

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

Eric J. Holcomb

Bruno L. Pigott

Commissioner

NOTICE OF 30-DAY PERIOD FOR PUBLIC COMMENT

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

for Ingredion Incorporated Indianapolis Plant in Marion County

Significant Source Modification No.: 097-40296-00042 Significant Permit Modification No.: 097-40627-00042

The Indiana Department of Environmental Management (IDEM) has received an application from Ingredion Incorporated Indianapolis Plant, located at 1515 South Drover Street, Indianapolis, IN 46221, for a significant modification of its Part 70 Operating Permit Renewal issued on September 22, 2015. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow Ingredion Incorporated Indianapolis Plant to make certain changes at its existing source. Ingredion Incorporated Indianapolis Plant has applied to construct and operate four (4) new bins with a baghouse to the dry starch west (DSW) area.

The applicant intends to construct and operate new equipment that will emit air pollutants; therefore, the permit contains new or different permit conditions. In addition, 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). IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow the applicant to make this change.

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

Indianapolis Public Library - West Indianapolis Branch 1216 S. Kappes Street Indianapolis, IN 46221

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

A copy of the preliminary findings is also available via IDEM's Virtual File Cabinet (VFC.) Please go to: http://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

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 SSM 097-40296-00042 and SPM 097-40627-00042 in all correspondence.

Comments should be sent to:

Deena P. Levering IDEM, Office of Air Quality 100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251 (800) 451-6027, ask for Deena P. Levering or (317) 234-5400 Or dial directly: (317) 234-5400

Fax: (317) 232-6749 attn: Deena P. Levering

E-mail: dleverin@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 Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

What will happen after IDEM makes a decision?

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

If you have any questions, please contact Deena P. Levering of my staff at the above address.

Heath Hartley, Section Chief Permits Branch

Office of Air Quality

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Eric J. Holcomb

Bruno L. Pigott

Commissioner

DRAFT

Ms. Melissa Putman Ingredion Incorporated Indianapolis Plant 1515 South Drover Street Indianapolis, Indiana 46221

> Re: 097-40627-00042 Significant Permit Modification

Dear Ms. Putman:

Ingredion Incorporated Indianapolis Plant was issued Part 70 Operating Permit Renewal No. T097-34650-00042 on September 22,2015 for a stationary wet corn milling plant which produces feed, gluten meal, germ meal, corn starch, and heavy steepwater located at 1515 South Drover Street, Indianapolis, IN 46221. An application requesting changes to this permit was received on August 7, 2018. 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 were provided in previously issued approvals for this source, IDEM OAQ has not included a copy of these attachments with this modification:

Attachment A: 40 CFR 60, Subpart IIII, Standards of Performance for Stationary Compression

Ignition Internal Combustion Engines

Attachment B: 40 CFR 63, Subpart ZZZZ, National Emission Standards for Hazardous Air

Pollutants for Stationary Reciprocating Internal Combustion Engines

Attachment C: 40 CFR 63, Subpart CCCCCC, National Emission Standards for Hazardous Air

Pollutants for Source Category: Gasoline Dispensing Facilities

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

Previously issued approvals for this source are also available via IDEM's Virtual File Cabinet (VFC.) Please go to: http://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

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

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. A copy of the permit is also available via IDEM's Virtual File Cabinet (VFC.) Please go to: http://www.in.gov/idem/ and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.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.





Ingredion Incorporated Indianapolis Plant Indianapolis, Indiana

Permit Reviewer: Deena P. Levering

Page 2 of 2 SPM No. 097-40627-00042

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If you have any questions regarding this matter, please contact Deena P. Levering, 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) 234-5400 or (800) 451-6027, and ask for Deena P. Levering or (317) 234-5400.

Sincerely,

Heath Hartley, Section Chief Permits Branch Office of Air Quality

Attachments: Modified Permit and Technical Support Document

cc: File - Marion County

Marion County Health Department

U.S. EPA, Region 5

Compliance and Enforcement Branch



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Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

Ingredion Incorporated Indianapolis Plant 1515 South Drover Street Indianapolis, Indiana 46221

(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.: 1097-34650-00042			
Master Agency Interest ID.: 11515			
	Issued by: / Original Signed by:	Issuance Date: September 22, 2015	
	Jason R. Krawczyk, Section Chief		
	Permits Branch	Expiration Date: September 22, 2020	
	Office of Air Quality		
	Administrative Amendment No. 097-37105-00042, issued on June 8, 2016		
	Significant Permit Modification No. 097-36989-00042, issued on October 14, 2016		
	Significant Permit Modification No. 097-37637-00042, issued on May 4, 2017		

Significant Permit Modification No. 097-37105-00042, issued on June 8, 2016 Significant Permit Modification No. 097-37637-00042, issued on October 14, 2016 Significant Permit Modification No. 097-37637-00042, issued on May 4, 2017 Administrative Amendment No.: 097-39102-00042, issued on November 13, 2017 Administrative Amendment No.: 097-39541-00042, issued on June 20, 2018

Significant Permit Modification No.: 097-40627-00042		
Issued by:	Issuance Date:	
Heath Hartley, Section Chief Permits Branch Office of Air Quality	Expiration Date: September 22, 2020	





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Indianapolis, Indiana Permit Reviewer: Laura Thompson SPM No. 097-40627-00042 Modified by: Deena P. Levering DRAFT

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SECTION A

SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary wet corn milling plant which produces feed, gluten meal, germ meal, corn starch, and heavy steepwater.

Source Address: 1515 South Drover Street, Indianapolis, Indiana 46221

General Source Phone Number: (317) 635-4455

SIC Code: 2046 (Wet Corn Milling)
County Location: Marion (Center Township)
Source Location Status: Nonattainment for SO₂ standard

Attainment for all other criteria pollutants

Source Status: Part 70 Operating Permit Program

Major Source, under PSD Rules

Minor Source, Section 112 of the Clean Air Act

Not 1 of 28 Source Categories

A.2 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) natural gas-fired #1 Starch Flash Dryer, identified as unit 40-4, with a maximum heat input capacity of 30 MMBtu/hr and with a maximum air throughput of 42,200 dscfm, using a wet scrubber for particulate control, constructed in 1965 and modified in 1994, and exhausting to stack 40-4.
- (b) One (1) natural gas-fired #2 Starch Flash Dryer, identified as unit 40-3, with a maximum heat input capacity of 36 MMBtu/hr and with a maximum air throughput of 73,000 dscfm, using a wet scrubber for particulate control, constructed in 1967 and modified in 1994 and 1999, and exhausting to stack 40-3.
- (c) One (1) natural gas-fired #3 Starch Flash Dryer, identified as unit 40-2, with a maximum heat input capacity of 36 MMBtu/hr and with a maximum air throughput of 60,000 dscfm, using a wet scrubber for particulate control, constructed in 1971, and exhausting to stack 40-2.
- (d) One (1) natural gas-fired #4 Starch Flash Dryer, identified as unit 575-1, with a maximum heat input capacity of 43 MMBtu/hr and with a maximum air throughput of 84,100 dscfm, using a wet scrubber for particulate control, constructed in 1977, and exhausting to stack 575-1.
- (e) One (1) natural gas-fired #5 Starch Flash Dryer, identified as unit 575-2, with a maximum heat input capacity of 38 MMBtu/hr and with a maximum air throughput of 84,200 dscfm, using a wet scrubber for particulate control, constructed in 1979 and replaced in 1995, and exhausting to stack 575-2.
- (f) One (1) natural gas-fired #6 Starch Flash Dryer, identified as unit 575-3, with a maximum heat input capacity of 40 MMBtu/hr and with a maximum throughput of 84,100 dscfm, using a wet scrubber for particulate control, constructed in 1993, and exhausting to stack 575-3.

(g) One (1) natural gas-fired #1 Spray Dryer, identified as unit 5549-1, with a maximum heat input capacity of 25 MMBtu/hr and with a maximum air throughput of 26,000 dscfm, using a wet scrubber for particulate control, constructed in 1993 and modified in 1998, and exhausting to stack 5549-1.

- (h) One (1) natural gas-fired #2 Spray Dryer, identified as unit 5549-2, with a maximum heat input capacity of 25 MMBtu/hr and with a maximum air throughput of 26,000 dscfm, using a wet scrubber for particulate control, constructed in 1993 and modified in 1998, and exhausting to stack 5549-2.
- (i) One (1) natural gas-fired Feed Dryer, identified as unit 5502-1A, with a maximum heat input capacity of 77 MMBtu/hr and with a maximum throughput of 20 tons/hr, using a first effect wash water system for SO₂ control, and the RTO, unit 5502-1D for VOC, HAPs, and particulate control, constructed in 1997, and exhausting to the inlet of unit 5502-1D.
- (j) One (1) natural gas-fired Germ Dryer, identified as unit 5502-1B, with a maximum heat input capacity of 20 MMBtu/hr and with a maximum throughput of 11 tons/hr, using the RTO, unit 5502-1D, for VOC, HAPs, and particulate control, constructed in 1997, and exhausting to the inlet of unit 5502-1D.
- (k) One (1) natural gas-fired Gluten Dryer, identified as unit 5502-1C, with a maximum heat input capacity of 32 MMBtu/hr and with a maximum throughput of 4.21 tons/hr, using the RTO, unit 5502-1D, for VOC, HAPs, and particulate control, constructed in 1997, and exhausting to the inlet of unit 5502-1D.
- (I) One (1) natural gas-fired Regenerative Thermal Oxidizer, identified as unit 5502-1D, with a maximum heat input capacity of 18 MMBtu/hr, used as a control for VOC, HAPs, and particulate, with a maximum air throughput of 45,148 dscfm, constructed in 1997, and exhausting to stack 5502-7.
- (m) Spray Agglomerator #3, identified as unit 5549-28, part of the spray agglomeration process, with a maximum heat input capacity of 25.0 MMBtu/hr and with a maximum air throughput of 38,000 dscfm, using a wet scrubber for particulate control, constructed in 2001, and exhausting to stack 5549-28.
- (n) One (1) Product Storage Hopper, identified as unit 5552-1, with a maximum air throughput of 2,450 dscfm, using a baghouse* for particulate control, constructed in 1995, and exhausting to stack 5552-1.
- (o) One (1) Product Transfer Hopper, identified as unit 5552-2, with a maximum air throughput of 350 dscfm, using a baghouse* for control, constructed in 1995, and exhausting to stack 5552-2.
- (p) One (1) Truck Loadout, identified as unit 5503-6, with a maximum throughput of 25 tons/hr, using a baghouse for particulate control, constructed in 1999, and exhausting to stack 5502-3.
- (q) One (1) Germ Bin, one (1) Pellet Bin #1, and one (1) Pellet Bin #2, identified as units 5503-2, 5503-3, and 5503-4 respectively, and with a combined maximum throughput of 120 tons/hr, with a maximum air throughput of 8,640 dscfm, using a Loadout Dust Collection System for particulate control, identified as 5503-5, each constructed in 1997, and exhausting to stack 5503-2.
- (r) One (1) DSW Packing Fugitive Dust Collector, identified as unit 71-7, with a maximum throughput of 0.1 tons/hr, with a maximum air throughput of 9,000 dscfm, using a baghouse for particulate control, constructed in 1977, and exhausting to stack 71-7.
- (s) One (1) RSP North Packing Line, identified as unit 577-2, with a maximum throughput of 18

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tons/hr, with a maximum air throughput of 9,600 dscfm, using a baghouse* for particulate control, constructed in 1979 and modified in 2000, and exhausting to stack 577-2.

- (t) One (1) Gluten Receiver, identified as unit 5503-1, with a maximum throughput of 4.21 tons/hr, with a maximum air throughput of 18,580 dscfm, using a baghouse* for particulate control, constructed in 1997, and exhausting to stack 5503-1.
- (u) One (1) Pellet Cooler and one (1) Germ Cooler, identified as units 5502-5 and 5502-6, with a maximum throughput of 19.36 tons/hr and 4.21 tons/hr respectively, with maximum air throughputs of 13,790 dscfm and 12,080 dscfm respectively, each using a high efficiency cyclone for particulate control, each constructed in 1997, and exhausting to stacks 5502-5 and 5502-6.
- (v) Two (2) Loose Feed Bins, collectively identified as unit 5502-4, each with a maximum throughput of 19.36 tons/hr, using a baghouse for particulate control, constructed in 1997, and exhausting to stack 5502-3.
- (w) One (1) Hammer Mill, identified as unit 5502-3, with a maximum throughput of 19.36 tons/hr, with a maximum air throughput of 11,700 dscfm, using a baghouse for particulate control, constructed in 1997, and exhausting to stack 5502-3.
- (x) One (1) DSE Bag Slitter, identified as unit 42-10, with a maximum throughput of 10 tons/hr, with a maximum air throughput of 5,000 dscfm, using a baghouse for particulate control, constructed in 1987, and exhausting to stack 42-10.
- (y) One (1) P-6 Rework Station, identified as unit 54-1, with a maximum throughput of 7.5 tons/hr, using a baghouse for particulate control, constructed in 1987, and exhausting to stack 54-1.
- (z) One (1) RSP Hopper #4, identified as unit 577-5, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-5.
- (aa) One (1) RSP Hopper #6, identified as unit 577-6, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-6.
- (bb) One (1) RSP Hopper #5, identified as unit 577-7, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-7.
- (cc) One (1) RSP Hopper #1, identified as unit 577-8, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-8.
- (dd) One (1) RSP Hopper #2, identified as unit 577-9, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-9.
- (ee) One (1) RSP Hopper #3, identified as unit 577-10, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-10.
- (ff) One (1) Industrial Packer, identified as unit 71-1, with a maximum air throughput of 5,300 dscfm, using a baghouse for particulate control, constructed in 1994, and exhausting to stack 71-1.
- (gg) Two (2) Spray Dryer Product Receivers, identified as units 5549-3 and 5549-4, each with a maximum air throughput of 1,700 dscfm, each using a baghouse* for particulate control, constructed in 1993 and 1996, and exhausting to stacks 5549-3 and 5549-4.
- (hh) One (1) #1 Spray Dryer Storage Hopper #1, identified as unit 5549-7, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 5549-7.

