8.2 Record Keeping Requirements [326 IAC 8-4-3]

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

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

SECTION D.9 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Insignificant Activities

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

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

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

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

D.9.1 Particulate Matter (PM) [326 IAC 6.5-1-2(a)]

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

SECTION E.1 [INTENTIONALLY LEFT BLANK]

SECTION F.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NSPS Subpart Ka for: Gasoline Storage Tank (T-601)

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

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

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

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

(a) Pursuant to 40 CFR 60.110a, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1 for the emissions units listed above, except as otherwise specified in 40 CFR 60.110a through 60.115a, Subpart Ka.

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

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

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

F.1.2 New Source Performance Standards for Storage Vessels for Petroleum Liquids for Which Construction, Reconstruction, or Modification Commenced After May 18, 1978, and Prior to July 23, 1984 Requirements [40 CFR Part 60, Subpart Ka][326 IAC 12-1]

Pursuant to 40 CFR Part 60, Subpart Ka, the Permittee shall comply with the provisions of 40 CFR Part 60,110a (included as Attachment C), which are incorporated by reference as 326 IAC 12, for the emissions units listed above as specified as follows:

(1) 40 CFR 60.110a (a) and (c)
(2) 40 CFR 60.111a
(3) 40 CFR 60.112a (a)(1, 3 and 4) and (b)
(4) 40 CFR 60.113a
(5) 40 CFR 60.114a
(6) 40 CFR 60.115a (a), (b), (c) and (d)(2)

SECTION F.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NSPS Subpart Kb for: Ethanol Storage Tank (T-611)

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

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

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

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

(a) Pursuant to 40 CFR 60.110b, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1 for the emissions units listed above, except when otherwise specified in 40 CFR 60.110b through 60.117b, Subpart Kb.

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

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

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

F.2.2 New Source Performance Standards for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984 Requirements [40 CFR Part 60, Subpart Kb][326 IAC 12-1]

Pursuant to 40 CFR Part 60, Subpart Kb, the Permittee shall comply with the provisions of 40 CFR Part 60,110b (included as Attachment D), which are incorporated by reference as 326 IAC 12, for the emissions units listed above as specified as follows:

(1) 40 CFR 60.110b (a), (d) and (e)(1, 2 and 3)
(2) 40 CFR 60.111b
(3) 40 CFR 60.112b (a)(1, 3 and 4) and (b)
(4) 40 CFR 60.113b (a) and (c)
(5) 40 CFR 60.114b
(6) 40 CFR 60.115b
(7) 40 CFR 60.116b
(8) 40 CFR 60.117b

SECTION F.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NSPS Subpart VV for:

Fermentation Operation (EU-05), Beerwell (EU-07) and Alcohol Load-Out (EU-13)

(e) One (1) fermentation operation, identified as EU-05, installed in October 1982, exhausted through Stacks VT-005 through VT-019, VT-019a and BL-230, consisting of sixteen (16) fermenter agitators, identified as A-2002, A-2004, A-2009, A-2011, A-203, A-205, A-206, A-207, A-208, A-210, A-212, A-213, A-214, A-215, A-220 and A-221, eight (8) fermenter coolers, identified as EP-2002, EP-2003, EP-2004, EP-2005, EP-2006, EP-2007, EP-2008, EP-2020, eight (8) pumps, identified as P-202 through P-208, P-220, sixteen (16) fermenters identified as TF-2002, TF-2004, TF-2009, TF-2011, T-203, T-205, T-206, T-207, T-208, T-210, T-212, T-213, T-214, T-215, T-220 and T-221, one (1) blower, identified as BL-230, one (1) foam trap, identified as FT-230, one (1) CO_2 scrubber, identified as V-230 installed in 1984, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, one (1) scrubber pump, identified as P-230, one foam trap bleed pump, identified as P-231, capacity: 319,000 gallons per tank and 2,100 tank turnovers per year. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this operation are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

(g) One (1) beerwell, identified as EU-07, installed in December 1986, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) beerwell, identified as T-222, two (2) beerwell pumps, identified as P-222A and P-222B and two (2) beerwell agitators, identified as A-222A and A-222B, capacity: 1,750 gallons of beer per minute. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

(m) One (1) alcohol load-out operation, identified as EU-13, installed in October 1982, exhausted through Stack G-602, equipped with a load-out natural gas-fired flare, identified as G-602, rated at 0.100 million British thermal units per hour, two (2) bottom transfer loading arms, identified as G-604 and G-607, two (2) bottom transfer vapor recovery arms, identified as G-605 and G-608, two (2) truck/rail vapor recovery loading arms, identified as G-603 and G-606, two (2) product filters, identified as F-660 and F-661, and two (2) fuel grade alcohol load-out pumps, identified as P-610 and P-611, capacity: 72,000 gallons of ethanol per hour. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

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

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

F.3.1 General Provisions Relating to NSPS VV [326 IAC 12-1][40 CFR Part 60, Subpart A]

(a) Pursuant to 40 CFR 60.480, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 12-1 for the emissions units listed above, except when otherwise specified in 40 CFR 60.480 through 60.489 Subpart VV.

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

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

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

F.3.2 New Source Performance Standards for Equipment Leaks of VOC in the Synthetic Organic Chemicals Manufacturing Industry Requirements [40 CFR Part 60, Subpart VV][326 IAC 12-1]

Pursuant to 40 CFR Part 60, Subpart VV, the Permittee shall comply with the provisions of 40 CFR Part 60.480 (included as Attachment E), which are incorporated by reference as 326 IAC 12, for the emissions units listed above as specified as follows:

(1) 40 CFR 60.480(a), (b) (c) and (e)
(2) 40 CFR 60.481
(3) 40 CFR 60.482-1
(4) 40 CFR 60.482-2
(5) 40 CFR 60.482-3
(6) 40 CFR 60.482-4
(7) 40 CFR 60.482-5
(8) 40 CFR 60.482-6
(9) 40 CFR 60.482-7
(10) 40 CFR 60.482-8
(11) 40 CFR 60.482-9
(12) 40 CFR 60.482-10
(13) 40 CFR 60.483-1
(14) 40 CFR 60.483-2
(15) 40 CFR 60.484
(16) 40 CFR 60.485
(17) 40 CFR 60.486
(18) 40 CFR 60.487
(19) 40 CFR 60.488
(20) 40 CFR 60.489

SECTION G.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NESHAP Subpart FFFF for:

Yeast Propagation Operation (EU-04), Fermentation Operation (EU-05), Beerwell (EU-07), Degasser and Recovery Column (EU-08), and Alcohol Load-out Operation (EU-13)

(d) One (1) yeast propagation operation, identified as EU-04, installed in October 1982, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) yeast mixing tank, identified as T-320, one (1) yeast mixing tank agitator, identified as A-320, three (3) yeast preparation tanks, identified as T-322 through T-324, three (3) agitators, identified as A-322 through A-324, and four (4) pumps, identified as P-320, PC-3220, PC-3230, and P-322, capacity: 16,000 gallons per tank and 2,100 tank turnovers per year. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

(e) One (1) fermentation operation, identified as EU-05, installed in October 1982, exhausted through Stacks VT-005 through VT-019, VT-019a and BL-230, consisting of sixteen (16) fermenter agitators, identified as A-2002, A-2004, A-2009, A-2011, A-203, A-205, A-206, A-207, A-208, A-210, A-212, A-213, A-214, A-215, A-220 and A-221, eight (8) fermenter coolers, identified as EP-2002, EP-2003, EP-2004, EP-2005, EP-2006, EP-2007, EP-2008, EP-2020, eight (8) pumps, identified as P-202 through P-208, P-220, sixteen (16) fermenters identified as TF-2002, TF-2004, TF-2009, TF-2011, T-203, T-205, T-206, T-207, T-208, T-210, T-212, T-213, T-214, T-215, T-220 and T-221, one (1) blower, identified as BL-230, one (1) foam trap, identified as FT-230, one (1) CO_2 scrubber, identified as V-230 installed in 1984, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, one (1) scrubber pump, identified as P-230, one foam trap bleed pump, identified as P-231, capacity: 319,000 gallons per tank and 2,100 tank turnovers per year. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this operation are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

(g) One (1) beerwell, identified as EU-07, installed in December 1986, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) beerwell, identified as T-222, two (2) beerwell pumps, identified as P-222A and P-222B and two (2) beerwell agitators, identified as A-222A and A-222B, capacity: 1,750 gallons of beer per minute. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

(h) One (1) degasser and recovery column, identified as EU-08, installed in October 1982, exhausted through Stacks VT-022 and BL-601. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

Stack VT-022 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2, to control VOC emissions from the one (1) recovery column vent condenser, identified as E-409. The associated equipment consists of:

One (1) recovery column, identified as V-402, one (1) recovery column reflux tank, identified as V-404, two (2) beer preheaters, identified as EP-4501 A & B, one (1) recovery column condenser, identified as E-4404, one (1) recovery column reboiler #2, identified as E-MS-408, one (1) recovery column vent condenser, identified as E-409, one (1) preheater #2, identified as E-412, one (1) recovery column reboiler #1, identified as E-413, , one (1) auxiliary product cooler, identified as E-419, , two (2) recovery column feed pumps, identified as P-401 A & P-401 B, two (2) recovery column bottoms pumps, identified as P-402 A and P-402 B, two (2) recovery column reflux pumps, identified as P-404 A and P-404 B, one (1) fusel oil transfer pump,

identified as P-4601, three (3) recovery column recirculation pumps #2, identified as P-407 A, P-407 B, and P-408.

Stack BL-601 routed to CO2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, associated equipment consists of:

One (1) degasser condenser, identified as E-403, one (1) degasser vent condenser, identified as E-410, and one (1) degasser, identified as V-401, capacity: 1,750 gallons of beer per minute.

(m) One (1) alcohol load-out operation, identified as EU-13, installed in October 1982, exhausted through Stack G-602, equipped with a load-out natural gas-fired flare, identified as G-602, rated at 0.100 million British thermal units per hour, two (2) bottom transfer loading arms, identified as G-604 and G-607, two (2) bottom transfer vapor recovery arms, identified as G-605 and G-608, two (2) truck/rail vapor recovery loading arms, identified as G-603 and G-606, two (2) product filters, identified as F-660 and F-661, and two (2) fuel grade alcohol load-out pumps, identified as P-610 and P-611, capacity: 72,000 gallons of ethanol per hour. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

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

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

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

Pursuant to 40 CFR 63.2540, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1 for the yeast propagation operation, identified as EU-04, fermentation operation, identified as EU-05, beerwell, identified as EU-07, the degasser and recovery column, identified as EU-08, and alcohol load-out operation, identified as EU-13, described in this section except when otherwise specified in 40 CFR Subpart V.