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- (ii) One (1) #1 Spray Dryer Storage Hopper #2, identified as unit 5549-8, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 5549-8.
- (jj) One (1) #2 Spray Dryer Storage Hopper #3, identified as unit 5549-9, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 5549-9.
- (kk) One (1) #2 Spray Dryer Storage Hopper #4, identified as unit 5549-10, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 5549-10.
- (II) One (1) Agglomerator Feed Storage Bin, identified as unit 5549-12, with a maximum air throughput of 1,530 dscfm, using a baghouse* for particulate control, constructed in 1995, and exhausting to stack 5549-12.
- (mm) One (1) Agglomerator, identified as unit 5549-13, with a maximum air throughput of 12,500 dscfm, using a baghouse for particulate control, constructed in 1995, including one (1) natural gas-fired burner with a maximum heat input capacity of 1.824 MMBtu/hr, and exhausting to stack 5549-13.
- (nn) One (1) Agglomerator Equipment Aspiration, identified as unit 5549-14, with a maximum air throughput of 2,840 dscfm, using a baghouse** for particulate control, constructed in 1995, and exhausting to stack 5549-14.
- (oo) One (1) spray agglomeration process, constructed in 2000, consisting of the following units:
 - (1) Bulk Bag Packer Filter Receiver, identified as unit 5549-17, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, and exhausting to stack 5549-17.
 - (2) Line 1 Middle Packer, identified as unit 5549-18, with a maximum air throughput of 4,600 dscfm, using a baghouse* for particulate control, and exhausting to stack 5549-18.
 - (3) Line 1 North Packer, identified as unit 5549-19, with a maximum air throughput of 5,400 dscfm, using a baghouse* for particulate control, and exhausting to stack 5549-19.
 - (4) #2 Fugitive Dust Collector, identified as emission unit 5549-20, with a maximum throughput of 14,000 dscfm, using a baghouse for particulate control, and exhausting to stack 5549-20.
 - (5) Line 1 Fugitive Dust Collector, identified as unit 5549-21, with a maximum air throughput of 14,000 dscfm, using a baghouse for particulate control, and exhausting to stack 5549-21.
 - (6) Line 2 Packer, identified as unit 5549-26, with a maximum air throughput of 5,400 dscfm, using a baghouse* for particulate control, and exhausting to stack 5549-26.
- (pp) One (1) Corn Truck Dump, identified as unit 56-1, with a maximum throughput of 448 tons/hr, with a maximum air throughput of 35,000 dscfm, using a baghouse for particulate control, constructed prior to 1968 and modified in 1996, and exhausting to stack 56-1.
- (qq) Grinding and machining operations controlled with fabric filters with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations:

- (1) One (1) DSE Hopper #9, identified as unit 42-3A, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 6.
- (2) One (1) DSE Hopper #10, identified as unit 42-3B, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 7.
- (3) One (1) DSE Hopper #11, identified as unit 42-3C, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 43-3C.
- (4) One (1) DSE Hopper #12, identified as unit 42-3D, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 9.
- (5) One (1) DSE Hopper #13, identified as unit 42-3E, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 10.
- (6) One (1) DSE Hopper #14, identified as unit 42-3F, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack11.
- (7) One (1) DSE Hopper #2, identified as unit 42-7A, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 14.
- (8) One (1) DSE Hopper #4, identified as unit 42-7B, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 14.
- (9) One (1) DSE Hopper #6, identified as unit 42-7C, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 16.
- (10) One (1) DSE Hopper #1, identified as unit 42-8A, with a maximum throughput of 10 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 17A.
- (11) One (1) DSE Hopper #3, identified as unit 42-8B, with a maximum throughput of 10 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 17B.
- (12) One (1) DSE Hopper #5, identified as unit 42-8C, with a maximum throughput of 10 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 17C.
- (13) One (1) DSE Hopper #7, identified as unit 42-8D, with a maximum throughput of 10 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 17D.
- (14) One (1) CWS #8; identified as unit 63-1A, with a maximum throughput of 1 tons/hr, with a maximum air throughput of 2,400 dscfm, using a baghouse* for particulate control, constructed prior to 1968, and modified in 1976, and exhausting to stack 46A.

(15) One (1) CWS South East, identified as unit 63-1B, with maximum throughput of 1 ton/hr, with a maximum air throughput of 2,400 dscfm, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 46B.

- (16) One (1) CWS South Mill, identified as unit 63-17, constructed in 1977, with a maximum throughput of 0.8 tons/hr, using a baghouse** (replaced baghouse in 2008) for particulate control, and exhausting to stack 53.
- (rr) One (1) Grain Elevator, identified as unit 56-2, with a maximum throughput of 80 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 24.
- (ss) Starch operations, starch drying, starch handling and starch packaging consisting of the following units:
 - (1) One (1) Starch Mixer 1 Filter Receiver, identified as 152-1, with a maximum air throughput of 500 dscfm, using a baghouse* for particulate control, constructed in 2002, and exhausting to stack 152-1.
 - One (1) Mixer 1 baghouse, identified as 152-2, with a maximum air throughput of 1,000 dscfm, using a baghouse* for particulate control, constructed in 2002 and approved in 2011 for modification, and exhausting to stack 152-2.
 - One (1) Starch Mixer 2 Filter/Receiver, identified as 152-4 (Bld 852A), with a maximum air throughput of 600 dscfm, using a baghouse* for particulate control, constructed on in 2002, and exhausting to stack152-4.
 - (4) One (1) Starch Mixer 2, identified as 152-5 (Bld 852A), with a maximum air throughput of 1,000 dscfm, using a baghouse* for particulate control, constructed in 2002, and exhausting to stack 152-5.
 - (5) One (1) Starch Storage Hopper, identified as 152-6, with a maximum throughput of 15 tons/hr, using a baghouse** for particulate control, constructed in 2003, and exhausting to stack 152-6.
 - (6) One (1) Starch Filter/Receiver 2 Bld 852, identified as unit 152-7, with a maximum air throughput of 500 dscfm, using a baghouse** for particulate control, constructed in 2004, and exhausting to stack 152-7.
 - (7) One (1) Starch Mixer 4 Bld 852A Filter Receiver, identified as unit 152-8, with a maximum air throughput of 600 dscfm, using a baghouse** for particulate control, constructed in 2004, and exhausting to stack 152-8.
 - (8) One (1) Starch Mixer 4 Bld 852A, identified as unit 152-9, with a maximum air throughput of 20 dscfm, using a baghouse** for particulate control, constructed in 2004, and exhausting to stack 152-9.
 - (9) One (1) Starch Mixer 3 Bld 852A Filter Receiver, identified as unit 152-10, with a maximum air 600 dscfm, using a baghouse** for particulate control, constructed in 2004, and exhausting to stack 152-10.
 - (10) One (1) Starch Mixer 3 Bld 852A, identified as unit 152-11, with a maximum air throughput of 1,000 dscfm, using a baghouse* for particulate control, constructed in 2004 and approved in 2011 for modification, and exhausting to stack 152-11.
 - (11) One (1) Bulk Bag Receiver, identified as 152-12, with a maximum air throughput of 800

dscfm , using a baghouse* for particulate control, constructed in 2004, and exhausting to stack 152-12.

- (12) One (1) Starch Storage Silo #2 Receiver, identified as Bin TF41820 (formerly unit 61-21), with a maximum throughput of 15 tons/hr, with a maximum air throughput of 589 dscfm, using a baghouse* for particulate control, constructed in 1976, modified in 1981, approved in 2010 for additional modification, and exhausting to stack 152-3.
- (13) One (1) Starch Cooling and Conveying System, identified as TF41818 (formerly unit 581-2), with a maximum air throughput of 14,000 dscfm, using a baghouse* for particulate control, constructed in 1983 and approved in 2010 for modification, and exhausting to stack TF41818.
- (14) One (1) Blending Bin, identified as 152-15 (formerly unit TF41819), with a maximum air throughput of 4,000 dscfm, using a baghouse* for particulate control, approved in 2010 for construction, and exhausting to stack DC41819.
- (15) One (1) Starch Hopper D/C, identified as 128-3, with a maximum throughput of 12.5 tons/hr, using a baghouse* for particulate control, constructed in 1983 and modified in 2000, and exhausting to stack 128-3.
- (16) One (1) DSW Chemical Blender Bag Slitter, identified as unit 61-15, with a maximum throughput of 7.5 tons/hr, using a baghouse** for particulate control, constructed prior to 1974, and exhausting to stack 35.
- (17) One (1) Sodium Sulfate Conveying System, including a silo and receiver, identified as units 40-1A and 40-1B, with a maximum throughput of 15 tons/hr, with maximum air throughputs of 1,400 dscfm and 1,250 dscfm, using two baghouses* for particulate control, constructed prior to 1968 and modified in 1998, and exhausting to stacks 40-1A and 40-1B.
- (18) One (1) DSE North Packer, identified as unit 42-1, with a maximum throughput of 30 tons/hr, using a baghouse* for particulate control, constructed prior to 1968 and modified in 1996, and exhausting to stack 5.
- (19) One (1) DSE Hopper #8, identified as unit 42-4, with a maximum throughput of 13.95 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 17E.
- (20) One (1) DSE Negative Receiver, identified as unit 42-6, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to1968, and exhausting to stack 13.
- (21) One (1) DSE South Packer, identified as unit 42-9, with a maximum throughput of 30 tons/hr, using a baghouse* for particulate control, constructed prior to 1968 and modified in 1996, and exhausting to stack 18.
- (22) One (1) DSE Railcar Loading East Track, identified as unit 42-11, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 20.
- (23) One (1) DSE Railcar Loading West Track, identified as unit 42-12, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 21.
- (24) One (1) DSE Bulk Bag System, identified as unit 42-13, with a maximum throughput of

30 tons/hr, with a maximum air throughput of 4,500 dscfm, using a receiver/baghouse* for particulate control, constructed in 1997, and exhausting to stack 106.

- One (1) Dextrin Blend, identified as unit 61-14, with a maximum throughput of 7.5 tons/hr, using hopper/filter receiver using a baghouse** for particulate control, constructed prior to 1973, and exhausting to stack 61-14.
- One (1) DSW Chemical Blender Tank, identified as unit 61-14A, with a maximum throughput of 7.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 34.
- One (1) CWS #7 Dryer Receiver, identified as unit 63-3, with a maximum air throughput of 2,000 dscfm, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 47.
- (28) One (1) CWS North Mill, identified as unit 63-4, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1974, and exhausting to stack 48.
- (29) One (1) CWS North Product, identified as unit 63-5, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1974, and exhausting to stack 49.
- (30) One (1) CWS Packer, identified as unit 63-9, with a maximum throughput of 20 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 50.
- (31) One (1) Liquid Glue Bag Dump, identified as unit 63-12, with a maximum throughput of 8 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 51.
- (32) One (1) CWS #9 and #10 Dryers Receiver, identified as unit 63-15, with a maximum air throughput of 3,600 dscfm, using a baghouse* for particulate control, constructed in 1975 and modified in 2010, and exhausting to stack 52.
- (33) CWS #11 Dryer and CWS #12 and #13 Dryers, identified as units 63-16A and 63-16B, each with a maximum air throughput of 3,300 dscfm, using two baghouses* for particulate control, constructed prior to August 7, 1977, and exhausting to stacks 54A and 54B.
- (34) One (1) CWS South Raw Material Dump, identified as unit 63-18, with a maximum throughput of 3.5 tons/hr, using a baghouse** for particulate control, constructed in 1977, and exhausting to stack 55.
- (35) One (1) DSW Negative Receiver, identified as unit 63-20, with a maximum throughput of 5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 56.
- (36) RESERVED
- (37) One (1) Negative Receiver, identified as unit 71-3, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 71-3.
- (38) RESERVED

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- (39) RESERVED
- (40) RESERVED
- (41) RESERVED
- (42) RESERVED
- (43) RESERVED
- (44) RESERVED
- (45) RESERVED
- (46) RESERVED
- (47) RESERVED
- (48) RESERVED
- (49) RESERVED
- (50) RESERVED
- (51) One (1) DSW Bulk Car Loading, identified as unit 71-8, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed in 1971, and exhausting to stack 72.
- (52) One (1) RSP South Bulk Bag Packing, identified as unit 577-1, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 77.
- (53) One (1) FG Bulk Bag Bin Vent Bld 800, identified as unit FA-60582, with a maximum throughput of 18 tons/hr, with a maximum air throughput of 3,800 dscfm, using a baghouse** for particulate control, constructed in 2003, and exhausting to stack FA-60582.
- One (1) RSP South Packing Line, identified as unit 577-3, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 79.
- One (1) RSP Bulk Loading System A, identified as unit 577-4, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 80.
- (56) One (1) RSP Bulk Loading Fugitive Dust Collector**, identified as unit 577-4A, with a maximum throughput of 18 tons/hr and an actual throughput of 18 lbs/hr, constructed in 1986, and exhausting to stack 81.
- (56a) One (1) aspiration line, constructed in 2017, assisting air flow within the DSS bulk loadout screener SR60585, and exhausting to RSP Bulk Loading Fugitive Dust Collector, 577-4A.
- One (1) CWS Conveying Cyclone Operation, identified as unit 578-1, with a maximum throughput of 7.5 tons/hr, using a baghouse** for particulate control, returned to service in 2008, and exhausting through stack 578-1.

- (58) One (1) CWS Packing Hopper, identified as unit 578-2, with a maximum throughput of 1 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 89.
- (59) One (1) CWS Milling System, identified as unit 578-3, with a maximum throughput of 1.5 tons/hr, using a baghouse* for particulate control, constructed in 1978, and approved for modification in 2018, exhausting to stack 578-3,-consisting of one (1) Aspiration Line, constructed in 2018, assisting air flow within the CWS Milling System, and a fine grind mill, using a cyclone (CY-41146) for particulate control, and exhausting to stack 578-3.
- (59a) One (1) Drum A Product Receiver, identified as DC700, with a maximum flow rate of 1750 dscfm, constructed in 1978, modified on April 13, 2016 and 2018, using a dust collector for control, and exhausting to stack 578-4.
- (59b) One (1) Drum B Product Receiver, identified as DC701, with a maximum flow rate of 1750 dscfm, constructed in 1978, modified on April 13, 2016 and 2018, using a dust collector for control, and exhausting to stack 578-5.
- (60) One (1) Product Bin 93, identified as unit TF31993 (formerly unit TF31901), with a maximum air throughput of 3,000 dscfm, using product recovery DC-31993* (Bld 630) for particulate control, constructed in 2004 and approved in 2015 for modification, and exhausting to stack 1-158.
- (61) One (1) Product Bin 92, identified as unit TF31992 (formerly unit TF31902), with a maximum air throughput of 2,000 dscfm, using product recovery DC-31992* (Bld 630) for particulate control, constructed in 2004 and approved in 2015 for modification, and exhausting to stack 2-158.
- (62) One (1) Product Bin 91, identified as unit TF31991, with a maximum air throughput of 2,000 dscfm, using product recovery DC-31991* (Bld 630) for particulate control, constructed in 2004 and approved in 2015 for modification, and exhausting to stack 3-158.
- (63) One (1) Surge Tank Bin 158-3, identified as unit SH31913, with a maximum air throughput of 200 dscfm, using product recovery DC-31911** (Bld 630) for particulate control, constructed in 2004, and exhausting to stack 7-158.
- (64) One (1) Bulk Bag Unload Bin 158-4, identified as unit DC-31900 (Bld 630) with a maximum air throughput of 600 dscfm, using a dust collector* for particulate control, constructed in 2004, and exhausting to stack 8-158.
- (65) One (1) FBR1 Exhaust, identified as unit TR31912, with a maximum air throughput of 8,800 dscfm, using product recovery metal filters** (Bld 630) for particulate control, constructed in 2004, and exhausting to stack 5-158.
- (66) One (1) FBR1 Cooling System, identified as TR31913, approved in 2014 for installation, with a product throughput of 15,000 pounds per hour, using a cyclone (CY31917)* and baghouse (DC31917)* for product recovery and particulate control, and exhausting to stack 9-158.
- (67) One (1) starch dryer, identified as unit T-1, with a maximum production rate of 300 lbs/hr, using a product collector/cyclone and dust collector* for particulate control, constructed in 2005, and exhausting to stack T-1.
- (68) One (1) Line 1 South Packing Hopper, identified as unit 5549-22, with a maximum air throughput of 4,800 dscfm, using a baghouse* for particulate control, constructed in

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2006, and exhausting to stack 5549-22.

- (69) Three (3) Base Bins (80, 81, and 82), identified as units TF31980, TF31981, and TF31982, respectively, each with a maximum air throughput of 1,275 dscfm, using product recovery DC31980*, DC31981*, and DC31982*, respectively, for particulate control, approved in 2015 for construction, and exhausting to stacks 10-158, 11-158, and 12-158.
- (70) One (1) FBR2 Exhaust, identified as unit TR31922, with a maximum air throughput of 6,000 dscfm, using product recovery metal filters* for particulate control, approved in 2015 for construction, and exhausting to stack 14-158.
- (71) One (1) FBR2 Cooling Reactor, identified as unit TR31923, with a maximum air throughput of 4,300 dscfm, using product recovery metal filters* for particulate control, approved in 2015 for construction, and exhausting to stack 15-158.
- (72) One (1) Product Bin 90, identified as unit TF31990, using product recovery DC31990* for particulate control, with a maximum air throughput of 2,200 dscfm, approved in 2015 for construction, and exhausting to stack 13-158.
- (73) One (1) Packing Receiver, identified as unit TS32001, with a maximum throughput of 20 metric tons/hr, with a maximum air throughput of 3,300 dscfm, using product recovery DC32001* for particulate control, approved in 2015 for construction, and exhausting to stack 71-10.
- (74) One (1) Base Bin, identified as TF41822, constructed in 2017, with a maximum air throughput of 2,060 dscfm, using product recovery DC41822* as particulate control, and exhausting to stack 152-13.
- (75) One (1) DSW Product Silo, identified as unit TF34031, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34031 for particulate control, exhausting to stack S34031.
- (76) One (1) DSW Product Silo, identified as unit TF34032, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34032 for particulate control, exhausting to stack S34032.
- (77) One (1) DSW Product Silo, identified as unit TF34033, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34033 for particulate control, exhausting to stack S34033.
- (78) One (1) DSW Product Silo, identified as unit TF34034, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34034 for particulate control, exhausting to stack S34034.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

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

(a) Stationary fire pump engines, including:

^{*}The control device is considered both integral to the process and inherent to the process for CAM applicability. Inherent process equipment is not subject to Compliance Assurance Monitoring (CAM).

^{**}The control device is considered inherent to the process for CAM applicability. Inherent process equipment is not subject to Compliance Assurance Monitoring (CAM).

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- (1) One (1) 210-horsepower diesel-fired emergency fire pump engine, identified as FP1, constructed in 2003. Under 40 CFR 63, Subpart ZZZZ, FP1 is considered an existing affected source.
- (2) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP2, constructed in 2003. Under 40 CFR 63, Subpart ZZZZ, FP2 is considered an existing affected source.
- (3) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP3, constructed in 2006. Under 40 CFR 63, Subpart ZZZZ, FP3 is considered a new affected source. Under 40 CFR 60, Subpart IIII, FP3 is considered an affected facility.
- (b) Combustion related activities including spaces heaters, process heaters, or boilers using natural gas-fired with heat input equal to or less than ten million (10,000,000) British thermal units per hour:
 - (1) One (1) process heater, Bld 630, natural gas fired, with maximum heat input capacity of 5.1 MMBtu/hr, identified as emission unit YX31914A, constructed in 2004 and venting out stack 158-6.
 - (2) One (1) natural gas-fired FBR2 Burner, identified as unit FH31924, with a maximum capacity of 3.0 MMBtu/hr, approved in 2015 for construction, and exhausting to stack 16-158.
 - (3) Two (2) natural gas-fired Air Heater Burners, identified as Air Heater 1 and Air Heater 2, units EF31926A and EF31927A, respectively, approved in 2015 for construction, each with a maximum heat input capacity of 0.4 MMBtu/hr, and exhausting to stacks 17-158 and 18-158.
 - (4) Drover CWS direct-fired air heaters, with a maximum total heat input capacity of 4.50 MMBtu/hr.
- (c) Three (3) degreasing operations, identified as D1, D2, and D3, each with a maximum annual solvent usage of 465 gallons, and each resulting in potential uncontrolled VOC emissions of less than three (3) pounds per hour and fifteen (15) pounds per day.
- (d) Paved and unpaved roads and parking lots with public access.
- (e) Emissions from a laboratory, as defined in 326 IAC 2-7-1(21)(G).
- (f) A gasoline fuel transfer dispensing operation handling less than or equal to 1,300 gallons per day and less than 10,000 gallons per month, filling storage tanks having a capacity equal to or less than 10,500 gallons. Under 40 CFR 63, Subpart CCCCCC, this is considered an existing affected source.
- (g) A petroleum fuel other than gasoline dispensing facility, having a storage tank capacity less than or equal to 10,500 gallons, and dispensing 3,500 gallons per day or less.
- (h) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs equal to or less than 12,000 gallons.
- (i) Vessels storing the following: Lubricating oils, Hydraulic oils, Machining oils, Machining fluids.

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- (j) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: abrasive blasting, identified as S1.
- (k) Three (3) acetic acid storage tanks, identified as T1, with a capacity no greater than sixteen thousand (16,000) gallons each.
- (I) Four (4) hydrochloric acid storage tanks, identified as T2, with a capacity no greater than sixteen thousand (16,000) gallons each.
- (m) Ten (10) small batch reactors, identified as Tanks 190, 191, 192, 193, 200, 201, 203, 211, 212, and 213, using no controls and exhausting to stacks 190, 191, 193, 200, 201, 203, 211, 212, and 213, respectively.
- (n) Twenty-one (21) steeping tanks, identified as ST1 through ST21, permitted in 2017, and exhausting to Stacks ST1 through ST21.
- (o) Seven (7) Millhouse vent fans, permitted in 2017.

A.4 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).

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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, T097-34650-00042, 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 April 15 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.

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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).

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(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]

- An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an (a) 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;
 - The permitted facility was at the time being properly operated; (2)
 - (3)During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered:

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality,

Compliance and Enforcement Branch), or

Telephone Number: 317-233-0178 (ask for Office of Air Quality,

Compliance and Enforcement Branch) Facsimile Number: 317-233-6865

For each emergency lasting one (1) hour or more, the Permittee submitted the (5) 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.

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

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- (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.

Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12] B.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;
 - 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 T097-34650-00042 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-

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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,

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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

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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.

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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)]

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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.

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SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 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 thirty percent (30%) 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.2 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.3 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.4 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.5 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

C.6 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.7 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:

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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.8 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.9 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).

a by: Deena P. Levering

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- (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.10 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.11 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.12 Risk Management Plan [326 IAC 2-7-5(11)][40 CFR 68]

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

- C.13 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

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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.
- The Permittee shall record the reasonable response steps taken. (e)
- (II)
- CAM Response to excursions or exceedances. (a)
 - (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:
 - 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.

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(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

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C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

applicable recordkeeping requirements

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

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

- C.15 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.16 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(00) 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

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- (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.17 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

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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:

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(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.18 Compliance with 40 CFR 82 and 326 IAC 22-1

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

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SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) natural gas-fired #1 Starch Flash Dryer, identified as unit 40-4, with a maximum heat input capacity of 30 MMBtu/hr and with a maximum air throughput of 42,200 dscfm, using a wet scrubber for particulate control, constructed in 1965 and modified in 1994, and exhausting to stack 40-4.
- (b) One (1) natural gas-fired #2 Starch Flash Dryer, identified as unit 40-3, with a maximum heat input capacity of 36 MMBtu/hr and with a maximum air throughput of 73,000 dscfm, using a wet scrubber for particulate control, constructed in 1967 and modified in 1994 and 1999, and exhausting to stack 40-3.
- (c) One (1) natural gas-fired #3 Starch Flash Dryer, identified as unit 40-2, with a maximum heat input capacity of 36 MMBtu/hr and with a maximum air throughput of 60,000 dscfm, using a wet scrubber for particulate control, constructed in 1971, and exhausting to stack 40-2.
- (d) One (1) natural gas-fired #4 Starch Flash Dryer, identified as unit 575-1, with a maximum heat input capacity of 43 MMBtu/hr and with a maximum air throughput of 84,100 dscfm, using a wet scrubber for particulate control, constructed in 1977, and exhausting to stack 575-1.
- (e) One (1) natural gas-fired #5 Starch Flash Dryer, identified as unit 575-2, with a maximum heat input capacity of 38 MMBtu/hr and with a maximum air throughput of 84,200 dscfm, using a wet scrubber for particulate control, constructed in 1979 and replaced in 1995, and exhausting to stack 575-2.
- (f) One (1) natural gas-fired #6 Starch Flash Dryer, identified as unit 575-3, with a maximum heat input capacity of 40 MMBtu/hr and with a maximum throughput of 84,100 dscfm, using a wet scrubber for particulate control, constructed in 1993, and exhausting to stack 575-3.
- (g) One (1) natural gas-fired #1 Spray Dryer, identified as unit 5549-1, with a maximum heat input capacity of 25 MMBtu/hr and with a maximum air throughput of 26,000 dscfm, using a wet scrubber for particulate control, constructed in 1993 and modified in 1998, and exhausting to stack 5549-1; [326 IAC 6.5-1-2]
- (h) One (1) natural gas-fired #2 Spray Dryer, identified as unit 5549-2, with a maximum heat input capacity of 25 MMBtu/hr and with a maximum air throughput of 26,000 dscfm, using a wet scrubber for particulate control, constructed in 1993 and modified in 1998, and exhausting to stack 5549-2.
- (i) One (1) natural gas-fired Feed Dryer, identified as unit 5502-1A, with a maximum heat input capacity of 77 MMBtu/hr and with a maximum throughput of 20 tons/hr, using a first effect wash water system for SO₂ control, and the RTO, unit 5502-1D for VOC, HAPs, and particulate control, with a maximum air throughput of 45,148 dscfm, constructed in 1997, and exhausting to the inlet of unit 5502-1D.
- (j) One (1) natural gas-fired Germ Dryer, identified as unit 5502-1B, with a maximum heat input capacity of 20 MMBtu/hr and with a maximum throughput of 11 tons/hr, using the RTO, unit 5502-1D, for VOC, HAPs, and particulate control, constructed in 1997, and exhausting to the inlet of unit 5502-1D.
- (k) One (1) natural gas-fired Gluten Dryer, identified as unit 5502-1C, with a maximum heat input capacity of 32 MMBtu/hr and with a maximum throughput of 4.21 tons/hr, using the RTO, unit 5502-1D, for VOC, HAPs and particulate control, constructed in 1997, and exhausting to the

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inlet of unit 5502-1D.