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

Pursuant to 40 CFR Part 63, Subpart FFFF, the Permittee shall comply with the provisions of 40 CFR Part 63.2430 (included as Attachment F), which are incorporated by reference as 326 IAC 20-84 for the yeast propagation operation, identified as EU-04, fermentation operation, identified as EU-05, beerwell, identified as EU-07, the degasser and recovery column, identified as EU-08, the evaporation process, identified as EU-09, the distillers dried grain and solubles (DDGS) dryer operation, identified as EU-10, and alcohol load-out operation, identified as EU-13, as specified as follows:

(1) 40 CFR 63.2430
(2) 40 CFR 63.2435(a), (b), (d) and (e)
(3) 40 CFR 63.2440(a), (b), and (d)
(4) 40 CFR 63.2445(a)(1), (b), (c), (d), (e) and (f)
(5) 40 CFR 63.2450
(6) 40 CFR 63.2455
(7) 40 CFR 63.2460
(8) 40 CFR 63.2465
(9) 40 CFR 63.2470
(10) 40 CFR 63.2475
(11) 40 CFR 63.2480
(12) 40 CFR 63.2485

(13) 40 CFR 63.2490
(14) 40 CFR 63.2495
(15) 40 CFR 63.2500
(16) 40 CFR 63.2505
(17) 40 CFR 63.2515
(18) 40 CFR 63.2520
(19) 40 CFR 63.2525
(20) 40 CFR 63.2535
(21) 40 CFR 63.2540
(22) 40 CFR 63.2545
(23) 40 CFR 63.2550

Tables 1 - 12
Table 2

SECTION G.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NESHAP Subpart V for:

Fermentation Operation (EU-05), Beerwell (EU-07), Degasser and Recovery Column (EU-08), and Alcohol Load-out Operation (EU-13)

(e) One (1) fermentation operation, identified as EU-05, installed in October 1982, exhausted through Stacks VT-005 through VT-019, VT-019a and BL-230, consisting of sixteen (16) fermenter agitators, identified as A-2002, A-2004, A-2009, A-2011, A-203, A-205, A-206, A-207, A-208, A-210, A-212, A-213, A-214, A-215, A-220 and A-221, eight (8) fermenter coolers, identified as EP-2002, EP-2003, EP-2004, EP-2005, EP-2006, EP-2007, EP-2008, EP-2020, eight (8) pumps, identified as P-202 through P-208, P-220, sixteen (16) fermenters identified as TF-2002, TF-2004, TF-2009, TF-2011, T-203, T-205, T-206, T-207, T-208, T-210, T-212, T-213, T-214, T-215, T-220 and T-221, one (1) blower, identified as BL-230, one (1) foam trap, identified as FT-230, one (1) CO_2 scrubber, identified as V-230 installed in 1984, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, one (1) scrubber pump, identified as P-230, one foam trap bleed pump, identified as P-231, capacity: 319,000 gallons per tank and 2,100 tank turnovers per year. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this operation are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

(g) One (1) beerwell, identified as EU-07, installed in December 1986, routed to CO_2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, consisting of one (1) beerwell, identified as T-222, two (2) beerwell pumps, identified as P-222A and P-222B and two (2) beerwell agitators, identified as A-222A and A-222B, capacity: 1,750 gallons of beer per minute. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

(m) One (1) alcohol load-out operation, identified as EU-13, installed in October 1982, ex¬hausted through Stack G-602, equipped with a load-out natural gas-fired flare, identified as G-602, rated at 0.100 million British thermal units per hour, two (2) bottom transfer loading arms, identified as G-604 and G-607, two (2) bottom transfer vapor recovery arms, identified as G-605 and G-608, two (2) truck/rail vapor recovery loading arms, identified as G-603 and G-606, two (2) product filters, identified as F-660 and F-661, and two (2) fuel grade alcohol load-out pumps, identified as P-610 and P-611, capacity: 72,000 gallons of ethanol per hour. Under NSPS, 40 CFR Part 60.480, Subpart VV, the pumps, compressors, pressure relief devices in gas/vapor service, sampling connection systems, open-ended valves or lines, and valves of this process are considered to be affected facilities. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

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

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

G.2.1 General Provisions Relating to NESHAP V [326 IAC 14-8][40 CFR Part 61, Subpart A]

Pursuant to 40 CFR 61.240, the Permittee shall comply with the provisions of 40 CFR Part 61, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 14-8 for the fermentation operation, identified as EU-05, beerwell, identified as EU-07, and alcohol load-out operation, identified as EU-13, as specified in accordance with the schedule in 40 CFR 61, Subpart V.

G.2.2 National Emission Standard for Equipment Leaks (Fugitive Emission Sources) [40 CFR 61, Subpart V][326 IAC 14-8]

Pursuant to 40 CFR Part 61, Subpart V, the Permittee shall comply with the provisions of 40 CFR Part 61.240 (included as Attachment G), which are incorporated by reference as 326 IAC 14-8 for the fermentation operation, identified as EU-05, beerwell, identified as EU-07, and alcohol load-out operation, identified as EU-13, as specified as follows:

(1) 40 CFR 61.240
(2) 40 CFR 61.241
(3) 40 CFR 61.242-1
(4) 40 CFR 61.242-2
(5) 40 CFR 61.242-3
(6) 40 CFR 61.242-4
(7) 40 CFR 61.242-5
(8) 40 CFR 61.242-6
(9) 40 CFR 61.242-6
(10) 40 CFR 61.242-7
(11) 40 CFR 61.242-8
(12) 40 CFR 61.242-9
(13) 40 CFR 61.242-10
(14) 40 CFR 61.242-11
(15) 40 CFR 61.243-1
(16) 40 CFR 61.243-2
(17) 40 CFR 61.244
(18) 40 CFR 61.245
(19) 40 CFR 61.246
(20) 40 CFR 61.247
Table 1
Table 2

SECTION G.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NESHAP Subpart DDDDD for: Natural Gas-Fired Boilers

(o) Two (2) natural gas-fired package boilers, identified as EU-15, rated at 220 million British thermal units per hour each, installed in October 1982, exhausted through Stack 001.

(t) Two (2) natural gas-fired Rental boilers, identified as EU-21a and EU-21b, not to exceed a rating of 99.5 million British thermal units per hour each, approved in 2014 for construction, exhausted through Stack 001.

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

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

G.3.1 General Provisions Relating to NESHAP under 40 CFR Part 63 [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.7565, 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 emissions units listed above, as specified in 40 CFR Part 63, Subpart DDDDD, in accordance with the schedule in 40 CFR 63, Subpart DDDDD.

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

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

and

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

G.3.2 National Emission Standards for Hazardous Air Pollutants for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD [326 IAC 20-95][40 CFR Part 63, Subpart DDDDD]

Pursuant to 40 CFR Part 63, Subpart DDDDD, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart DDDDD, which are incorporated by reference as 326 IAC 20-95 (included as Attachment H to this permit), for the emissions units listed above, as specified as follows:

(1) 40 CFR 63.7485
(2) 40 CFR 63.7490 (a)(1), (2)(b), (d)
(3) 40 CFR 63.7495 (a), (b)
(4) 40 CFR 63.7499 (l), (m)
(5) 40 CFR 63.7500 (a)(1), (e)
(6) 40 CFR 63.7501
(7) 40 CFR 63.7505

(8) 40 CFR 63.7510
(9) 40 CFR 63.7515
(10) 40 CFR 63.7520
(11) 40 CFR 63.7521
(12) 40 CFR 63.7522
(13) 40 CFR 63.7525
(14) 40 CFR 63.7530
(15) 40 CFR 63.7535
(16) 40 CFR 63.7540
(17) 40 CFR 63.7541
(18) 40 CFR 63.7545
(19) 40 CFR 63.7550
(20) 40 CFR 63.7555
(21) 40 CFR 63.7560
(22) 40 CFR 63.7570
(23) 40 CFR 63.7575
Tables 2-10

SECTION G.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

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

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

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

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

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

G.4.1 General Provisions Relating to NESHAP ZZZZ [326 IAC 20-1][40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.6665 the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, as specified in Table 8 of 40 CFR Part 63, Subpart ZZZZ in accordance with the schedule 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 Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

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

G.4.2 Stationary Reciprocating Internal Combustion Engines NESHAP [326 IAC 20-82][40 CFR Part 63, Subpart ZZZZ]

The Permittee which engages in the use of reciprocating internal combustion engines shall comply with the following provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment I of this permit), which are incorporated by reference as 326 IAC 20-82, for the emissions units listed above, as specified as follows:

(1) 40 CFR 63.6580
(2) 40 CFR 63.6585
(3) 40 CFR 63.6590(a)(1)(iii)
(4) 40 CFR 63.6595(a)(1), (b), (c)
(5) 40 CFR 63.6603(a)

(6) 40 CFR 63.6605
(7) 40 CFR 63.6625 (e)(3), (f), (h), (j)
(8) 40 CFR 63.6635
(9) 40 CFR 63.6640 (a), (b), (e), (f)(1)
(10) 40 CFR 63.6645(a)(5)
(11) 40 CFR 63.6655(a), (d), (e)(3), (f)(2)
(12) 40 CFR 63.6660
(13) 40 CFR 63.6665
(14) 40 CFR 63.6670
(15) 40 CFR 63.6675
(16) Table 2d to Subpart ZZZZ of Part 63 (item 5.)
(17) Table 6 to Subpart ZZZZ of Part 63 (item 9.)
(18) Table 8 to Supbart ZZZZ of Part 63

SECTION G.5 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Two (2) natural gas-fired Rental boilers, identified as EU-21a and EU-21b, not to exceed a rating of 99.5 million British thermal units per hour each, approved in 2014 for construction, exhausted through Stack 001.

(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)][326 IAC 2-8-4(1)][326 IAC 2-6.1-5(a)]

G.5.1 General Provisions Relating to New Source Performance Standards [326 IAC 12-1][40 CFR Part 60, Subpart A]

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

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

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

and

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

G.5.2 New Source Performance Standard for Small Industrial-Commercial-Institutional Steam Generating Units NSPS [326 IAC 12][40 CFR Part 60, Subpart Dc]

Pursuant to 40 CFR Part 60, Subpart Dc, the Permittee shall comply with the provisions of 40 CFR Part 60, Subpart Dc, which are incorporated by reference as 326 IAC 12 (included as Attachment J to this permit), for the emissions units listed above as specified as follows:

(1) 40 CFR 60.40c(a)
(2) 40 CFR 60.41c
(3) 40 CFR 60.42c
(4) 40 CFR 60.43c(a)(2)
(5) 40 CFR 60.44c
(6) 40 CFR 60.45c
(7) 40 CFR 60.46c
(8) 40 CFR 60.47c
(9) 40 CFR 60.48c (1)

DRAFT

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

Source Name: Noble Americas South Bend Ethanol LLC
Source Address: 3201 West Calvert Street, South Bend, Indiana 46613
Part 70 Permit No.: T141-32025-00033

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.