- (I) One (1) natural gas-fired Regenerative Thermal Oxidizer, identified as unit 5502-1D, with a maximum heat input capacity of 18 MMBtu/hr, used as a control for VOC, HAPs, and particulate, constructed in 1997, and exhausting to stack 5502-7.
- (m) Spray Agglomerator #3, identified as unit 5549-28, part of the spray agglomeration process, with a maximum heat input capacity of 25.0 MMBtu/hr and with a maximum air throughput of 38,000 dscfm, using a wet scrubber for particulate control, constructed in 2001, and exhausting to stack 5549-28.

(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 Prevention of Significant Deterioration (PSD) Minor Limits [326 IAC 2-2]

- (a) PM and PM10
 - (1) Pursuant to SPM No. 097-34377-00042, issued on January 22, 2015, the combined input of starch for units 5549-1 and 5549-2 shall not exceed 30,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, and the total emission rate shall not exceed 2.50 pound PM per ton of starch and 2.50 pound of PM10 per ton of starch. Compliance with these limits, in combination with other limits, will limit the net emissions increase of the 1993 Modification (CP 097-00042-93-01) and the 1997 Modification (CP 097-00042-97-01) each to less than twenty-five (25) tons of PM and fifteen (15) tons of PM10 per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-3 (Emission Offset) and 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the 1993 and 1997 Modifications.
 - (2) Pursuant to T097-34650-00042, PM and PM10 emissions from 575-3 shall not exceed the limits in the table below:

Linit (Ctools)		PM Limits		PM10 Limits		
Unit (Stack)	(gr/dscf)	(lb/hr)	(ton/yr)	(gr/dscf)	(lb/hr)	(ton/yr)
575-3 (575-3)	0.012	7.82	34.25	0.012	6.253	27.39

Compliance with these limits, in combination with other limits, will limit the net emissions increase of the 1993 Modification (CP 097-00042-93-01) and 1997 Modification (CP 097-00042-97-01) each to less than twenty-five (25) tons of PM and fifteen (15) tons of PM10 per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-3 (Emission Offset) and 326 IAC 2-2 (Prevention of Significant Deterioration not applicable to the 1993 and 1997 Modifications.

(3) Pursuant to T097-34650-00042, PM and PM10 emissions from 5549-28 shall not exceed the limits in the table below:

Unit (Stack)		PM Limits		PM10 Limits		
Unit (Stack)	(gr/dscf)	(lb/hr)	(ton/yr)	(gr/dscf)	(lb/hr)	(ton/yr)
5549-28 (5549-28)	0.025	8.14	35.67	0.025	8.14	35.67

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Compliance with these limits, in combination with other limits, will limit the net emissions increase of the 2000 Modification (SSM No. 097-11362-00042) to less than twenty-five (25) tons of PM and fifteen (15) tons of PM10 per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the 2000 Modification.

(4) Pursuant to SPM No. 097-34377-00042, issued on January 22, 2015, PM and PM10 emissions from units 5502-1A, 5502-1B, 5502-1C, and 5502-1D shall not exceed the limits in the table below:

Linit (Stook)	PM Limits			PM10 Limits		
Unit (Stack)	(gr/dscf)	(lb/hr)	(ton/yr)	(gr/dscf)	(lb/hr)	(ton/yr)
5502-1A (5502-7)						
5502-1B (5502-7)	0.0114	4.533	10.055	0.0114	4.533	19.855
5502-1C (5502-7)	0.0114	4.533	19.855	0.0114	4.533	19.000
5502-1D (5502-7)						

Compliance with these limits, in combination with other limits, will limit the net emissions increase of the 1997 Modification (CP 097-00042-97-01), the 1999 Modification (CP 097-00042-99-01), and the 2000 Modification (SSM No. 097-11362-00042) each to less than twenty-five (25) tons of PM and fifteen (15) tons of PM10 per twelve (12) consecutive month period. These limits shall render the requirements of 326 IAC 2-3 (Emission Offset) and 326 IAC 2-2 (Prevention of Significant Deterioration not applicable to the 1997 Modification. These limits shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the 1999 and 2000 Modifications.

- (5) Pursuant to T097-34650-00042, the starch produced from unit 40-3 shall not exceed 127,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, and the emission rate shall not exceed 0.566 pound of PM per ton of starch produced and 0.566 pound of PM10 per ton of starch produced. Compliance with these limits, in combination with other limits, will limit the net emissions increase of the 1999 Modification (CP 097-00042-99-01) and the 2000 Modification (SSM No. 097-11362-00042) each to less than twenty-five (25) tons of PM and fifteen (15) tons of PM10 per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the 1999 and 2000 Modifications.
- (b) SO2
 Pursuant to CP 097-00042-97-01, issued on March 24, 1997, the SO₂ emissions from units 5502-1A, 5502-1B, 5502-1C, and 5502-1D shall not exceed a total of 8.05 pounds per hour. Compliance with this limit will limit the potential to emit of the 1997 Modification (CP 097-00042-97-01) to less than forty (40) tons of SO₂ per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the 1997 Modification.

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(c) NOx

Pursuant to T097-34650-00042:

- (1) The combined input of natural gas to units 5502-1A, 5502-1B, 5502-1C, and 5502-1D shall not exceed 1,263 million cubic feet (MMcf) per twelve (12) consecutive month period, with compliance determined at the end of each month.
- (2) NOx emissions from units 5502-1A, 5502-1B, 5502-1C, and 5502-1D shall not exceed 62.0 pounds per MMcf.

Compliance with these limits will limit the potential to emit of the 1997 Modification (CP 097-00042-97-01) to less than forty (40) tons of NO_x per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the 1997 Modification.

(d) VOC

Pursuant SSM No. 097-24401-00042, issued on October 28, 2008, the combined VOC emissions from units 5502-1A, 5502-1B, 5502-1C, and 5502-1D shall not exceed a total of 4.89 pounds per hour. Compliance with this limit will limit the potential to emit of the Germ Dryer, Feed Dryer, and Gluten Dryer to less than forty (40) tons of VOC per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the Germ Dryer, Feed Dryer, and Gluten Dryer.

D.1.2 HAP Area Source Limits [326 IAC 2-4.1]

In order to render the requirements of 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) not applicable and to render the source minor under Section 112 of the Clean Air Act, the Permittee shall comply with the following limits:

- (a) The combined HAP emissions (acetaldehyde, acrolein, formaldehyde, and methanol) from the Germ Dryer, Feed Dryer, Gluten Dryer, and RTO, identified as 5502-1A, 5502-1B, 5502-1C, and 5502-1D, shall not exceed 2.65 pounds per hour (lbs/hr).
- (b) Acetaldehyde HAP emissions from the Germ Dryer, Feed Dryer, Gluten Dryer, and RTO, identified as 5502-1A, 5502-1B, 5502-1C, and 5502-1D, combined shall not exceed 2.24 pounds per hour (lbs/hr).

Compliance with these limits, in combination with the potential to emit of any single HAP and any combination of HAPs from all other emission units at the source shall limit the source-wide potential to emit of any single HAP to less than ten (10) tons per twelve (12) consecutive month period and the potential to emit of any combination of HAPs to less than twenty-five (25) tons per twelve (12) consecutive month period, and shall render the requirements 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) not applicable and shall render the source minor under Section 112 of the Clean Air Act.

D.1.3 Particulate Matter [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a), particulate matter emissions from units 575-3, 5502-1A, 5502-1B, 5502-1C, 5502-1D, 5549-1, 5549-2, and 5549-28 shall each not exceed 0.03 grain per dry standard cubic foot (gr/dscf).

D.1.4 Particulate Matter [326 IAC 6.5-6-25]

(a) Pursuant to 326 IAC 6.5-6-25(a), units 40-4, 40-3, 40-2, 575-1, and 575-2 shall meet the emission limits as indicated in the table below:

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Unit	PM Limit (gr/dscf)	PM Limit (ton/yr)
40-4	0.020	44.1
40-3	0.020	42.3
40-2	0.020	31.9
575-1	0.018	32.4
575-2	0.011	32.4

(b) Pursuant to 326 IAC 6.5-6-25(b), units 40-4, 40-3, 40-2, 575-1, and 575-2 shall burn only natural gas.

D.1.5 Volatile Organic Compounds [326 IAC 8-1-6]

Pursuant to SSM No. 097-24401-00042, issued on October 28, 2008 and 326 IAC 8-1-6, the Permittee shall employ Best Available Control Technology (BACT) for emission units 5502-1A, 5502-1B, 5502-1C which has been determined to be:

- (a) The VOC emissions from the Germ Dryer, Feed Dryer, and Gluten Dryer, identified as 5502-1A, 5502-1B, and 5502-1C, shall be controlled by a regenerative thermal oxidizer or an equivalent thermal oxidation unit*.
- (b) The overall VOC efficiency for the regenerative thermal oxidizer, or an equivalent thermal oxidation unit*, (including capture efficiency and destruction efficiency) shall be at least 95%.
- (c) The VOC emissions from the Germ Dryer, Feed Dryer, and Gluten Dryer, identified as 5502-1A, 5502-1B, and 5502-1C, combined shall not exceed 4.89 pounds per hour (lbs/hr).

*An equivalent thermal oxidation unit means a unit that can meet the same level of control or better than 5502-1D, that results in a potential to emit for each regulated pollutant that is less than or equal to the potential to emit of 5502-1D, and that would not result in the need for a modification pursuant to 326 IAC 2-7-10.5, 326 IAC 2-2, 326 IAC 2-3, 326 IAC 2-1.1-5, or 326 IAC 2-4.1.

D.1.6 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

A Preventive Maintenance Plan is required for these units 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 [326 IAC 2-7-5(1)]

D.1.7 Particulate, Sulfur Dioxide, HAPs, and VOC Control

- (a) In order to assure compliance with Conditions D.1.1(a)(4), D.1.1(d), D.1.2, D.1.3, and D.1.5, the RTO, 5502-1D, or an equivalent thermal oxidation unit, shall be in operation and control particulate and VOC emissions from units 5502-1A, 5502-1B, and 5502-1C at all times when any of those units are in operation.
- (b) In order to assure compliance with Condition D.1.1(b), the first (1st) effect wash water system shall be in operation and control SO₂ emissions from unit 5502-1A at all times the unit is in operation.
- (c) In order to assure compliance with Conditions D.1.1, D.1.3, and D.1.4, the scrubbers shall be in operation and control particulate emissions from units 40-2, 40-3, 40-4, 575-1, 575-2, 575-3, 5549-1, 5549-2, and 5549-28 at all times those units are in operation.

D.1.7 Testing Requirements [326 IAC 2-1.1-11]

(a) In order to demonstrate compliance with Conditions D.1.1(b), D.1.1(d), and D.1.4, the

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Permittee shall perform SO₂ and VOC testing on emission units 5502-1A, 5502-1B, 5502-1C and 5502-1D, utilizing methods as approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

- (b) If emission unit 5502-1D is replaced with an equivalent thermal oxidation unit, not later than 180 days after installation of an equivalent thermal oxidation unit, in order to demonstrate compliance with Conditions D.1.1(d) and D.1.4, the Permittee shall perform VOC testing on emission units 5502-1A, 5502-1B, 5502-1C, utilizing methods approved by the Commissioner at least once every five (5) years from the date of the most recent valid compliance demonstration of an equivalent thermal oxidation unit. 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.
- In order to demonstrate compliance with Condition D.1.2, the Permittee shall perform (c) acetaldehyde and combined HAP (acetaldehyde, acrolein, methanol, and formaldehyde) testing on emission units 5502-1A, 5502-1B, 5502-1C and 5502-1D, 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)]

Visible Emission Notations [40 CFR 64] D.1.9

- Visible emission notations of exhaust from stacks 40-2, 40-3, 40-4, 575-1, 575-2, 575-3, (a) 5502-7, 5549-1, 5549-2, and 5549-28 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.
- In the case of batch or discontinuous operations, readings shall be taken during that part (c) of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A notation of abnormal emissions is not a deviation from the permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.10 Parametric Monitoring for First Effect Water Wash System

The Permittee shall monitor and record the pH and flow rate of the liquid through the nozzles of the first effect wash water to the GHE at least once per week of the system used to control SO2 emissions from unit 5502-1A.

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(a) pH

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When for any one reading, the pH of the first effect wash water is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a pH of 6.5 or greater, unless a different 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 pH 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.

(b) Flow Rate

When for any one reading, the flow rate of the liquid through the nozzles of the first effect wash water is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a flow rate of 400 gallons per minute or greater, unless a different 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 flow rate 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.

D.1.11 Parametric Monitoring for Scrubbers [40 CFR 64]

- (a) The Permittee shall monitor and record the exhaust air stream pressure drop and scrubber make-up rate across each scrubber, controlling emissions from units 40-2, 40-3, 40-4, 575-1, 575-2, 575-3, 5549-1, and 5549-2, at least once per week when the associated processes are in operation.
- (b) The Permittee shall monitor and record the exhaust air stream pressure drop and scrubber make-up rate across the scrubber controlling emissions from unit 5549-28 at least once per day when the associated process is in operation.

(c) Exhaust Air Stream Pressure Drop

When for any one reading, an exhaust air stream pressure drop is outside the normal range, the Permittee shall take a reasonable response. The normal ranges for these units are indicated in the table below, unless a different upper-bound or lower-bound value for these ranges 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. An exhaust air stream pressure drop that is outside the above mentioned ranges is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

Unit ID	Stack ID	Normal Pressure
		Drop Range (inches
		of water)
40-2	40-2	3.0 - 8.0
40-3	40-3	6.0 - 15.0
40-4	40-4	3.0 - 8.0
575-1	575-1	6.0 - 15.0
575-2	575-2	6.0 - 15.0
575-3	575-3	6.0 - 15.0
5549-1	5549-1	6.0 - 15.0
5549-2	5549-2	6.0 - 15.0
5549-28	5549-28	6.0 - 15.0

(d) Scrubber Make-Up Rate

When for any one reading, a scrubber make-up rate is outside the normal range, the Permittee shall take a reasonable response. The normal ranges for these units are

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indicated in the table below, unless a different lower-bound value for these ranges 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 scrubber make-up rate that is outside the above mentioned ranges is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

Unit ID	Stack ID	Normal Scrubber
		Make-Up Rate
		(gal/min)
40-2	40-2	≥ 10
40-3	40-3	≥ 10
40-4	40-4	≥ 10
575-1	575-1	≥ 10
575-2	575-2	≥ 10
575-3	575-3	≥ 10
5549-1	5549-1	≥ 20
5549-2	5549-2	≥ 20
5549-28	5549-28	≥ 20

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

D.1.12 Scrubber or Water Wash System Failure Detection

In the event that a scrubber or water wash system malfunction has been observed:

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

D.1.13 RTO Temperature [40 CFR 64]

- A continuous monitoring system shall be calibrated, maintained, and operated on the (a) RTO 5502-1D, or an equivalent thermal oxidation unit, for measuring operating temperature. For the purpose of this condition, continuous means no less often than once per fifteen (15) minutes. The output of this system shall be recorded as a 3-hour average.
- (b) The Permittee shall determine the 3-hour average temperature from the latest valid stack test that demonstrates compliance with the limits in Conditions D.1.1(d), D.1.2, and D.1.5.
- On and after the date the stack test results are available, the Permittee shall operate the (c) thermal oxidizer at or above the 3-hour average temperature as observed during the latest compliant stack test.
- (d) If the 3-hour average temperature falls below the above mentioned 3-hour average temperature, the Permittee shall take a reasonable response. Section C - Response to

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Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. A 3-hour average temperature reading below the above mentioned 3-hour average temperature is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.14 Parametric Monitoring - RTO Fan Amperage [40 CFR 64]

The Permittee shall monitor and record the fan amperage for the RTO 5502-1D, or an equivalent thermal oxidation unit, at least once per day when the oxidizer is in operation. When for any one reading the fan amperage is outside the normal range, the Permittee shall take a reasonable response. The normal range for this unit is a fan amperage of 70 or less, unless a different upper-bound value for this range is determined during the latest stack test. When, for any one reading, the fan amperage is outside the above mentioned range, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. 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.

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

D.1.15 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.1(a)(1), the Permittee shall maintain monthly records of the combined input of starch for units 5549-1 and 5549-2.
- (b) To document the compliance status with Condition D.1.1(a)(5), the Permittee shall maintain monthly records of the amount of starch produced by unit 40-3.
- (c) To document the compliance status with Condition D.1.1(c), the Permittee shall maintain monthly records of the total input of natural gas consumed by units 5502-1A, 5502-1B, 5502-1C, and 5502-1D.
- (d) To document the compliance status with Condition D.1.9, the Permittee shall maintain records of the daily visible emission notations of the exhaust from stacks 40-2, 40-3, 40-4, 575-1, 575-2, 575-3, 5502-7, 5549-1, 5549-2, and 5549-28. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (e) To document the compliance status with Condition D.1.10, the Permittee shall maintain records of the weekly pH and flow rate readings of the first (1st) effect wash water system for unit 5502-1A. The Permittee shall include in its weekly record when a reading is not taken and the reason for the lack of reading (e.g. the process did not operate that week).
- (f) To document the compliance status with Condition D.1.11(a), the Permittee shall maintain records of the weekly pressure drop readings and make-up rates for the scrubbers associated with units 40-2, 40-3, 40-4, 575-1, 575-2, 575-3, 5549-1, and 5549-2. The Permittee shall include in its weekly record when a reading is not taken and the reason for the lack of a reading (e.g. the process did not operate that week).
- (g) To document the compliance status with Condition D.1.11(b), the Permittee shall maintain records of the daily pressure drop readings and make-up rates for the scrubber associated with unit 5549-28. The Permittee shall include in its daily record when a reading is not taken and the reason for the lack of reading (e.g. the process did not operate that day).
- (h) To document the compliance status with Condition D.1.13, the Permittee shall maintain continuous temperature records for the RTO (unit 5502-1D), or an equivalent thermal

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oxidation unit, and the 3-hour average temperature used to demonstrate compliance during the most recent compliant stack test.

- (i) To document the compliance status with Condition D.1.14, the Permittee shall maintain records of the daily duct pressure or fan amperature readings for the RTO (unit 5502-1D). The Permittee shall include in its daily record when the readings are not taken and the reason for the lack of readings (e.g. the process did not operate that day).
- (j) Section C General Record Keeping Requirements contains the Permittee's obligation with regard to the records required by this condition.

D.1.16 Reporting Requirements

Quarterly summaries of the information to document the compliance status with Conditions D.1.1(a)(1), D.1.1(a)(5), and D.1.1(c) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The reports submitted by the Permittee 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).

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SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (n) One (1) Product Storage Hopper, identified as unit 5552-1, with a maximum air throughput of 2,450 dscfm, using a baghouse* for particulate control, constructed in 1995, and exhausting to stack 5552-1.
- (o) One (1) Product Transfer Hopper, identified as unit 5552-2, with a maximum air throughput of 350 dscfm, using a baghouse* for control, constructed in 1995, and exhausting to stack 5552-2.
- (p) One (1) Truck Loadout, identified as unit 5503-6, with a maximum throughput of 25 tons/hr, with a maximum air throughput of 11,700 dscfm, using a baghouse for particulate control, constructed in 1999, and exhausting to stack 5502-3.
- (q) One (1) Germ Bin, one (1) Pellet Bin #1, and one (1) Pellet Bin #2, identified as units 5503-2, 5503-3, and 5503-4 respectively, and with a combined maximum throughput of 120 tons/hr, with a maximum air throughput of 8,640 dscfm, using a Loadout Dust Collection System for particulate control, identified as 5503-5, each constructed in 1997, and exhausting to stack 5503-2.
- (r) One (1) DSW Packing Fugitive Dust Collector, identified as unit 71-7, with a maximum throughput of 0.1 tons/hr, with a maximum air throughput of 9,000 dscfm, using a baghouse for particulate control, constructed in 1977, and exhausting to stack 71-7.
- (s) One (1) RSP North Packing Line, identified as unit 577-2, with a maximum throughput of 18 tons/hr, with a maximum air throughput of 9,600 dscfm, using a baghouse* for particulate control, constructed in 1979 and modified in 2000, and exhausting to stack 577-2.
- (t) One (1) Gluten Receiver, identified as unit 5503-1, with a maximum throughput of 4.21 tons/hr, with a maximum air throughput of 18,580 dscfm, using a baghouse* for particulate control, constructed in 1997, and exhausting to stack 5503-1.
- (u) One (1) Pellet Cooler and one (1) Germ Cooler, identified as units 5502-5 and 5502-6, with a maximum throughput of 19.36 tons/hr and 4.21 tons/hr respectively, with maximum air throughputs of 13,790 dscfm and 12,080 dscfm respectively, each using a high efficiency cyclone for particulate control, each constructed in 1997, and exhausting to stacks 5502-5 and 5502-6.
- (v) Two (2) Loose Feed Bins, collectively identified as unit 5502-4, each with a maximum throughput of 19.36 tons/hr, using a baghouse for particulate control, constructed in 1997, and exhausting to stack 5502-3.
- (w) One (1) Hammer Mill, identified as unit 5502-3, with a maximum throughput of 19.36 tons/hr, using a baghouse for particulate control, constructed in 1997, and exhausting to stack 5502-3.
- (x) One (1) DSE Bag Slitter, identified as unit 42-10, with a maximum throughput of 10 tons/hr, with a maximum air throughput of 5,000 dscfm, using a baghouse for particulate control, constructed in 1987, and exhausting to stack 42-10.
- (y) One (1) P-6 Rework Station, identified as unit 54-1, with a maximum throughput of 7.5 tons/hr, using a baghouse for particulate control, constructed in 1987, and exhausting to stack 54-1.
- (z) One (1) RSP Hopper #4, identified as unit 577-5, with a maximum air throughput of 4,500

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dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-5.

- (aa) One (1) RSP Hopper #6, identified as unit 577-6, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-6.
- (bb) One (1) RSP Hopper #5, identified as unit 577-7, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-7.
- (cc) One (1) RSP Hopper #1, identified as unit 577-8, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-8.
- (dd) One (1) RSP Hopper #2, identified as unit 577-9, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-9.
- (ee) One (1) RSP Hopper #3, identified as unit 577-10, with a maximum air throughput of 4,500 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 577-10.
- (ff) One (1) Industrial Packer, identified as unit 71-1, with a maximum air throughput of 5,300 dscfm, using a baghouse for particulate control, constructed in 1994, and exhausting to stack 71-1.
- (gg) Two (2) Spray Dryer Product Receivers, identified as units 5549-3 and 5549-4, each with a maximum air throughput of 1,700 dscfm, each using a baghouse* for particulate control, each constructed in 1993, and exhausting to stacks 5549-3 and 5549-4.
- (hh) One (1) #1 Spray Dryer Storage Hopper #1, identified as unit 5549-7, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 5549-7.
- (ii) One (1) #1 Spray Dryer Storage Hopper #2, identified as unit 5549-8, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 5549-8.
- (jj) One (1) #2 Spray Dryer Storage Hopper #3, identified as unit 5549-9, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 5549-9.
- (kk) One (1) #2 Spray Dryer Storage Hopper #4, identified as unit 5549-10, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, constructed in 1993, and exhausting to stack 5549-10.
- (II) One (1) Agglomerator Feed Storage Bin, identified as unit 5549-12, with a maximum air throughput of 1,530 dscfm, using a baghouse* for particulate control, constructed in 1995, and exhausting to stack 5549-12.
- (mm) One (1) Agglomerator, identified as unit 5549-13, with a maximum air throughput of 12,500 dscfm, using a baghouse for particulate control, constructed in 1995, including one (1) natural gas-fired burner with a maximum heat input capacity of 1.824 MMBtu/hr, and exhausting to stack 5549-13.

- (nn) One (1) Agglomerator Equipment Aspiration, identified as unit 5549-14, with a maximum air throughput of 2,840 dscfm, using a baghouse** for particulate control, constructed in 1995, and exhausting to stack 5549-14.
- (oo) One (1) spray agglomeration process, constructed in 2000, consisting of the following units:
 - (1) Bulk Bag Packer Filter Receiver, identified as unit 5549-17, with a maximum air throughput of 450 dscfm, using a baghouse* for particulate control, and exhausting to stack 5549-17.
 - Line 1 Middle Packer, identified as unit 5549-18, with a maximum air throughput of 4,600 dscfm, using a baghouse* for particulate control, and exhausting to stack 5549-18.
 - (3) Line 1 North Packer, identified as unit 5549-19, with a maximum air throughput of 5,400 dscfm, using a baghouse* for particulate control, and exhausting to stack 5549-19.
 - (4) #2 Fugitive Dust Collector, identified as emission unit 5549-20, with a maximum throughput of 14,000 dscfm, using a baghouse for particulate control, and exhausting to stack 5549-20.
 - (5) Line 1 Fugitive Dust Collector, identified as unit 5549-21, with a maximum air throughput of 14,000 dscfm, using a baghouse for particulate control, and exhausting to stack 5549-21.
 - (6) Line 2 Packer, identified as unit 5549-26, with a maximum air throughput of 5,400 dscfm, using a baghouse* for particulate control, and exhausting to stack 5549-26.
- (pp) One (1) Corn Truck Dump, identified as unit 56-1, with a maximum throughput of 448 tons/hr, with a maximum air throughput of 35,000 dscfm, using a baghouse for particulate control, constructed prior to 1968, and modified in 1996, and exhausting to stack 56-1.