Please check what document is being certified:

☐ Annual Compliance Certification Letter

☐ Test Result (specify) _____

☐ Report (specify) _____

☐ Notification (specify) _____

☐ Affidavit (specify) _____

☐ Other (specify) _____

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:
Printed Name:
Title/Position:
Phone:
Date:

DRAFT

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: Noble Americas South Bend Ethanol LLC
Source Address: 3201 West Calvert Street, South Bend, Indiana 46613
Part 70 Permit No.: T141-32025-00033

This form consists of 2 pages **Page 1 of 2**

□ This is an emergency as defined in 326 IAC 2-7-1(12) • The Permittee must notify the Office of Air Quality (OAQ), within four (**4**) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and • The Permittee must submit notice in writing or by facsimile within two (**2**) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16.

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency:
Describe the cause of the Emergency:

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
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: _____

DRAFT

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

Part 70 Quarterly Report

Source Name: Noble Americas South Bend Ethanol LLC
Source Address: 3201 West Calvert Street, South Bend, Indiana 46613
Part 70 Permit No.: T141-32025-00033
Facility: Two (2) package boilers (EU-15) and Two (2) natural gas-fired Rental boilers (EU-21a and EU-21b)
Parameter: Natural gas usage (million cubic feet)
Limit: Shall not exceed 3,641.13 million cubic feet (MMcf) per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER : YEAR:

Month	Natural Gas Usage (MMcf)	Natural Gas Usage (MMcf)	Natural Gas Usage (MMcf)
	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: _____

DRAFT

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

Part 70 Quarterly Report

Source Name: Noble Americas South Bend Ethanol LLC
Source Address: 3201 West Calvert Street, South Bend, Indiana 46613
Part 70 Permit No.: T141-32025-00033
Facilities: Corn receiving (EU-01), corn handling (EU-02), corn milling (EU-03) Five (5) DDGS dryers (EU-10), DDGS handling (EU-11), alcohol load-out (EU-13), and two (2) package boilers (EU-15)
Parameter: PM emissions
Limit: A total of 70 tons per twelve (12) consecutive month period with compliance determined at the end of each month (as calculated by Condition D.1.2(c).

QUARTER : YEAR:

Month	PM Emissions (tons/month)	PM Emissions (tons/month)	PM Emissions (tons/month)
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

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

DRAFT

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

Part 70 Quarterly Report

Source Name: Noble Americas South Bend Ethanol LLC
Source Address: 3201 West Calvert Street, South Bend, Indiana 46613
Part 70 Permit No.: T141-32025-00033
Facilities: Alternative Operating Scenario for the DDGS cooler system (EU-18)
[VOC emissions from the DDGS cooler system (EU-18) routed to the two (2) thermal oxidizers controlling VOC emissions from the DDGS dryers (EU-10), the evaporation process (EU-09), and the recovery column vent condenser, identified as E-409 (part of EU-08), in addition to one of the five (5) DDGS dryers, identified as D-511 through D-515, taken out of service]
Parameter: Hours of operation
Limit: 750 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER : YEAR:

Month	Hours of Operation for the Alternative Operating Scenario	Hours of Operation for the Alternative Operating Scenario	Hours of Operation for the Alternative Operating Scenario
	This Month	Previous 11 Months	12 Month Total

☐ No deviation occurred in this quarter.

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

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

DRAFT

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

Part 70 Quarterly Report

Source Name: Noble Americas South Bend Ethanol LLC
Source Address: 3201 West Calvert Street, South Bend, Indiana 46613
Part 70 Permit No.: T141-32025-00033
Facility: Alcohol Load-out Operation (EU-13)
Parameter: Hours of Operation
Limit: Shall not exceed 4,034 hours per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER : YEAR:

Month	Hours of Operation This Month	Hours of Operation Previous 11 Months	Hours of Operation 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: _____

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: Noble Americas South Bend Ethanol LLC
Source Address: 3201 West Calvert Street, South Bend, Indiana 46613
Part 70 Permit No.: T141-32025-00033

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 Significant Permit Modification

Source Description and Location

Source Name:	Noble Americas South Bend Ethanol LLC
Source Location:	3201 W. Calvert St., South Bend, IN 46613
County:	St. Joseph
SIC Code:	2869 (Industrial Organic Chemicals, Not Elsewhere Classified)
Operation Permit No.:	T141-32025-00033
Operation Permit Issuance Date:	October 3, 2013
Significant Permit Modification No.:	141-35917-00033
Permit Reviewer:	Doug Logan

Source Definition

This Source Definition from the Part 70 Operating Permit Renewal was incorporated into this permit as follows:

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

(a) Noble Americas South Bend Ethanol LLC, and

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

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

Separate Part 70 Operating Permits have been issued to Noble Americas South Bend Ethanol LLC and Linde LLC solely for administrative purposes. This conclusion was initially determined under Part 70 Operating Permit Renewal (T141-6956-00033) on March 17, 2008.

Note: As documented in the Addendum to the Technical Support Document for Part 70 Operating Permit Renewal No. T141-32025-00033, the former SB Ethanol Assets, LLC ethanol facility located in South Bend, Indiana, now is owned by Noble Americas South Bend Ethanol LLC. A copy of the permit transfer was filed with IDEM.

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. T141-32025-00033 on October 3, 2013. The source has since received the following approvals:

(a) Significant Source Modification No. 141-34355-00033**,** issued on October 30, 2014; and

(b) Significant Permit Modification No**.** 141-34559-00033*,* issued on November 19, 2014**.**

County Attainment Status

The source is located in St. Joseph County.

Pollutant	Designation
SO_2	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O_3	Unclassifiable or attainment effective July 20, 2012, for the 2008 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]Attainment effective October 18, 2000, for the 1-hour ozone standard for the South Bend-Elkhart area, including St. Joseph County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour standard was revoked effective June 15, 2005.

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. St. Joseph County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
St. Joseph County has been classified as attainment for $PM_{2.5}$. 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
St. Joseph County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

The source includes a gasoline storage tank, an ethanol storage tank, an ethanol production operation, and boilers with a total heat input rating of greater than 250 million British thermal units per hour (MMBtu/hr) which support the fuel-grade ethanol production plant.

(a) EPA published a final rule in the Federal Register on May 1, 2007, that excluded ethanol production facilities that produce ethanol through natural fermentation, from the major source category "Chemical Process Plants". Therefore, the fugitive emissions from ethanol production facilities are not counted toward determination of PSD, Emission Offset, and Part 70 Permit applicability.

(b) The gasoline storage tank, identified as T-601, has an applicable New Source Performance Standard, Subpart Ka, that was in effect on August 7, 1980. Therefore, its fugitive emissions are counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

(c) The fugitive emissions from the ethanol storage tank, identified as T-611, are not counted toward PSD, Emission Offset, and Part 70 Permit applicability because the applicable NSPS, Kb was in effect after August 7, 1980.

(d) The fugitive emissions from equipment leaks are not counted toward PSD, Emission Offset, and Part 70 Permit applicability because the applicable NSPS, VV was in effect after August 7, 1980.

(e) The natural gas-fired boilers with a total heat input rating of greater than 250 MMBtu/hr are considered one of the 28 listed source categories, based on the EPA guidance for "nested activities". Therefore, any fugitive emissions from these boilers are counted toward PSD, 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	less than 250
PM_{10}	less than 250
$PM_{2.5}$	less than 250
SO_2	less than 250
NO_X	greater than 250
VOC	less than 250
CO	less than 250
HAPs	
Single	greater than 10
Total	greater than 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 a major stationary source, under PSD (326 IAC 2-2), because a PSD regulated pollutant, excluding GHGs, is emitted at a rate of 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 stationary source under Emission Offset (326 IAC 2-3) because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or more.

(c) These emissions are based upon TSD Appendix A, Significant Source Modification N0.: 141-34355-00033, issued October 30, 2014.

(d) This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than

twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Noble Americas South Bend Ethanol, LLC on June 5, 2015, relating to changing the compliance determination requirements for natural gas-fired boilers. The source is not proposing any increase in potential to emit.

The source has removed No.2 fuel oil backup capacity from two natural gas-fire package boilers, identified as EU-15. Due to this change, the natural gas-fired boilers are no longer subject to a requirement to operate SO_2 and NOx CEMS. Therefore, the source requested the removal of the requirement to operate a CEMS and modification of compliance determination requirements...

Enforcement Issues

There are no pending enforcement actions.

Emission Calculations

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

Permit Level Determination – Part 70 Modification to an Existing Source

There is no increase in the potential to emit of any regulated pollutants associated with this modification. This modification is not subject to the source modification requirements under 326 IAC 2-7-10.5. The changes will be incorporated into the permit as a Significant Permit Modification under 326 IAC 2-7-12(d)(1), because the modification involves a change in existing monitoring part 70 permit terms or conditions.

Permit Level Determination – PSD or Emission Offset or Nonattainment NSR

This modification to an existing major PSD stationary source is not major because there is no increase in the potential to emit of any PSD regulated pollutants associated with this modification and the emissions 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

There are no federal rules applicable to this modification.

State Rule Applicability Determination

There are no state rules applicable to this modification.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

If the Compliance Determination Requirements are not sufficient to demonstrate continuous compliance, they will be supplemented with Compliance Monitoring Requirements, also in Section D of the permit. Unlike Compliance Determination Requirements, failure to meet Compliance Monitoring conditions would serve as a trigger for corrective actions and not grounds for enforcement action. However, a violation in relation to a compliance monitoring condition will arise through a source's failure to take the appropriate corrective actions within a specific time period.

The Compliance Determination Requirements applicable to this modification are as follows:

(a) The two (2) natural gas-fired package boilers, identified as EU-15 have applicable compliance determination conditions as specified below:

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

(2) PSD NO_X emissions = (TNG x 135.66 pounds of NOx/mmcf x 1 tons/2,000 pounds) + (TTNG x 100.0 pounds of NO_X/mmcf x 1 ton/2,000 pounds) + (HEGO x 1.80 mmBtu/hr x 4.41 pounds of NO_X/mmBtu x 1 ton/2,000 pounds) + (HFPO x 0.631 mmBtu/hr x 4.41 pounds of NO_X/mmBtu x 1 ton/2,000 pounds).