*The control device is considered both integral to the process and inherent to the process for CAM applicability. Inherent process equipment is not subject to Compliance Assurance Monitoring (CAM).

**The control device is considered inherent to the process for CAM applicability. Inherent process equipment is not subject to Compliance Assurance Monitoring (CAM).

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

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

- D.2.1 Prevention of Significant Deterioration (PSD) and Emission Offset Minor Limits [326 IAC 2-2][326 IAC 2-3]
 - (a) In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-3 (Emission Offset) not applicable to the 1993 Modification (CP 097-00042-93-01, issued on May 10, 1993) and the 1997 Modification (CP097-00042-97-01, issued on March 24, 1997), the Permittee shall comply with the following:
 - (1) Pursuant to CP 097-00042-97-01, issued on March 24, 1997, PM and PM10 emissions shall not exceed the limits in the table below:

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Unit (Stack)	PM Limits			PM10 Limits		
Unit (Stack)	(gr/dscf)	(lb/hr)	(ton/yr)	(gr/dscf)	(lb/hr)	(ton/yr)
5549-3 (5549-3)	0.01	0.146	0.64	0.01	0.146	0.64
5549-7 (5549-7)	0.01	0.039	0.17	0.01	0.039	0.17
5549-8 (5549-8)	0.01	0.039	0.17	0.01	0.039	0.17
5549-9 (5549-9)	0.01	0.039	0.17	0.01	0.039	0.17
5549-10 (5549-10)	0.01	0.039	0.17	0.01	0.039	0.17

(2) Pursuant to T097-34650-00042, PM and PM10 emissions shall not exceed the limits in the table below:

Linit (Stook)		PM Limits		PM10 Limits		
Unit (Stack)	(gr/dscf)	(lb/hr)	(ton/yr)	(gr/dscf)	(lb/hr)	(ton/yr)
577-5 (577-5)	0.01	0.386	1.69	0.01	0.386	1.69
577-6 (577-6)	0.01	0.386	1.69	0.01	0.386	1.69
577-7 (577-7)	0.01	0.386	1.69	0.01	0.386	1.69
577-8 (577-8)	0.01	0.386	1.69	0.01	0.386	1.69
577-9 (577-9)	0.01	0.386	1.69	0.01	0.386	1.69
577-10 (577-10)	0.01	0.386	1.69	0.01	0.386	1.69

Compliance with these limits, in combination with other limits, will limit the net emissions increase of the 1993 Modification (CP 097-00042-93-01) and 1997 Modification (CP 097-00042-97-01) each to less than twenty-five (25) tons of PM and fifteen (15) tons of PM10 per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-3 (Emission Offset) and 326 IAC 2-2 (Prevention of Significant Deterioration not applicable to the 1993 and 1997 Modifications.

- (b) In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-3 (Emission Offset) not applicable to the 1997 Modification (CP 097-00042-97-01, issued on March 24, 1997) and in order to render the requirements of 326 IAC 2-2 not applicable to the 1999 Modification (CP 097-00042-99-01, issued on February 25, 1999) and the 2000 Modification (SSM No. 097-11362-00042, issued on August 30, 2000), the Permittee shall comply with the following:
 - (1) Pursuant to CP 097-00042-97-01, issued on March 24, 1997, PM and PM10 emissions shall not exceed the limits in the table below:

Unit (Stack)		PM Limits		PM10 Limits		
Utili (Stack)	(gr/dscf)	(lb/hr)	(ton/yr)	(gr/dscf)	(lb/hr)	(ton/yr)
5549-4 (5549-4)	0.01	0.146	0.64	0.01	0.146	0.64
5549-12 (5549-12)	0.01	0.13	0.57	0.01	0.13	0.57
5549-14 (5549-14)	0.01	0.244	1.07	0.01	0.244	1.07

- (2) Pursuant to CP 097-00042-97-01, issued on March 24, 1997, the input of starch to unit 5549-13 shall not exceed 14,010 tons per twelve (12) consecutive month period, with compliance determined at the end of each month, and the emission rate shall not exceed 0.61 pound of PM per ton of starch and 0.61 pound of PM10 per ton of starch.
- (3) Pursuant to SPM No. 097-24287-00042, issued on August 23, 2007, PM and PM10 emissions shall not exceed the limits in the table below:

Linit (Ctook)	PM Limits			PM10 Limits		
Unit (Stack)	(gr/dscf)	(lb/hr)	(ton/yr)	(gr/dscf)	(lb/hr)	(ton/yr)
5502-5 (5502-5)	0.01	1.182	5.177	0.01	1.182	5.177

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Unit (Stack)	PM Limits			PM10 Limits		
Unit (Stack)	(gr/dscf)	(lb/hr)	(ton/yr)	(gr/dscf)	(lb/hr)	(ton/yr)
5503-1 (5503-1)	0.01	1.593	6.977	0.01	1.593	6.977

(4) Pursuant to SPM No. 097-23497-00042, issued on November 14, 2008, PM and PM10 emissions shall not exceed the limits in the table below:

Unit (Stack)		PM Limits		PM10 Limits		
Offit (Stack)	(gr/dscf)	(lb/hr)	(ton/yr)	(gr/dscf)	(lb/hr)	(ton/yr)
5502-3 (5502-3)						
5502-4 (5502-3)	0.01	1.003	4.393	0.01	1.003	4.393
5503-6 (5502-3)						

(5) Pursuant to SPM No. 097-34377-00042, issued on January 22, 2015, PM and PM10 emissions shall not exceed the limits in the table below:

Unit (Stack)		PM Limits			PM10 Limits		
Offit (Stack)	(gr/dscf)	(lb/hr)	(ton/yr)	(gr/dscf)	(lb/hr)	(ton/yr)	
5503-2 (5503-2)			3.24	0.01	0.74	3.24	
5503-3 (5503-2)	0.01	0.74					
5503-4 (5503-2)	0.01						
5503-5 (5503-2)							
5502-6 (5502-6)	0.01	1.035	4.533	0.01	1.035	4.533	

(6) Pursuant to T097-34650-00042, PM and PM10 emissions shall not exceed the limits in the table below:

Linit (Stools)	PM Limits			PM10 Limits		
Unit (Stack)	(gr/dscf)	(lb/hr)	(ton/yr)	(gr/dscf)	(lb/hr)	(ton/yr)
5552-2 (5552-2)	0.01	0.03	0.13	0.01	0.03	0.13
5552-1 (5552-1)	0.01	0.21	0.92	0.01	0.21	0.92

Compliance with these limits, in combination with other limits, will limit the net emissions increase of the 1997 Modification (CP 097-00042-97-01), the 1999 Modification (CP 097-00042-99-01) and the 2000 Modification (SSM No. 097-11362-00042) each to less than twenty-five (25) tons of PM and fifteen (15) tons of PM10 per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-3 (Emission Offset) and 326 IAC 2-2 (Prevention of Significant Deterioration not applicable to the 1997 Modification and shall render the requirements of 326 IAC 2-2 not applicable to the 1999 and 2000 Modifications.

- (c) In order to render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the 2000 Modification (SSM No. 097-11362-00042, issued on August 30, 2000), the Permittee shall comply with the following:
 - (1) Pursuant to T097-7714-00042, issued on April 14, 2004, PM and PM10 emissions shall not exceed the limits in the table below:

Linit (Ctook)	PM Limits			PM10 Limits		
Unit (Stack)	(gr/dscf)	(lb/hr)	(ton/yr)	(gr/dscf)	(lb/hr)	(ton/yr)
5549-21 (5549-21)	0.01	1.2	5.27	0.01	1.2	5.27
5549-26 (5549-26)	0.01	0.26	1.16	0.01	0.26	1.16

(2) Pursuant to T097-34650-00042, PM and PM10 emissions shall not exceed the limits in the table below:

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Unit (Stack)	PM Limits			PM10 Limits		
Utili (Stack)	(gr/dscf)	(lb/hr)	(ton/yr)	(gr/dscf)	(lb/hr)	(ton/yr)
577-2 (577-2)	0.01	0.82	3.59	0.01	0.82	3.59
5549-17 (5549-17)	0.01	0.04	0.18	0.01	0.04	0.18
5549-18 (5514-18)	0.01	0.28	1.23	0.01	0.28	1.23
5549-19 (5549-19)	0.01	0.24	1.05	0.01	0.24	1.05
5549-20 (5549-20)	0.01	0.93	4.07	0.01	0.93	4.07

Compliance with these limits, in combination with other limits, will limit the net emissions increase of the 2000 Modification (SSM No. 097-11362-00042) to less than twenty-five (25) tons of PM and fifteen (15) tons of PM10 per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the 2000 Modification.

D.2.2 Particulate Matter [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a), particulate matter emissions from units 54-1, 71-7, 577-2, 577-5 through 577-10, 5502-3, 5502-4, 5502-5, 5502-6, 5503-1 through 5503-6, 5549-3, 5549-4, 5549-7 through 5549-10, 5549-12, 5549-13, 5549-14, the spray agglomeration process (consisting of units 5549-17 through 5549-21 and 5549-26), 5552-1, and 5552-2 shall each not exceed 0.03 grain per dry standard cubic foot (gr/dscf).

D.2.3 Particulate Matter [326 IAC 6.5-6-25]

Pursuant to 326 IAC 6.5-6-25(a), units 42-10, 56-1, and 71-1 shall meet the emission limits as indicated in the table below:

Unit	PM Limit (gr/dscf)	PM Limit (ton/yr)
42-10	0.030	2.4
56-1	0.020	7.02
71-1	0.030	0.9

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

A Preventive Maintenance Plan is required for these units 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 [326 IAC 2-7-5(1)]

D.2.5 Particulate Control

- (a) In order to ensure compliance with Conditions D.2.1, D.2.2, and D.2.3, the baghouses for particulate control, including those integral to the process, shall be in operation and control particulate emissions from the respective units listed in this section at all times those units are in operation.
- (b) In order to ensure compliance with Conditions D.2.1 and D.2.2, the high efficiency cyclones for particulate control shall be in operation and control particulate emissions from units 5502-5 and 5502-6 at all times the respective units are in operation.

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

Visible Emissions Notations [40 CFR 64]

- Visible emission notations of the exhaust from stacks 42-10, 56-1, 71-7, 5502-3, 5502-5, (a) 5502-6, 5503-2, 5549-13, 5549-20, and 5549-21 shall be performed once per day during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.7 Visible Emissions Notations

- Visible emission notations of the exhaust from stacks 577-2, 577-5 through 577-10, 5503-(a) 1, 5549-3, 5549-4, 5549-7 through 5549-10, 5549-12, 5549-14, 5549-17 through 5549-19, 5549-26, 5552-1, and 5552-2 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.
- In the case of batch or discontinuous operations, readings shall be taken during that part (c) of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.2.8 Parametric Monitoring for Baghouses [40 CFR 64]

The Permittee shall monitor and record the pressure drop across the baghouses used in conjunction with units 42-10, 56-1, 71-7, 5502-3, 5502-4, 5503-2, 5503-3, 5503-4, 5503-6, 5549-13, 5549-20, and 5549-21 at least once per day when the associated units are in operation. When for any one reading, a pressure drop is outside the normal range, the Permittee shall take a reasonable response. The normal ranges for these units are indicated in the table below, unless a different upper-bound or lower-bound value for these ranges 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 drop that is

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outside the above mentioned ranges is not a devation from this permit. Failure to take response steps shall be considered a devation from this permit.

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Unit ID	Stack ID	Normal Pressure Drop Range (inches of water)
42-10	42-10	1.0 - 8.0
56-1	56-1	1.0 - 8.0
71-7	71-7	1.0 - 8.0
5502-3		
5502-4	5502-3	1.0 - 8.0
5503-6		
5503-2		
5503-3	5503-2	0.5 - 7.0
5503-4		
5549-13	5549-13	1.0 - 8.0
5549-20	5549-20	0.5 - 7.0
5549-21	5549-21	0.5 - 7.0

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.

Broken or Failed Bag Detection D.2.9

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

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

D.2.10 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions 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).

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

D.2.11 Record Keeping Requirements

To document the compliance status with Condition D.2.1(b)(2), the Permittee shall maintain monthly records of the input of starch for unit 5549-13.