(3) CO emissions = [(TNG x 51.00 pounds of CO/mmcf of natural gas)] + [(TTNG x 84.0 pounds of CO/mmcf) + (HEGO x 1.80 mmBtu/hr x 0.95 pounds of CO/mmBtu) + (HFPO x 0.631 mmBtu/hr x 0.95 pounds of CO/mmBtu)] x 1 ton/2,000 pounds.

where:

TTNG = Total throughput of natural gas (mmcf) to the space heaters

HEGO = Number of hours the emergency generator operated

HFPO = Number of hours the backup emergency fire pump operated

TNG = Throughput of natural gas (mmcf) to the two (2) package boilers (EU-15)

Summary of Testing Requirements					
Emission Unit	**Control Device**	**Timeframe for Testing**	**Pollutant**	**Frequency of Testing**	**Limit or Requirement**
EU-15	none	180 days after restart	NOx and CO	once every 5 years	135.66 lbs NOx/mmscf and 51.00 lbs CO/mmscf

The compliance monitoring requirements for the source will not change as a result of this modification.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. 141-32025-00033. Deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

Summary of IDEM Updates throughout the Permit

Typographical errors in unit description made in SSM 141-34355-00033 were corrected.

Section A - Modifications

Section A has been revised to incorporate the appropriate IDEM updates detailed above under "Summary of IDEM Updates throughout the Permit."

Section A has been modified as follows:

...

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) degasser and recovery column, identified as EU-08, installed in October 1982, exhausted through Stacks VT-022 **and BL-601**. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

Stack VT-022 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2, to control VOC emissions from the one (1) recovery column vent condenser, identified as E-409. The associated equipment consists of:

One (1) recovery column, identified as V-402, one (1) recovery column reflux tank, identified as V-404, two (2) beer preheaters, identified as EP-4501 A & B, one (1) recovery column condenser, identified as E-4404, one (1) recovery column reboiler #2, identified as E-MS-408, one (1) recovery column vent condenser, identified as E-409, one (1) preheater #2, identified as E-412, one (1) recovery column reboiler #1, identified as E-413, , one (1) auxiliary product cooler, identified as E-419, , two (2) recovery column feed pumps, identified as P-401 A & P-401 B, two (2) recovery column bottoms pumps, identified as P-402 A and P-402 B, two (2) recovery column reflux pumps, identified as P-404 A and P-404 B, one (1) fusel oil transfer pump, identified as P-4601, three (3) recovery column recirculation pumps #2, identified as P-407 A, P-407 B**,** and P-408.

Stack BL-601 routed to CO2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, associated equipment consists of:

One (1) degasser condenser, identified as E-403, one (1) degasser vent condenser, identified as E-410, and one (1) degasser, identified as V-401, capacity: 1,750 gallons of beer per minute.

(i) ...

Section D.1 - Revisions

(a) Compliance determination equations in paragraphs (a) and (b) of Condition D.1.3 - Emissions Determination were revised to remove continuous emissions monitoring (CEM) emissions values that are not required for natural gas-fired boilers. Emissions in

the compliance equations will be determined by multiplying the appropriate emission factor for each pollutant by the twelve (12) month total fuel throughput of the boilers in mmcf. CEM emissions terms were also removed from the description of terms.

(b) The compliance determination equation in Condition D.1.4 - Emissions Determination was revised to incorporate the CO limit from Section D.6 as an emission factor for the natural gas-fired package boilers (EU-15).

(c) Records for SO_2 and NOx CEMS were deleted from Condition D.1.5 - Record Keeping Requirements because the CEMS were removed.

(d) Section D.1 has been revised to incorporate the appropriate IDEM updates detailed above under "Summary of IDEM Updates throughout the Permit."

Section D.1 has been revised as follows:

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: PSD Emission Units

(a) ...

(h) One (1) degasser and recovery column, identified as EU-08, installed in October 1982, exhausted through Stacks VT-022 **and BL-601**. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

Stack VT-022 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2, to control VOC emissions from the one (1) recovery column vent condenser, identified as E-409. The associated equipment consists of:

One (1) recovery column, identified as V-402, one (1) recovery column reflux tank, identified as V-404, two (2) beer preheaters, identified as EP-4501 A & B, one (1) recovery column condenser, identified as E-4404, one (1) recovery column reboiler #2, identified as E-MS-408, one (1) recovery column vent condenser, identified as E-409, one (1) preheater #2, identified as E-412, one (1) recovery column reboiler #1, identified as E-413, , one (1) auxiliary product cooler, identified as E-419, , two (2) recovery column feed pumps, identified as P-401 A & P-401 B, two (2) recovery column bottoms pumps, identified as P-402 A and P-402 B, two (2) recovery column reflux pumps, identified as P-404 A and P-404 B, one (1) fusel oil transfer pump, identified as P-4601, three (3) recovery column recirculation pumps #2, identified as P-407 A, P-407 B**,** and P-408.

Stack BL-601 routed to CO2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, associated equipment consists of:

One (1) degasser condenser, identified as E-403, one (1) degasser vent condenser, identified as E-410, and one (1) degasser, identified as V-401, capacity: 1,750 gallons of beer per minute.

(i) ...

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

...

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

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

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

(b) PSD NO_X emissions = ~~CEM + CEMD +~~ **(TNG x 135.66 pounds of NOx/mmcf x 1 ton/2,000 pounds) +** (TTNG x 100.0 pounds of NO_X/mmcf x 1 ton/2,000 pounds) + (HEGO x 1.80 mmBtu/hr x 4.41 pounds of NO_X/mmBtu x 1 ton/2,000 pounds) + (HFPO x 0.631 mmBtu/hr x 4.41 pounds of NO_X/mmBtu x 1 ton/2,000 pounds).

(c) PSD PM emissions = [(TNG x 1.9 pounds of PM/mmcf of natural gas)] x 1 ton/2,000 pounds +

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

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

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

[TDGS11 x 6.002E-03 pounds of PM/ton of DDGS processed through the DDGS dryers] x 1 ton/2,000 pounds +

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

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

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

where:

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

~~CEMD = Emissions during continuous emissions monitoring (CEMs) downtimes for SO_2 or NO_X, (tons) for the two (2) package boilers (EU-15)~~

TTNG = Total throughput of natural gas (mmcf) to the space heaters

HEGO = Number of hours the emergency generator operated

HFPO = Number of hours the backup emergency fire pump operated

TNG = Throughput of natural gas (mmcf) to the two (2) package boilers (EU-15)

CE = Overall control efficiency (fraction) of the control device

TCR = Throughput of corn received (tons/month) to corn receiving operation (EU-01)

TCH = Throughput of corn handled (tons/month) to the corn handling operation (EU-02)

TCM = Throughput of corn milled (tons/month) to the corn milling operation (EU-03)

TDGS11 = Throughput of DDGS (tons/month) to DDGS handling operation (EU-11)

TDGS12 = Throughput of DDGS (tons/month) to DDGS load-out operation (EU-12)

K = 0.0001 tons/month for alcohol load-out operation (EU-13)

INSIG = PM emissions from other insignificant activities

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

D.1.4 Emissions Determination [326 IAC 2-2]

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

CO emissions (tons/yr) = [(TNG x ~~84.0~~ **51.00** pounds of CO/mmcf of natural gas)] + [(TTNG x 84.0 pounds of CO/mmcf) + (HEGO x 1.80 mmBtu/hr x 0.95 pounds of CO/mmBtu) + (HFPO x 0.631 mmBtu/hr x 0.95 pounds of CO/mmBtu)] x 1 ton/2,000 pounds.

where:

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

TTNG = Total throughput of natural gas (mmcf) to the space heaters

HEGO = Number of hours the emergency generator operated

HFPO = Number of hours the backup emergency fire pump operated

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

D.1.5 Record Keeping Requirements

(a) To document the compliance status with Conditions D.1.1, D.1.2, D.1.3 and D.1.4 the Permittee shall maintain records of the following:

~~(1) Records of SO_2 and NO_x CEMS emissions data,~~

(~~2~~**1**) Throughput of natural gas to space heaters,

(~~3~~**2**) Throughput of natural gas to EU-15,

(~~4~~**3**) Throughput of corn processed (received (EU-01), handled (EU-02) and milled (EU-03)),

(~~5~~**4**) Throughput of DDGS, and

(~~6~~**5**) Operational times of each of the five (5) DDGS dryers on a monthly basis.

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

...

Section D.4 - Revisions

(a) Condition D.4.14 - Scrubber Parametric Monitoring was deleted because Scrubber V-424 was removed in SSM 141-34355-00033.
(b) Condition D.4.15 - Scrubber Flow Rate was deleted because Scrubber V-424 was removed in SSM 141-34355-00033.
(c) Condition D.4.16 - Scrubber Failure Detection was deleted because Scrubber V-424 was removed in SSM 141-34355-00033. Subsequent conditions were renumbered.
(d) Typographical errors in conditions referenced in paragraphs (a) and (b) of Condition D.4.16 - Record Keeping Requirements were corrected.
(e) Record keeping requirements for Scrubber V-424 were deleted from Condition D.4.16 - Record Keeping Requirements because the scrubber was removed in SSM 141-34355-00033.
(f) Record keeping requirements for Scrubber V-230 were deleted from Condition D.4.16 - Record Keeping Requirements because compliance determination and monitoring requirements for the scrubber are included in Section D.3. Subsequent paragraphs were relettered.
(g) IDEM, OAQ clarified the record keeping requirements for RTO's in paragraph (c) of Condition D.4.16 - Record Keeping Requirements.
(h) Record keeping requirements for RTO-503 were deleted from Condition D.4.16 - Record Keeping Requirements because the RTO was removed in SSM 141-34355-00033. Subsequent paragraphs were relettered.
(i) Section D.4 has been revised to incorporate the appropriate IDEM updates detailed above under "Summary of IDEM Updates throughout the Permit."

Section D.4 has been revised as follows:

SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: Degasser, Evaporation, DDGS Dryer, and DGGS Cooler Operations

(h) One (1) degasser and recovery column, identified as EU-08, installed in October 1982, exhausted through Stacks VT-022 **and BL-601**. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

Stack VT-022 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2, to control VOC emissions from the one (1) recovery column vent condenser, identified as E-409. The associated equipment consists of:

One (1) recovery column, identified as V-402, one (1) recovery column reflux tank, identified as V-404, two (2) beer preheaters, identified as EP-4501 A & B, one (1) recovery column condenser, identified as E-4404, one (1) recovery column reboiler #2, identified as E-MS-408, one (1) recovery column vent condenser, identified as E-409, one (1) preheater #2, identified as E-412, one (1) recovery column reboiler #1, identified as E-413, , one (1) auxiliary product cooler, identified as E-419, , two (2) recovery column feed pumps, identified as P-401 A & P-401 B, two (2) recovery column bottoms pumps, identified as P-402 A and P-402 B, two (2) recovery column reflux pumps, identified as P-404 A and P-404 B, one (1) fusel oil transfer pump, identified as P-4601, three (3) recovery column recirculation pumps #2, identified as P-407 A, P-407 B**,** and P-408.