- (b) To document the compliance status with Condition D.2.6, the Permittee shall maintain records of the daily visible emission notations of the exhaust from stacks 42-10, 56-1, 71-7, 5502-3, 5502-5, 5502-6, 5503-2, 5549-13, 5549-20, and 5549-21. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (c) To document the compliance status with Condition D.2.7, the Permittee shall maintain records of the daily visible emission notations of the exhaust from stacks 577-2, 577-5 through 577-10, 5503-1, 5549-3, 5549-4, 5549-7 through 5549-10, 5549-12, 5549-14, 5549-17 through 5549-19, 5549-26, 5552-1, and 5552-2. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (d) To document the compliance status with Condition D.2.8, the Permittee shall maintain records of the daily pressure drop across the baghouses used in conjunction with units 42-10, 56-1, 71-7, 5502-3, 5502-4, 5503-2, 5503-3, 5503-4, 5503-6, 5549-13, 5549-20, and 5549-21. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (e) Section C General Record Keeping Requirements of this permit contains the Permittee's obligation with regard to the records required by this condition.

D.2.12 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.2.1(b)(2) shall be submitted not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The reports submitted by the Permittee 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).

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SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (qq) Grinding and machining operations controlled with fabric filters with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring, buffing, polishing, abrasive blasting, pneumatic conveying, and woodworking operations:
 - (1) One (1) DSE Hopper #9, identified as unit 42-3A, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 6.
 - (2) One (1) DSE Hopper #10, identified as unit 42-3B, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 7.
 - (3) One (1) DSE Hopper #11, identified as unit 42-3C, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 43-3C.
 - (4) One (1) DSE Hopper #12, identified as unit 42-3D, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 9.
 - (5) One (1) DSE Hopper #13, identified as unit 42-3E, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 10.
 - (6) One (1) DSE Hopper #14, identified as unit 42-3F, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack11.
 - (7) One (1) DSE Hopper #2, identified as unit 42-7A, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 14.
 - (8) One (1) DSE Hopper #4, identified as unit 42-7B, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 14.
 - (9) One (1) DSE Hopper #6, identified as unit 42-7C, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 16.
 - (10) One (1) DSE Hopper #1, identified as unit 42-8A, with a maximum throughput of 10 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 17A.
 - (11) One (1) DSE Hopper #3, identified as unit 42-8B, with a maximum throughput of 10 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 17B.
 - (12) One (1) DSE Hopper #5, identified as unit 42-8C, with a maximum throughput of 10

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tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 17C.

- (13) One (1) DSE Hopper #7, identified as unit 42-8D, with a maximum throughput of 10 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 17D.
- (14) One (1) CWS #8; identified as unit 63-1A, with a maximum throughput of 1 tons/hr, with a maximum air throughput of 2,400 dscfm, using a baghouse* for particulate control, constructed prior to 1968, and modified in 1976, and exhausting to stack 46A.
- (15) One (1) CWS South East, identified as unit 63-1B, with maximum throughput of 1 ton/hr, with a maximum air throughput of 2,400 dscfm, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 46B.
- (16) One (1) CWS South Mill, identified as unit 63-17, constructed in 1977, with a maximum throughput of 0.8 tons/hr, using a baghouse** (replaced baghouse in 2008) for particulate control, and exhausting to stack 53.
- (rr) One (1) Grain Elevator, identified as unit 56-2, with a maximum throughput of 80 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 24.
- (ss) Starch operations, starch drying, starch handling and starch packaging consisting of the following units:
 - (1) One (1) Starch Mixer 1 Filter Receiver, identified as 152-1, with a maximum air throughput of 500 dscfm, using a baghouse* for particulate control, constructed in 2002, and exhausting to stack 152-1.
 - (2) One (1) Mixer 1 baghouse, identified as 152-2, with a maximum air throughput of 1,000 dscfm, using a baghouse* for particulate control, constructed in 2002 and approved in 2011 for modification, and exhausting to stack 152-2.
 - One (1) Starch Mixer 2 Filter/Receiver, identified as 152-4 (Bld 852A), with a maximum air throughput of 600 dscfm, using a baghouse* for particulate control, constructed on in 2002, and exhausting to stack152-4.
 - (4) One (1) Starch Mixer 2, identified as 152-5 (Bld 852A), with a maximum air throughput of 1,000 dscfm, using a baghouse* for particulate control, constructed in 2002, and exhausting to stack 152-5.
 - (5) One (1) Starch Storage Hopper, identified as 152-6, with a maximum throughput of 15 tons/hr, using a baghouse** for particulate control, constructed in 2003, and exhausting to stack 152-6.
 - (6) One (1) Starch Filter/Receiver 2 Bld 852, identified as unit 152-7, with a maximum air throughput of 500 dscfm, using a baghouse** for particulate control, constructed in 2004, and exhausting to stack 152-7.
 - (7) One (1) Starch Mixer 4 Bld 852A Filter Receiver, identified as unit 152-8, with a maximum air throughput of 600 dscfm, using a baghouse** for particulate control, constructed in 2004, and exhausting to stack 152-8.
 - (8) One (1) Starch Mixer 4 Bld 852A, identified as unit 152-9, with a maximum air throughput of 20 dscfm, using a baghouse** for particulate control, constructed in

2004, and exhausting to stack 152-9.

- (9) One (1) Starch Mixer 3 Bld 852A Filter Receiver, identified as unit 152-10, with a maximum air 600 dscfm, using a baghouse** for particulate control, constructed in 2004, and exhausting to stack 152-10.
- (10) One (1) Starch Mixer 3 Bld 852A, identified as unit 152-11, with a maximum air throughput of 1,000 dscfm, using a baghouse* for particulate control, constructed in 2004 and approved in 2011 for modification, and exhausting to stack 152-11.
- (11) One (1) Bulk Bag Receiver, identified as 152-12, with a maximum air throughput of 800 dscfm, using a baghouse* for particulate control, constructed in 2004, and exhausting to stack 152-12.
- (12) One (1) Starch Storage Silo #2 Receiver, identified as Bin TF41820 (formerly unit 61-21), with a maximum throughput of 15 tons/hr, with a maximum air throughput of 589 dscfm, using a baghouse* for particulate control, constructed in 1976, modified in 1981, approved in 2010 for additional modification, and exhausting to stack 152-3.
- (13) One (1) Starch Cooling and Conveying System, identified as TF41818 (formerly unit 581-2), with a maximum air throughput of 14,000 dscfm, using a baghouse* for particulate control, constructed in 1983 and approved in 2010 for modification, and exhausting to stack TF41818.
- (14) One (1) Blending Bin, identified as 152-15 (formerly unit TF41819), with a maximum air throughput of 4,000 dscfm, using a baghouse* for particulate control, approved in 2010 for construction, and exhausting to stack DC41819.
- (15) One (1) Starch Hopper D/C, identified as 128-3, with a maximum throughput of 12.5 tons/hr, using a baghouse* for particulate control, constructed in 1983 and modified in 2000, and exhausting to stack 128-3.
- (16) One (1) DSW Chemical Blender Bag Slitter, identified as unit 61-15, with a maximum throughput of 7.5 tons/hr, using a baghouse** for particulate control, constructed prior to 1974, and exhausting to stack 35.
- (17) One (1) Sodium Sulfate Conveying System, including a silo and receiver, identified as units 40-1A and 40-1B, with a maximum throughput of 15 tons/hr, with maximum air throughputs of 1,400 dscfm and 1,250 dscfm, using two baghouses* for particulate control, constructed prior to1968 and modified in 1998, and exhausting to stacks 40-1A and 40-1B.
- (18) One (1) DSE North Packer, identified as unit 42-1, with a maximum throughput of 30 tons/hr, using a baghouse* for particulate control, constructed prior to 1968 and modified in 1996, and exhausting to stack 5.
- (19) One (1) DSE Hopper #8, identified as unit 42-4, with a maximum throughput of 13.95 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 17E.
- (20) One (1) DSE Negative Receiver, identified as unit 42-6, with a maximum throughput of 10 tons/hr, using a baghouse* for particulate control, constructed prior to1968, and exhausting to stack 13.
- (21) One (1) DSE South Packer, identified as unit 42-9, with a maximum throughput of 30

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tons/hr, using a baghouse* for particulate control, constructed prior to 1968 and modified in 1996, and exhausting to stack 18.

- One (1) DSE Railcar Loading East Track, identified as unit 42-11, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 20.
- (23) One (1) DSE Railcar Loading West Track, identified as unit 42-12, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 21.
- One (1) DSE Bulk Bag System, identified as unit 42-13, with a maximum throughput of 30 tons/hr, with a maximum air throughput of 4,500 dscfm, using a receiver/baghouse* for particulate control, constructed in 1997, and exhausting to stack 106.
- One (1) Dextrin Blend, identified as unit 61-14, with a maximum throughput of 7.5 tons/hr, using hopper/filter receiver using a baghouse** for particulate control, constructed prior to 1973, and exhausting to stack 61-14.
- One (1) DSW Chemical Blender Tank, identified as unit 61-14A, with a maximum throughput of 7.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 34.
- One (1) CWS #7 Dryer Receiver, identified as unit 63-3, with a maximum air throughput of 2,000 dscfm, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 47.
- (28) One (1) CWS North Mill, identified as unit 63-4, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1974, and exhausting to stack 48.
- (29) One (1) CWS North Product, identified as unit 63-5, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1974, and exhausting to stack 49.
- (30) One (1) CWS Packer, identified as unit 63-9, with a maximum throughput of 20 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 50.
- (31) One (1) Liquid Glue Bag Dump, identified as unit 63-12, with a maximum throughput of 8 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 51.
- One (1) CWS #9 and #10 Dryers Receiver, identified as unit 63-15, with a maximum air throughput of 3,600 dscfm, using a baghouse* for particulate control, constructed in 1975 and modified in 2010, and exhausting to stack 52.
- (33) CWS #11 Dryer and CWS #12 and #13 Dryers, identified as units 63-16A and 63-16B, each with a maximum air throughput of 3,300 dscfm, using two baghouses* for particulate control, constructed prior to August 7, 1977, and exhausting to stacks 54A and 54B.
- One (1) CWS South Raw Material Dump, identified as unit 63-18, with a maximum throughput of 3.5 tons/hr, using a baghouse** for particulate control, constructed in

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- One (1) DSW Negative Receiver, identified as unit 63-20, with a maximum throughput of 5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 56.
- (36) RESERVED
- (37) One (1) Negative Receiver, identified as unit 71-3, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 71-3.
- (38) RESERVED
- (39) RESERVED
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- (51) One (1) DSW Bulk Car Loading, identified as unit 71-8, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed in 1971, and exhausting to stack 72.
- (52) One (1) RSP South Bulk Bag Packing, identified as unit 577-1, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 77.
- (53) One (1) FG Bulk Bag Bin Vent Bld 800, identified as unit FA-60582, with a maximum throughput of 18 tons/hr, with a maximum air throughput of 3,800 dscfm, using a baghouse** for particulate control, constructed in 2003, and exhausting to stack FA-60582.
- One (1) RSP South Packing Line, identified as unit 577-3, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 79.

- One (1) RSP Bulk Loading System A, identified as unit 577-4, with a maximum throughput of 18 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 80.
- One (1) RSP Bulk Loading Fugitive Dust Collector**; identified as unit 577-4A, with a maximum throughput of 18 tons/hr and an actual throughput of 18 lbs/hr, constructed in 1986, and exhausting to stack 81.
- (56a) One (1) aspiration line, constructed in 2017, assisting air flow within the DSS bulk loadout screener SR60585, and exhausting to RSP Bulk Loading Fugitive Dust Collector, 577-4A.
- (57) One (1) CWS Conveying Cyclone Operation, identified as unit 578-1, with a maximum throughput of 7.5 tons/hr, using a baghouse** for particulate control, returned to service in 2008, and exhausting through stack 578-1.
- (58) One (1) CWS Packing Hopper, identified as unit 578-2, with a maximum throughput of 1 tons/hr, using a baghouse* for particulate control, constructed in 1978, and exhausting to stack 89.
- (59) One (1) CWS Milling System, identified as unit 578-3, with a maximum throughput of 1.5 tons/hr, using a baghouse* for particulate control, constructed in 1978, and approved for modification in 2018, exhausting to stack 578-3, consisting of one (1) Aspiration Line, constructed in 2018, assisting air flow within the CWS Milling System, and a fine grind mill, using a cyclone (CY-41146) for particulate control, and exhausting to stack 578-3.
- (59a) One (1) Drum A Product Receiver, identified as DC700, with a maximum flow rate of 1750 dscfm, constructed in 1978, modified on April 13, 2016 and 2018, using a dust collector for control, and exhausting to stack 578-4.
- (59b) One (1) Drum B Product Receiver, identified as DC701, with a maximum flow rate of 1750 dscfm, constructed in 1978, modified on April 13, 2016 and 2018, using a dust collector for control, and exhausting to stack 578-5.
- (60) One (1) Product Bin 93, identified as unit TF31993 (formerly unit TF31901), with a maximum air throughput of 3,000 dscfm, using product recovery DC-31993* (Bld 630) for particulate control, constructed in 2004 and approved in 2015 for modification, and exhausting to stack 1-158.
- (61) One (1) Product Bin 92, identified as unit TF31992 (formerly unit TF31902), with a maximum air throughput of 2,000 dscfm, using product recovery DC-31992* (Bld 630) for particulate control, constructed in 2004 and approved in 2015 for modification, and exhausting to stack 2-158.
- (62) One (1) Product Bin 91, identified as unit TF31991, with a maximum air throughput of 2,000 dscfm, using product recovery DC-31991* (Bld 630) for particulate control, constructed in 2004 and approved in 2015 for modification, and exhausting to stack 3-158.
- (63) One (1) Surge Tank Bin 158-3, identified as unit SH31913, with a maximum air throughput of 200 dscfm, using product recovery DC-31911** (Bld 630) for particulate control, constructed in 2004, and exhausting to stack 7-158.
- (64) One (1) Bulk Bag Unload Bin 158-4, identified as unit DC-31900 (Bld 630) with a

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maximum air throughput of 600 dscfm, using a dust collector* for particulate control, constructed in 2004, and exhausting to stack 8-158.