...

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

...

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

~~D.4.14 Scrubber Parametric Monitoring~~

~~(a) The Permittee shall record the pressure drop across the scrubber (V-424) used in conjunction with the recovery column (EU-08) at least once per day when this process is in operation. When for any one reading, the pressure drop across the scrubber is outside the normal range, the Permittee shall take reasonable response. The normal range for this unit is a pressure drop between 0.5 and 2.0 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.4.15 Scrubber Flow Rate~~

~~(a) The Permittee shall monitor and record the flow rate of the scrubber V-424 at least once per day when the recovery column (EU-08) is in operation.~~

~~(1) The Permittee shall determine the minimum flow rate from the latest valid stack test that demonstrates compliance with limits in Conditions D.4.1 and D.4.5 .~~

~~(2) 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. If the flow rate falls below the level observed during the latest compliant stack test, the Permittee shall take a reasonable response.~~

~~(b) The Permittee shall monitor and record the flow rate of the scrubber V-424 at least once per day when the degasser (EU-08) is in operation.~~

~~(1) The Permittee shall determine the minimum flow rate from the latest valid stack test that demonstrates compliance with limits in Conditions D.4.1 and D.4.5.~~

~~(2) 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. If the flow rate falls below the level observed during the latest compliant stack test, the Permittee shall take a reasonable response.~~

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

~~D.4.16 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 yeast propagation operation (EU-04), the fermentation process (EU-05), and the beerwell (EU-07). 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).~~

D.4.~~17~~**14** Baghouse Parametric Monitoring

...

D.4.~~18~~**15** Broken or Failed Bag Detection

...

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

D.4.~~19~~**16** Record Keeping Requirements

(a) To document the compliance status with Condition D.4.~~11~~**12**, the Permittee shall maintain records of the continuous operating temperature required under Condition D.4.~~11~~**12**.

(b) To document the compliance status with Condition D.4.~~12~~**13**, the Permittee shall maintain a daily record of the duct pressure or fan amperage of the thermal oxidizer controlling the degasser and recovery column, evaporation process and the DDGS dryer operation. The Permittee shall include in its daily record when a duct pressure or fan amperage reading is not taken and the reason for the lack of a duct pressure or fan amperage reading (e.g., the degasser and recovery column, evaporation process and the DDGS dryer operation did not operate that day).

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

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

~~(e) To document the compliance status with Condition D.4.14(a), the Permittee shall maintain a daily record of the water flow rate in the scrubber (V-424) controlling the recovery column (EU-08). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a water flow rate reading (e.g., the recovery column did not operate that day).~~

~~(f) To document the compliance status with Condition D.4.14(b), the Permittee shall maintain a daily record of the water flow rate in the scrubber (V-230) controlling the degasser (EU-08). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a water flow rate reading (e.g., the degasser did not operate that day).~~

(~~g~~**c**) To document the compliance status with Condition D.4.2, **when one (1) RTO is out of service,** the Permittee shall maintain records of the ~~total hours the Alternative Operating Scenario, as stated in Condition D.4.7, is utilized~~ **dryers in operation**.

(~~h~~**d**) To document the compliance status with Condition D.4.~~16~~**14**, the Permittee shall maintain a daily record of the pressure drop across the baghouse (DC-503) controlling the distillers dried grains and solubles (DDGS) cooler system (EU-18). The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g., the distillers dried grains and solubles (DDGS) cooler system did not operate that day).

~~(i) To document the compliance status with Condition D.4.11, the Permittee shall maintain continuous temperature records of thermal oxidizer RTO-503 and the 3-hour average temperature used to demonstrate compliance from the most recent valid stack test.~~

~~(j) To document the compliance status with Condition D.4.12, the Permittee shall maintain a daily record of the duct pressure or fan amperage for thermal oxidizer RTO-503. The Permittee shall include in its daily record when a duct pressure or fan amperage reading~~

~~is not taken and the reason for the lack of a reading (e.g., the distillers dried grains and solubles (DDGS) cooler system did not operate that day).~~

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

D.4.~~20~~**17** Reporting Requirements

...

Section G.1 - Modifications

Section G.1 has been revised to incorporate the appropriate IDEM updates detailed above under "Summary of IDEM Updates throughout the Permit."

Section G.1 has been modified as follows:

SECTION G.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description: NESHAP Subpart FFFF for:

Yeast Propagation Operation (EU-04), Fermentation Operation (EU-05), Beerwell (EU-07), Degasser and Recovery Column (EU-08), and Alcohol Load-out Operation (EU-13)

(d) ...

(h) One (1) degasser and recovery column, identified as EU-08, installed in October 1982, exhausted through Stacks VT-022 **and BL-601**. Under NESHAP, 40 CFR Part 63.2430, Subpart FFFF, these facilities are miscellaneous organic chemical manufacturing process units used to manufacture an organic chemical classified using the 1987 version of SIC code 2869.

Stack VT-022 routed to two (2) natural gas-fired regenerative thermal oxidizers (RTOs), identified as RTO-1 and RTO-2, to control VOC emissions from the one (1) recovery column vent condenser, identified as E-409. The associated equipment consists of:

One (1) recovery column, identified as V-402, one (1) recovery column reflux tank, identified as V-404, two (2) beer preheaters, identified as EP-4501 A & B, one (1) recovery column condenser, identified as E-4404, one (1) recovery column reboiler #2, identified as E-MS-408, one (1) recovery column vent condenser, identified as E-409, one (1) preheater #2, identified as E-412, one (1) recovery column reboiler #1, identified as E-413, , one (1) auxiliary product cooler, identified as E-419, , two (2) recovery column feed pumps, identified as P-401 A & P-401 B, two (2) recovery column bottoms pumps, identified as P-402 A and P-402 B, two (2) recovery column reflux pumps, identified as P-404 A and P-404 B, one (1) fusel oil transfer pump, identified as P-4601, three (3) recovery column recirculation pumps #2, identified as P-407 A, P-407 B**,** and P-408.

Stack BL-601 routed to CO2 scrubber, identified as V-230, using bisulfite solution into the scrubbing water, exhausted to Stack BL-230, associated equipment consists of:

One (1) degasser condenser, identified as E-403, one (1) degasser vent condenser, identified as E-410, and one (1) degasser, identified as V-401, capacity: 1,750 gallons of beer per minute.

(m) ...

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

Conclusion and Recommendation

The operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Permit Modification No. 141-35917-00033. 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 Doug Logan at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5328 or toll free at 1-800-451-6027 extension 4-5328.

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

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM 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
PTE Summary

Company Name: Noble Americas South Bend Ethanol LLC
Address City IN Zip: 3201 W. Calvert, South Bend, IN 46613
Part 70 Permit Number: 141-32025-00033
Significant Permit Modification No.: 141-35917-00033
Reviewer: Doug Logan
Date: 6/24/2015

Potential to Emit after Control (tons/yr)								
ID #	**Emission Unit**	**PM**	**PM10**	**PM2.5 ***	**SO_2**	**NOx**	**VOC**	**CO**
EU-01	Corn Receiving	1.40	1.40	0.41	--	--	--	--
EU-02	Corn Handling				--	--	--	--
EU-03	Corn Milling	0.88	0.88	0.26	--	--	--	--
EU-04	Yeast Propagation (Acc. Vent)	--	--	--	--	--	0.06	--
EU-05	Fermentation (CO_2 Scrubber)	0.24	0.27	0.27	--	--	26.34	--
EU-07	Beerwell							
RTO-1 and RTO-2	RTOs	8.54	8.54	2.13	76.83	7.01	17.07	27.83
EU-10	DDGS Dryer							
EU-18	DDGS Cooler							
EU-11	DDGS Handling	0.73	0.25	0.06	--	--	--	--
EU-12	DDGS Load-out	0.23	0.23	0.07	--	--	--	--
EU-13	Alcohol Load-out (Flare)	--	--	--	--	0.90	5.29	4.79
EU-15, EU-21	Natural gas-fired Boilers	5.21	20.85	20.85	1.65	307.24	15.09	202.29
EU-17	Fugitive Dust (Roads)	12.32	2.46	0.60	--	--	--	--
	Corn Oil Recovery System	--	--	--	--	--	0.64	--
	Fugitive VOCs (LDAR)	--	--	--	--	--	6.83	--
	Total	**29.55**	**34.88**	**24.65**	**78.48**	**315.15**	**71.34**	**234.91**

** PM2.5 listed is direct PM2.5*

Potential to Emit after Issuance (tons/yr)								
ID #	**Emission Unit**	**PM**	**PM10**	**PM2.5 ***	**SO_2**	**NOx**	**VOC**	**CO**
EU-01	Corn Receiving	1.40	1.40	0.41	--	--	--	--
EU-02	Corn Handling				--	--	--	--
EU-03	Corn Milling	0.88	0.88	0.26	--	--	--	--
EU-04	Yeast Propagation (Acc. Vent)	--	--	--	--	--	0.06	--
EU-05	Fermentation (CO_2 Scrubber)	0.24	0.27	0.27	--	--	26.34	--
EU-07	Beerwell							
RTO-1 and RTO-2	RTOs	8.54	8.54	2.13	76.83	7.01	17.07	27.83
EU-10	DDGS Dryer							
EU-18	DDGS Cooler							
EU-11	DDGS Handling	0.73	0.25	0.06	--	--	--	--
EU-12	DDGS Load-out	0.23	0.23	0.07	--	--	--	--
EU-13	Alcohol Load-out (Flare)	--	--	--	--	0.90	5.29	4.79
EU-15, EU-21	Natural gas-fired Boilers	3.46	13.84	13.84	1.09	246.98	10.01	92.85
EU-17	Fugitive Dust (Roads)	12.32	2.46	0.60	--	--	--	--
	Corn Oil Recovery System	--	--	--	--	--	0.64	--
	Fugitive VOCs (LDAR)	--	--	--	--	--	6.83	--
	Total	**27.80**	**27.86**	**17.63**	**77.92**	**254.88**	**66.26**	**125.47**

** PM2.5 listed is direct PM2.5*

Appendix A: Emission Calculations
HAPs PTE Summary

Company Name: Noble Americas South Bend Ethanol LLC
Address City IN Zip: 3201 W. Calvert, South Bend, IN 46613
Part 70 Permit Number: 141-32025-00033
Significant Permit Modification No.: 141-35917-00033
Reviewer: Doug Logan
Date: 6/24/2015

HAPs Potential to Emit after Control (tons/yr)															
ID #	**Emission Unit**	**Acetylaldehyde**	**Acrolein**	**Methanol**	**Methane**	**Formaldehyde**	**Benzene**	**Dichlorobenzene**	**Hexane**	**Toluene**	**Lead**	**Cadmium**	**Chromium**	**Manganese**	**Nickel**
EU-01	Corn Receiving	--	--	--		--	--	--	--	--	--	--	--	--	--
EU-02	Corn Handling	--	--	--		--	--	--	--	--	--	--	--	--	--
EU-03	Corn Milling	--	--	--		--	--	--	--	--	--	--	--	--	--
EU-04	Yeast Propogation (Acc. Vent)	--	--	--		--	--	--	--	--	--	--	--	--	--
EU-05	Fermentation (CO_2 Scrubber)	9.63	0.77	0.72		0.24	--	--	--	--	--	--	--	--	--
EU-07	Beerwell														
RTO-1 and RTO-2	RTOs	2.73	0.85	1.02	3.64	1.39	--	--	--	--	--	--	--	--	--
EU-10	DDGS Dryer														
EU-18	DDGS Cooler														
EU-11	DDGS Handling	--	--	--		--	--	--	--	--	--	--	--	--	--
EU-12	DDGS Load-out	--	--	--		--	--	--	--	--	--	--	--	--	--
EU-13	Alcohol Load-out (Flare)	--	--	--		--	--	--	--	--	--	--	--	--	--
EU-15	Natural gas-fired Package Boilers	--	--	--		0.21	5.76E-03	3.29E-03	4.94	9.33E-03	1.37E-03	3.02E-03	3.84E-03	1.04E-03	5.76E-03
EU-17	Fugitive Dust (Roads)	--	--	--		--	--	--	--	--	--	--	--	--	--
	Corn Oil Recovery System	--	--	--		--	--	--	--	--	--	--	--	--	--
	Fugitive VOCs (LDAR)	--	--	--		--	--	--	--	--	--	--	--	--	--
	Single HAP Totals	**12.36**	**1.62**	**1.75**	**3.64**	**1.84**	**5.76E-03**	**3.29E-03**	**4.94**	**0.01**	**1.37E-03**	**3.02E-03**	**3.84E-03**	**1.04E-03**	**5.76E-03**

PTE Prior to Control - The source is not accepting federally enforceable limits for HAPs at this time. Therefore, the PTE after Issuance of HAPs will be greater than ten (10) tons/year for a single HAP and greater than twenty-five (25) tons/year for combined HAPs.

Appendix A: Emission Calculations
Baghouses
Corn Receiving, DDGS Cooler
DDGS Loadout, Corn Milling

Company Name: Noble Americas South Bend Ethanol LLC
Address City IN Zip: 3201 W. Calvert, South Bend, IN 46613
Part 70 Permit Number: 141-32025-00033
Significant Permit Modification No.: 141-35917-00033
Reviewer: Doug Logan
Date: 6/24/2015

Materials Processing and Handling Emissions:

Basis:	Permitted Capacity	(tph)	(tpy)
Grain (tpy)	1,036,218	140	1,226,400
DDGS (tpy)	336,226	38.98	341,465

Emissions factors based on AP-42 and Expected Grain Loading (gr/scf) for Grain/DDGS Sources
PM2.5 for fabric filters (baghouses) estimated at 29% of PM10

Baghouse Stack PM/PM10/PM2.5 Emissions:

ID	Emission Source	Baghouse Aiflow (scfm)	Emission Factor (gr/scf)	Hours of Operation (hrs/yr)	Controlled PM/PM-10 Emissions (lbs/hr)	Controlled PM/PM-10 Emissions (tons/yr)	Controlled PM2.5 Emissions (tons/yr)
*EU-01/EU-02	Corn Receiving/Handling	37,300	0.001	8,760	0.32	**1.40**	**0.41**
EU-03	Corn Milling Baghouse	23,430	0.001	8,760	0.20	***0.88***	***0.26***
EU-12	DDGS Loadout BH (D-0601)	6,150	0.001	8,760	0.05	***0.23***	***0.07***
EU-18	DDGS Cooler BH	10,500	0.001	8,760	0.09	***0.39***	***0.11***
				Total	**0.66**	**2.91**	**0.84**

Bulk Handling and Processing Estimated Fugitive Emissions:

PM Emissions:

ID	Emission Source	Throughput (tpy)	Emission Factor (lb/ton)	Potential uncontrolled PM (tpy)	Fugitive PM Emissions (tons/yr)
Fug	Grain Handling	1,226,400	0.061	37.41	1.870
Fug	DDGS Handling	341,465	0.086	14.68	0.734
				Total	**2.604**

PM10 Emissions:

ID	Emission Source	Throughput (tpy)	Emission Factor (lb/ton)	Potential uncontrolled PM10 (tpy)	Fugitive PM10 Emissions (tons/yr)
Fug	Grain Handling	1,226,400	0.034	20.85	1.042
Fug	DDGS Handling	341,465	0.029	4.95	0.248
				Total	**1.290**

PM2.5 Emissions:

ID	Emission Source	Throughput (tpy)	Emission Factor (lb/ton)	Potential uncontrolled PM2.5 (tpy)	Fugitive PM2.5 Emissions (tons/yr)
Fug	Grain Handling	1,226,400	0.009	5.52	0.276
Fug	DDGS Handling	341,465	0.007	1.20	0.060
				Total	**0.336**

See AP-42, Grain Elevators 9.9.1 for Fugitive Emission Factors (estimated where not exact)
*When PM2.5 AP-42 emission factors are not established, assume 25% of PM10.

Appendix A: Emission Calculations
Accumulator Vent (EU-04)
VOC Emissions

Company Name: **Noble Americas South Bend Ethanol LLC**
Address City IN Zip: **3201 W. Calvert, South Bend, IN 46613**
Part 70 Permit Number: **141-32025-00033**
Significant Permit Modification No.: **141-35917-00033**
Reviewer: **Doug Logan**
Date: **6/24/2015**

Unit Name	Emission Unit ID	VOC Concentration (ppm, carbon)	Molecular Weight (from test data)	Air Flow Rate (cfm)	Conversion Constant (1.557E-7)	Midwest Scaling Factor (from test data)	VOC (lb/hour)	VOC (tons/year)
Accumulator Vent	EU-04	46.5	59.2	15.0	1.557E-07	2.3	0.015	0.065

Appendix A: Emission Calculations
Fermentation (CO2) Scrubber
Fermenters and Beerwell

Company Name: **Noble Americas South Bend Ethanol LLC**
Address City IN Zip: **3201 W. Calvert, South Bend, IN 46613**
Part 70 Permit Number: **141-32025-00033**
Significant Permit Modification No.: **141-35917-00033**
Reviewer: **Doug Logan**
Date: **6/24/2015**

Basis:	Estimate and emission factors based on ICM Emission Guide		
	Denatured Ethanol Production:	96.31	MM gal/yr
	Assumed operation time:	8760	hr/yr
	Flow:	10,971	cfm

VOC/HAP Emissions: assumes that all ethanol production is scrubbed

ID	Emission Source	Pollutant	Production (MMgpy)	Emission factor * (lb/MMgpy)	Controlled Emissions (tons/yr)
EU-05	Fermentation Scrubber	VOC	96.31	547	26.34
		PM	96.31	4.96	0.24
		PM10/2.5	96.31	5.55	0.27
		PM+PM10/2.5	96.31		0.51
	HAPs:	Acetylaldehyde	96.31	200	9.63
		Acrolein	96.31	16	0.77
		Methanol	96.31	15	0.72
		Formaldehyde	96.31	5	0.24
	Total HAPs:				11.36
	Other Compounds:	Acetic Acid	96.31	23.36	1.12
		Butyric Acid	96.31	43.8	2.11
		Lactic Acid	96.31	32.12	1.55
		Furfural	96.31	0.53	0.03
		Glycerol	96.31	7.59	0.37

Appendix A: Emission Calculations
Natural Gas Combustion
DDGS Dryers
DDGS Cooler
RTOs

Company Name: Noble Americas South Bend Ethanol LLC
Address City IN Zip: 3201 W. Calvert, South Bend, IN 46613
Part 70 Permit Number: 141-32025-00033
Significant Permit Modification No.: 141-35917-00033
Reviewer: Doug Logan
Date: 6/24/2015

Criteria emissions from combustion of natural gas at other gas fired equipment

Basis: SO2 factor based on AP-42 emission factor; NOx factor based on AP-42 w/proposed burners
Unit assumed to operate maximum fuel input capacity
Assumed operation time: 8760 hr/yr
PTE based on 100% Natural Gas
BTU content of natural gas: 1020 Btu/scf

Unit	Fuel	Size MMBtu/hr	Pollutant	E Factors lb/MMBtu	E Factors lb/MMscf	E Factors lb/1000 gal	PTE lb/hr	PTE tpy
11 Dryers + Cooler to 2 RTOs		16.0	NOx	0.100			1.6	7.01
			SO2	see below				76.83
			CO	see below				27.83
			VOC	see below				17.07
			PM/PM-10	see below				8.54

Note: 1 stack contains combined Dryer/RTO exhaust gases

Emissions from 5 ST Dryers, Process Vents to 2 RTOs

Basis: Emission factors & controls based on DDGS throughput
DDGS Annual production 341,465 tons
NOx see above

SO2	0.45	lb/ton	Mass balance
	76.83	tpy	Uncontrolled (Glacial Lakes) Dryer and Cooler SO2
CO	0.16	lb/ton	Variable based on RTO bed temp
	27.83	tpy	Expect 1600 F bed temp Dryer only contribution
VOC	0.10	lb/ton	w/RTO control
	17.07	tpy	Uncontrolled 35.5 lb/ton (Russell) Dryer only contribution
PM-10 *	0.05	lb/ton	w/RTO control
	8.54	tpy	Uncontrolled 2.08 lb/ton (Russell) Dryer only contribution

**Includes condensable fraction*

Appendix A: Emission Calculations
Natural Gas Combustion
DDGS Dryers
DDGS Cooler
RTOs

Company Name: Noble Americas South Bend Ethanol LLC
Address City IN Zip: 3201 W. Calvert, South Bend, IN 46613
Part 70 Permit Number: 141-32025-00033
Significant Permit Modification No.: 141-35917-00033
Reviewer: Doug Logan
Date: 6/24/2015

Total Emissions from Process Vents- 5 Dryers- Cooler-2 RTOs System

Pollutant	**PTE tpy**
NOx	7.01
SO2	76.83
CO	27.83
VOC	17.07
PM/PM-10	8.54
PM2.5	2.13

DDGS Production HAPs:
Emission Factors from testing @ GLE

DDGS: (tons/yr):	341,465			Total (tpy)
	lb/ton	tpy		
Formaldehyde	0.0073	1.25		1.25
Acetaldehyde	0.016	2.73		2.73
Acrolein	0.005	0.85		0.85
Methanol	0.006	1.02		1.02
Totals		5.86	Production HAPs (TO):	5.86
			CH4 Combustion:	3.64
			Total TO HAPs:	**9.64**

If HAP below detection limit, emissions considered to be negligible

Formaldehyde HAPS from Natural gas combustion (tpy):	0.14
Formaldehyde HAPS from DDGS Production:	1.25
Total Formaldehyde HAPS from TO:	**1.39**

Appendix A: Emission Calculations
Flare (EU-13)

Company Name: **Noble Americas South Bend Ethanol LLC**
Address City IN Zip: **3201 W. Calvert, South Bend, IN 46613**
Part 70 Permit Number: **141-32025-00033**
Significant Permit Modification No.: **141-35917-00033**
Reviewer: **Doug Logan**
Date: **6/24/2015**

VOC emissions from Product Loading (Truck/Rail)
(worst case emissions are based on 100% loadout by truck)
Natural Gasoline Delivery Truck -- Flared (controlled):

Loading Operations	Basis:	Calculated from AP-42, Section 5.2.2 - Loading Losses			
	Equation:	12.46*S*P*M/T			
	where:	S	0.6	Saturation factor (submerged)	
From Tanks 4.09		P	5.0034	Vapor pressure (psia)	
		M	66	Molar Mass (lb/lb-mole)	
From Tanks 4.09, average temp		T	515.16	Product Temp (deg R)	
	AP-42 Factor:		4.79	lb/1000 gal	
Losses calculated using this factor multiplied by loading rates:					
Gasoline vapor emission rate (based on denaturant delivery):				96,310,000	gal/yr
VOC Loading losses				461,538	lb/yr,uncontrolled
Controlled by flare				4.62	tpy, @ 98% red.
Assumes that every tanker delivering natural gasoline took on a load of denatured etoh					

Truck loading with flare (combustion portion of emissions):							
	PM/PM-10 is negligible based on smokeless design						
	Pilot operated 8760 hrs/yr						
Rate		6.4	MMBtu/hr				
Heating Value		850	Btu/scf				
Operating time		4034	hr/yr				
Pilot		0.1	MMBtu/hr				
Emission	NOx	0.068	lb/MMBtu	(AP-42, Table 13.5-2)			
Factors	CO	0.37	lb/MMBtu	(AP-42, Table 13.5-2)			
(waste gas only)	VOC	0.052	lb/MMBtu	(AP-42, Table 13.5-2, less methane and ethane)			
	PM/PM10	0	smokeless design				
	SO2	0	negligible sulfur presence				
	HAP	0	due to negligible presence				
Flaring Emissions	NOx	1756	lb/yr		0.88	ton/yr	
(during loading)	CO	9553	lb/yr		4.78	ton/yr	
	VOC	1343	lb/yr		0.67	ton/yr	
Pilot Emissions	NOx	0.1	lb/MMBtu	(AP-42, Table 1.4)	0.0202	tpy	
(8760 hrs/yr)	CO	0.084	lb/MMBtu	(AP-42, Table 1.4)	0.0169	tpy	
	VOC	0.0055	lb/MMBtu	(AP-42, Table 1.4)	0.0011	tpy	
	PM/PM10	0.0076	lb/MMBtu	(AP-42, Table 1.4)	0.0015	tpy	
	SO2	0.0006	lb/MMBtu	(AP-42, Table 1.4)	0.0001	tpy	
	HAP	0			negligible		

Totals	NOx	0.90	
see above	CO	4.79	
	VOC	5.29	Total
	PM/PM10	0.00	
	SO2	0.00	
	HAP	negligible	

Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR >100
Utility Boilers (EU-15 and EU-21)

Company Name: Noble Americas South Bend Ethanol LLC
Address City IN Zip: 3201 W. Calvert, South Bend, IN 46613
Part 70 Permit Number: 141-32025-00033
Significant Permit Modification No.: 141-35917-00033
Reviewer: Doug Logan
Date: 6/24/2015

A. Potential to Emit (uncontrolled)

1. EU-21, Two (2) natural gas fired rental boilers, not to exceed 99.5 MMBtu/hr heat input capacity, each

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
199.0	1020	1709.1

	Potential to Emit for EU-21						
	PM[1]	PM10[1]	direct PM2.5[1]	SO2	NOx[2]	VOC	CO
AP-42 Emission Factor (lb/mmcf)	1.9	7.6	7.6	0.6	*50.0*	5.5	*84.0*
Source Specific Emission Factor in lb/MMBtu					0.04		0.05
Source Specific Emission Factor in lb/mmcf					40.80		51.00
Potential Emission in tons/yr (AP-42)	1.62	6.49	6.49	0.51	42.73	4.70	43.58
Potential Emission in tons/yr (source-specific)					34.86		

1. PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.
PM2.5 emission factor is condensable and filterable PM2.5 combined.
2. Low NOx burners are rated at 0.04 lb/MMBtu

2. EU-15, Two (2 natural gas fired package boilers, 220 MMBtu/hr heat input capacity, each

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
440.0	1020	3778.8

	Potential to Emit for EU-15						
	PM[1]	PM10[1]	direct PM2.5[1]	SO2	NOx[3]	VOC	CO
AP-42 Emission Factor (lb/mmcf)	1.9	7.6	7.6	0.6	*140.0*	5.5	84.0
Source Specific Emission Factor in lb/MMBtu					0.133		0.05
Source Specific Emission Factor in lb/mmcf					135.66		51.00
Potential Emission in tons/yr	3.59	14.36	14.36	1.13	264.52	10.39	158.71
Potential Emission in tons/yr (source-specific)					256.32		

1. PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.
PM2.5 emission factor is condensable and filterable PM2.5 combined.
3. Low NOx burners are rated at 0.133 lb/MMBtu

3. Total PTE

	PM*	PM10*	direct PM2.5*	SO2	NOx **	VOC	CO
Natural gas fired boilers (EU-15 and EU-21) (AP-42)	5.21	20.85	20.85	1.65	307.24	15.09	202.29
(source-specific)					291.18		

Appendix A: Emission Calculations
Natural Gas Combustion Only
MMBTU/HR >100
Utility Boilers (EU-15 and EU-21)

Company Name: Noble Americas South Bend Ethanol LLC
Address City IN Zip: 3201 W. Calvert, South Bend, IN 46613
Part 70 Permit Number: 141-32025-00033
Significant Permit Modification No.: 141-35917-00033
Reviewer: Doug Logan
Date: 6/24/2015

B. Potential to Emit after Issuance

HHV mmBtu / mmscf	Limited Throughput[4] MMCF/yr
1020	3641.13

	Potential to Emit after Issuance						
	PM[1]	PM10[1]	direct PM2.5[1]	SO2	NOx[5]	VOC	CO
AP-42 Emission Factor (lb/mmcf)	1.9	7.6	7.6	0.6	140.0	5.5	
Source Specific Emission Factor in lb/MMBtu					0.133		0.05
Source Specific Emission Factor in lb/mmcf					135.66		51.00
Potential Emission in tons/yr	3.46	13.84	13.84	1.09	246.98	10.01	92.85

1. PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM10 combined.
PM2.5 emission factor is condensable and filterable PM2.5 combined.
4. Limited Throughput from Condition D.6.1(a), SSM 141-34355-00033, issued October 30, 2014
5. NOx emission factor 0.133 lb/MMBtu is worst case and represents the two (2) existing natural gas-fired package boilers, EU-15.

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, and 1.4-3, SCC #1-01-006-01, 1-01-006-04
(AP-42 Supplement D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

C. Hazardous Air Pollutants, Uncontrolled Potential to Emit

	Potential Throughput (MMCF/yr)
EU-21, two (2) rental boilers	1709.06
EU-15, two (2) package boilers	3778.82
Total	5487.88

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	5.76E-03	3.29E-03	2.06E-01	4.94	9.33E-03	**5.16E+00**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	1.37E-03	3.02E-03	3.84E-03	1.04E-03	5.76E-03	**1.50E-02**
					Total HAPs	5.18
					Worst HAP	4.94

Methodology is the same as page 1.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Appendix A: Emission Calculations
Corn Oil Recovery

Company Name: Noble Americas South Bend Ethanol LLC
Address City IN Zip: 3201 W. Calvert, South Bend, IN 46613
Part 70 Permit Number: 141-32025-00033
Significant Permit Modification No.: 141-35917-00033
Reviewer: Doug Logan
Date: 6/24/2015

Storage (VOCs)

Basis: Tanks 4.09 software (VOC)

Stored Liquid	VOC lbs/yr	VOC tons/yr
Corn Oil Tk #1	68.22	
Corn Oil Tk #2	68.22	
Total VOCs	136.44	0.07

VOC emissions from Corn Oil Loading (Truck)

Emissions are based on 100% of product shipped out by truck (or rail)

Truck Loadout:

Loading Operations — Basis: Calculated from AP-42, Section 5.2.2 - Loading Losses

Equation: 12.46*S*P*M/T

where:	S	0.6	Saturation factor (submerged)
From Tanks 4.09	P	0.0093	Vapor pressure (average psia)
	M	96.09	Molar Mass (lb/lb-mole)
From Tanks 4.09, average temp	T	509.71	Product Temp (deg R)

AP-42 Factor: 0.013 lb/1000 gal

Losses calculated using this factor multiplied by loading rates:

Corn Oil Loadout rate:	4,600,000	gal/yr
VOC Loading losses	60.29	lb/yr,uncontrolled
VOC Loading losses	0.03	tons/yr,uncontrolled

Fugitive Emissions (VOCs) — Basis: Leak Rate (SOCMI average) multiplied by no. of components

Component counts based on a similar sized facility

Leak Rates and VOC control from: Protocol for Leak Emission Rates EPA-453/R-95-017, November 1995

Equipment	#	Leak Rate (kg/hr/source)		VOC lb/hr	VOC tpy	LDAR Con percent	VOC tpy
Light Liquid Valves	7	0.00403		0.062	0.272	84	0.044
Light Liquid Pumps	4	0.0199		0.175	0.768	69	0.238
Gas Valves	0	0.00597		0.000	0.000	87	0.000
Flanges (connectors)	15	0.00183		0.060	0.265	0	0.265
Total Fugitive Components	26		VOC	Uncontrolled	1.305	Controlled	0.546

Total Corn Oil Extraction, Storage, Loading, Fugitives Components VOCs: 0.64 tons/year

Appendix A: Emission Calculations
Fugitive Components
LDAR

Company Name: **Noble Americas South Bend Ethanol LLC**
Address City IN Zip: **3201 W. Calvert, South Bend, IN 46613**
Part 70 Permit Number: **141-32025-00033**
Significant Permit Modification No.: **141-35917-00033**
Reviewer: **Doug Logan**
Date: **6/24/2015**

Fugitive Emissions *Basis:* Leak Rate (SOCMI average) multiplied by no. of components
Component count based on typical LDAR program
Leak Rates and VOC control from: *Protocol for Leak Emission Rates EPA-453/R-95-017, November 1995*

Equipment	#	Leak Rate (kg/hr/source)	VOC lb/hr	VOC tpy	LDAR Control percent	VOC tpy
Light Liquid Valves	100	0.00403	0.89	3.89	84.00	0.62
Light Liquid Pumps	15	0.0199	0.66	2.88	69.00	0.89
Gas Valves	50	0.00597	0.66	2.88	87.00	0.37
Flanges (connectors)	280	0.00183	1.13	4.94	0.00	4.94
Total Fugitive Components	445	*VOC*	*Uncontrolled*	14.59	*Controlled*	6.83

Notes:
Components in vacuum service are not inventoried and not to be inspected due to leak free nature
Components with >20% VOC by volume or > 10% by weight will be part of LDAR program
Relief Devices are not in fugitive components LDAR program (< 20% VOC volume or < 10% VOC weight)
Above are based on actual counts at a 45 Mmgpy plant + appx. 10% - 50% increase

HAP portion of VOCs:

	Mass Fraction	VOC (tpy)	HAP (tpy)
Formaldehyde	0.000169	6.83	0.001
Acetaldehyde	0.0002	6.83	0.001
Methanol	0.0002	6.83	0.001
Acrolein	0.0045	6.83	0.031
			0.03

HAP fraction derived from stack testing of typical Fermentation Scrubber

Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads
IDEM PTE

Company Name: Noble Americas South Bend Ethanol LLC
Address City IN Zip: 3201 W. Calvert, South Bend, IN 46613
Part 70 Permit Number: 141-32025-00033
Significant Permit Modification No.: 141-35917-00033
Reviewer: Doug Logan
Date: 6/24/2015

Paved Roads at Industrial Site
The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Informtation (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Corn Oil Truck Leaving (full)	1.68	1.0	1.7	40.0	67.2	2640	0.500	0.8	306.6
Corn Oil Truck Entering (empty)	1.68	1.0	1.7	15.0	25.2	2640	0.500	0.8	306.6
Denaturant	0.70	1.0	0.7	40.0	28.0	2640	0.500	0.4	127.8
Denaturant	0.70	1.0	0.7	15.0	10.5	2640	0.500	0.4	127.8
Denaturanted Ethanol	35.20	1.0	35.2	40.0	1408.0	2640	0.500	17.6	6424.0
Denaturanted Ethanol	35.20	1.0	35.2	15.0	528.0	2640	0.500	17.6	6424.0
Grain Truck Entering (Full)	134.40	1.0	134.4	40.0	5376.0	2640	0.500	67.2	24528.0
Grain Truck leaving (empty)	134.40	1.0	134.4	15.0	2016.0	2640	0.500	67.2	24528.0
DDGS Leaving (Full)	37.42	1.0	37.4	40.0	1496.8	2640	0.500	18.7	6829.2
DDGS entering (empty)	37.42	1.0	37.4	15.0	561.3	2640	0.500	18.7	6829.2
		Totals	**418.8**		**11517.0**			**209.4**	**76431.0**

Average Vehicle Weight Per Trip = 27.5 tons/trip
Average Miles Per Trip = 0.50 miles/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	27.5	27.5	27.5	tons = average vehicle weight (provided by source)
sL =	1.1	1.1	1.1	g/m^2 = silt loading value for paved roads at wet corn oil facilities - Table 13.2.1-3)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1)
Mitigated Emission Factor, Eext = Ef * [1 - (p/4N)]
where p = 125 days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	0.353	0.071	0.0173	lb/mile
Mitigated Emission Factor, Eext =	0.322	0.064	0.0158	lb/mile
Dust Control Efficiency =	50%	50%	50%	(pursuant to control measures outlined in fugitive dust control plan)

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)	Controlled PTE of PM (tons/yr)	Controlled PTE of PM10 (tons/yr)	Controlled PTE of PM2.5 (tons/yr)
Vehicle	13.47	2.69	0.66	12.32	2.46	0.60	6.16	1.23	0.30
Totals	**13.47**	**2.69**	**0.66**	**12.32**	**2.46**	**0.60**	**6.16**	**1.23**	**0.30**

Methodology
Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip) / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations
PM = Particulate Matter
PM10 = Particulate Matter (<10 um)
PM2.5 = Particle Matter (<2.5 um)
PTE = Potential to Emit

Truck Travel Specifics

VMT Calculations	load size		amount per year		# of trips yr	day	weight	
Corn Oil Truck Leaving (full)	7,500	gal	4,600,000	gal	613	1.680365297	40	
Corn Oil Truck Entering (empty)					613	1.680365297	15	
Denaturant	7,500	gal	1,926,221	gal	257	0.703642374	40	
					257	0.703642374	15	
Denaturanted Ethanol	7,500	gal	96,311,028	gal	12,841	35.18211068	40	
					12,841	35.18211068	15	
Grain Truck Entering (Full)	25	tons	1,226,400	tons	49,056	134.4	40	permit limited
Grain Truck leaving (empty)					49,056	134.4	15	
DDGS Leaving (Full)	25	tons	341,465	tons	13,659	37.42082192	40	permit limited
DDGS entering (empty)					13,659	37.42082192	15	

Appendix A: Emissions Calculations
Natural Gas Combustion Only for Two (2) RTOs
MM BTU/HR <100

Company Name: **Noble Americas South Bend Ethanol LLC**
Address City IN Zip: **3201 W. Calvert, South Bend, IN 46613**
Part 70 Permit Number: **141-32025-00033**
Significant Permit Modification No.: **141-35917-00033**
Reviewer: **Doug Logan**
Date: **6/24/2015**

Two (2) RTOs, each with a maximum rating of 8.0 MMBtu/hour, approved for construction in 2014, and exhausting to atmosphere.

Heat Input Capacity MMBtu/hr	HHV mmBtu / mmscf	Potential Throughput MMCF/yr
16.0	1020	137.4

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.1	0.5	0.5	4.12E-02	6.9	0.4	5.8

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
PM2.5 emission factor is filterable and condensable PM2.5 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03
Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,020 MMBtu
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

HAPS Calculations

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	**Total - Organics**
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	1.443E-04	8.245E-05	5.153E-03	1.237E-01	2.336E-04	**1.293E-01**

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	**Total - Metals**
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	3.435E-05	7.558E-05	9.619E-05	2.611E-05	1.443E-04	**3.765E-04**
					Total HAPs	**1.297E-01**
					Worst HAP	**1.237E-01**

Methodology is the same as above.

The five highest organic and metal HAPs emission factors are provided above.
Additional HAPs emission factors are available in AP-42, Chapter 1.4.

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

Thomas W. Easterly
Commissioner

July 28, 2015

Ms. Jennifer Lozano
Noble Americas South Bend Ethanol LLC
3201 W. Calvert St.
South Bend, IN 46613

Re: Public Notice
Noble Americas South Bend Ethanol LLC
Permit Level: Title V Significant Permit Modification
Permit Number: 141-35917-00033

Dear Ms. Lozano:

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 South Bend Tribune in South Bend, Indiana publish the abbreviated version of the public notice no later than July 31, 2015. 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 St. Joseph County Public Library, 304 South Main Street in South Bend, 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 Doug Logan, 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 4-5328 or dial (317) 234-5328.

Sincerely,

Vivian Haun

Vivian Haun
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover lette-2014. Dot4/10/14

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

Thomas W. Easterly
Commissioner

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

July 27, 2015

South Bend Tribune
225 West Colfax Avenue
South Bend, IN 46626

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Noble Americas South Bend Ethanol LLC, St. Joseph 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 July 31, 2015.

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: 141-35917-00033

Enclosure

PN Newspaper.dot 6/13/2013

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

Thomas W. Easterly
Commissioner

July 28, 2015

To: St. Joseph County 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: Noble Americas South Bend Ethanol LLC
Permit Number: 141-35917-00033

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 6/13/2013

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

Thomas W. Easterly
Commissioner

Notice of Public Comment

July 28, 2015
Noble Americas South Bend Ethanol LLC
141-35917-00033

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 6/13/13

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

Thomas W. Easterly
Commissioner

AFFECTED STATE NOTIFICATION OF PUBLIC COMMENT PERIOD
DRAFT INDIANA AIR PERMIT

July 28, 2015

A 30-day public comment period has been initiated for:

Permit Number: **141-35917-00033**
Applicant Name: **Noble Americas South Bend Ethanol LLC**
Location: **South Bend, St. Joseph 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 7/28/2015 141-35917-00033 DRAFT Noble Americas South Bend Ethanol LLC		AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
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**

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee / Remarks
1		Jennifer Lozano Noble Americas South Bend Ethanol LLC 3201 W Calvert Street South Bend IN 46613 (Source CAATS)									
2		Steven A Stokely GM Noble Americas South Bend Ethanol LLC 3201 W Cavlert Street South Bend IN 46613 *(RO CAATS)*									
3		Mr. Wayne Falda South Bend Tribune 255 W Colfax Ave South Bend IN 46626 *(Affected Party)*									
4		South Bend City Council / Mayors Office 227 W. Jefferson Blvd. South Bend IN 46601 *(Local Official)*									
5		St. Joseph County Board of Commissioners 227 West Jefferson Blvd, South Bend IN 46601 *(Local Official)*									
6		St. Joseph County Health Department 227 W Jefferson Blvd, Room 825 South Bend IN 46601-1870 *(Health Department)*									
7		St. Joseph County Public Library 304 South Main Street South Bend IN 46601 *(Library)*									
8											
9											
10											
11											
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	
7			The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is $50,000 per piece subject to a limit of $50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is $500. The maximum indemnity payable is $25,000 for registered mail, sent with optional postal insurance. See ***Domestic Mail Manual*** **R900, S913**, and **S921** for limitations of coverage on inured and COD mail. See ***International Mail Manual*** for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.

FACSIMILIE OF PS Form 3877