- (65) One (1) FBR1 Exhaust, identified as unit TR31912, with a maximum air throughput of 8,800 dscfm, using product recovery metal filters** (Bld 630) for particulate control, constructed in 2004, and exhausting to stack 5-158.
- (66) One (1) FBR1 Cooling System, identified as TR31913, approved in 2014 for installation, with a product throughput of 15,000 pounds per hour, using a cyclone (CY31917)* and baghouse (DC31917)* for product recovery and particulate control, and exhausting to stack 9-158.
- (67) One (1) starch dryer, identified as unit T-1, with a maximum production rate of 300 lbs/hr, using a product collector/cyclone and dust collector* for particulate control, constructed in 2005, and exhausting to stack T-1.
- (68) One (1) Line 1 South Packing Hopper, identified as unit 5549-22, with a maximum air throughput of 4,800 dscfm, using a baghouse* for particulate control, constructed in 2006, and exhausting to stack 5549-22.
- (69) Three (3) Base Bins (80, 81, and 82), identified as units TF31980, TF31981, and TF31982, respectively, each with a maximum air throughput of 1,275 dscfm, using product recovery DC31980*, DC31981*, and DC31982*, respectively, for particulate control, approved in 2015 for construction, and exhausting to stacks 10-158, 11-158, and 12-158.
- (70) One (1) FBR2 Exhaust, identified as unit TR31922, with a maximum air throughput of 6,000 dscfm, using product recovery metal filters* for particulate control, approved in 2015 for construction, and exhausting to stack 14-158.
- (71) One (1) FBR2 Cooling Reactor, identified as unit TR31923, with a maximum air throughput of 4,300 dscfm, using product recovery metal filters* for particulate control, approved in 2015 for construction, and exhausting to stack 15-158.
- (72) One (1) Product Bin 90, identified as unit TF31990, using product recovery DC31990* for particulate control, with a maximum air throughput of 2,200 dscfm, approved in 2015 for construction, and exhausting to stack 13-158.
- (73) One (1) Packing Receiver, identified as unit TS32001, with a maximum throughput of 20 metric tons/hr, with a maximum air throughput of 3,300 dscfm, using product recovery DC32001* for particulate control, approved in 2015 for construction, and exhausting to stack 71-10.
- (74) One (1) Base Bin, identified as TF41822, constructed in 2017, with a maximum air throughput of 2,060 dscfm, using product recovery DC41822* as particulate control, and exhausting to stack 152-13.
- (75) One (1) DSW Product Silo, identified as unit TF34031, constructed in 2018, with a maximum storage capacity of 45 tons and a maximum throughput capacity of 1.75 tons per hour, using baghouse DC34031 for particulate control, exhausting to stack S34031.
- (76) One (1) DSW Product Silo, identified as unit TF34032, constructed in 2018, with a maximum storage capacity of 45 tons and a maximum throughput capacity of 1.75 tons per hour, using baghouse DC34032 for particulate control, exhausting to stack

S34032.

(77) One (1) DSW Product Silo, identified as unit TF34033, constructed in 2018, with a maximum storage capacity of 45 tons and a maximum throughput capacity of 1.75 tons per hour, using baghouse DC34033 for particulate control, exhausting to stack S34033.

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- (78) One (1) DSW Product Silo, identified as unit TF34034, constructed in 2018, with a maximum storage capacity of 45 tons and a maximum throughput capacity of 1.75 tons per hour, using baghouse DC34034 for particulate control, exhausting to stack S34034.
- *The control device is considered both integral to the process and inherent to the process for CAM applicability. Inherent process equipment is not subject to Compliance Assurance Monitoring (CAM).
- **The control device is considered inherent to the process for CAM applicability. Inherent process equipment is not subject to Compliance Assurance Monitoring (CAM).

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

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

D.3.1 PSD and Nonattainment NSR Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]

(a) Pursuant to SPM No. 097-29534-00042, issued on November 22, 2010, in order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable, the PM, PM10 and PM2.5 emissions from stacks TF41818, DC41819, and 152-3 shall be less than the emission limits listed in the table below:

Equipment Description	Stack ID	PM Emission Limit (lb/hr)	PM10 Emission Limit (lb/hr)	PM2.5 Emission Limit (lb/hr)
One (1) Starch Cooling and Conveying System (TF41818)	stack TF41818	3.97	2.38	1.59
One (1) Blending Bin (152-15)	stack DC41819	1.12	0.67	0.45
One (1) Starch Storage Silo #2 Receiver (TF41820)	stack 152-3	0.55	0.33	0.22

Compliance with the above limits will limit the potential to emit from this modification to less than twenty-five (25) tons of PM, fifteen (15) tons of PM $_{10}$, and ten (10) tons of PM $_{2.5}$ per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the 2010 Modification.

(b) Pursuant to SPM No. 097-30227-00046, issued on October 12, 2011, in order to render the requirements of 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable, the PM, PM10 and PM2.5 emissions shall be less than the emission limits listed in the table below:

Unit Number	Stack ID	PM Emission Limit (lb/hr)	PM10 Emission Limit (lb/hr)	PM2.5 Emission Limit (lb/hr)
40-1A	stack 40-1A	0.13	0.13	0.13

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Unit Number	Stack ID	PM Emission Limit (lb/hr)	PM10 Emission Limit (lb/hr)	PM2.5 Emission Limit (lb/hr)
40-1B	stack 40-1B	0.13	0.13	0.13
152-7	stack 152-7	0.43	0.30	0.17
152-8	stack 152-8	0.52	0.36	0.21
152-9	stack 152-9	0.10	0.05	0.05
152-10	stack 152-10	0.52	0.36	0.21
152-11	stack 152-11	0.86	0.60	0.34
FA-60582	stack FA-60582	1.63	0.80	0.65
152-12	stack 152-12	0.69	0.48	0.28
42-13	stack 106	0.50	0.10	0.10

Compliance with these limits will limit the potential to emit of the modification to less than twenty-five (25) tons of PM, fifteen (15) tons of PM10, and ten (10) tons of PM2.5 per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable to the 2011 Modification.

(c) Pursuant to MSM No. 097-35461-00042, issued on June 17, 2014, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the PM, PM10, and PM2.5 emissions from TR31913 shall be less than the emission limits listed in the table below:

Unit Number	Stack ID	PM Emission Limit (lb/hr)	PM10 Emission Limit (lb/hr)	PM2.5 Emission Limit (lb/hr)
TR31913	9-158	1.71	1.71	1.71

Compliance with these limits will limit the emissions increase of the modification to less than twenty-five (25) tons of PM, fifteen (15) tons of PM10, and ten (10) tons of PM2.5 per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the 2014 Modification.

(d) Pursuant to MSM No. 097-35115-00042, issued on January 7, 2015 and MSM No. 097-35748-00042, issued on May 6, 2015, in order to render the requirements of 326 IAC 2-2 (PSD) not applicable, the PM, PM10, and PM2.5 emissions shall be less than the emission limits listed in the table below:

Unit Number	Stack ID	PM Emission Limit (lb/hr)	PM10 Emission Limit (lb/hr)	PM2.5 Emission Limit (lb/hr)
TF31980	10-158	0.055	0.055	0.055
TF31981	11-158	0.055	0.055	0.055
TF31982	12-158	0.055	0.055	0.055
TR31922	14-158	0.514	0.514	0.514
TR31923	15-158	0.369	0.369	0.369
TF31990	13-158	0.094	0.094	0.094
TS32001	71-10	0.283	0.283	0.283

Compliance with these limits will limit the emissions increase of the modification to less than twenty-five (25) tons of PM, fifteen (15) tons of PM10, and ten (10) tons of PM2.5 per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the 2015 Modification.

(e) Pursuant to MSM No. 097-35115-00042, issued on January 7, 2015 and MSM No. 097-35748-00042, issued on May 6, 2015, in order to render the requirements of 326 IAC 2-2

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(PSD) not applicable, the PM, PM10, and PM2.5 emissions shall be less than the emission limits listed in the table below:

Unit Number	Stack ID	PM Emission Limit (lb/hr)	PM10 Emission Limit (lb/hr)	PM2.5 Emission Limit (lb/hr)
TF31980	10-158	0.055	0.055	0.055
TF31981	11-158	0.055	0.055	0.055
TF31982	12-158	0.055	0.055	0.055
TR31922	14-158	0.514	0.514	0.514
TR31923	15-158	0.369	0.369	0.369
TF31990	13-158	0.094	0.094	0.094
TS32001	71-10	0.283	0.283	0.283

Compliance with these limits will limit the emissions increase of the modification to less than twenty-five (25) tons of PM, fifteen (15) tons of PM10, and ten (10) tons of PM2.5 per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the 2015 Modification.

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

Emission Unit	PM (lb/hr)	PM10 (lb/hr)	PM2.5 (lb/hr)
DSW Product Silo TF34031	0.51	0.51	0.51
DSW Product Silo TF34032	0.51	0.51	0.51
DSW Product Silo TF34033	0.51	0.51	0.51
DSW Product Silo TF34034	0.51	0.51	0.51

Compliance with these limits, shall limit the potential to emit from the four (4) new DSW Product Silos of PM to less than twenty-five (25) tons per twelve (12) consecutive month period, PM_{10} to less than fifteen (15) tons per twelve (12) consecutive month period, and $PM_{2.5}$ to less than ten (10) tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2018 modification.

D.3.2 Particulate Matter [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a), particulate matter emissions from units 40-1A, 40-1B, 42-9, 42-11, 42-12, 42-13, 61-15, 63-1A, 63-1B, 63-3, 63-4, 63-5, 63-9, 63-12, 63-15, 63-16A, 63-16B, 63-17, 63-18, 63-20, 71-3, 71-8, 128-3, 152-1, 152-2, 152-4 through 152-12, 152-15, 577-1, 577-3, 577-4, 577-4A, 578-1, 578-2, 578-3, DC700, DC701, 5549-22, DC-31900, FA-60582, SH31913, TF31993, TF31992, TR31912, TR31913, TF31991, T-1, TF41818, TF41820, TF31980, TF31981, TF31982, TR31922, TR31923, TF31990, TS32001, TF41822, and TF34031, TF34032, TF34033, and TF34034 shall each not exceed 0.03 grain per dry standard cubic foot (gr/dscf).

D.3.3 Particulate Matter [326 IAC 6.5-6-25]

Pursuant to 326 IAC 6.5-6-25(a), the following units shall meet the emission limits as indicated in the table below:

Unit	PM Limit (gr/dscf)	PM Limit (ton/yr)
56-2	0.010	11.3
61-14A	0.029	0.6
61-14	0.028	1.2

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Unit	PM Limit (gr/dscf)	PM Limit (ton/yr)
42-4	0.029	2.3
42-1	0.030	0.9
42-6	0.03	2.5
42-8(A, B, C, and D)	0.030	4.2
42-7A	0.032	1.7
42-7B	0.032	1.7
42-7C	0.032	1.7
42-3A	0.032	1.8
42-3B	0.032	1.8
42-3C	0.032	1.8
42-3D	0.032	1.8
42-3E	0.032	1.8
42-3F	0.032	1.8

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

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

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

Particulate Control D.3.5

- (a) In order to ensure compliance with Conditions D.3.1, D.3.2, and D.3.3, the cyclones, baghouses, and metal filters for particulate control, including those integral to the process, shall be in operation and control particulate emissions from all units listed in this section at all times those respective units are in operation.
- In order to assure that the requirements of 326 IAC 2-2 (PSD) do not apply, the integral (b) controls for particulate control associated with the CWS Milling System (CY-41146 and Drum A and Drum B dust collectors) shall be in operation and control emissions from the emission units at all times the emission units (578-3, DC700, and DC701) are in operation.

Compliance with this condition, combined with the potential to emit particulate from all other emission units at the source, shall assure the particulate emissions from the entire source are less than 250 tons per twelve (12) consecutive month period and shall render the requirements of 326 IAC 2-2 (PSD) not applicable.

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

D.3.6 Visible Emissions Notations

- Visible emission notations of the exhaust from stacks 40-1A, 40-1B, 152-7, 152-8, 152-9, (a) 152-10, 152-11, FA-60582, 152-12, 53 (unit 63-17), 106 (unit 42-13), 10-158 (unit TF31980), 11-158 (unit TF31981), 12-158 (unit TF31982), 14-158 (unit TR31922), 15-158 (unit TR31923), 13-158 (unit TF31990), 71-10 (unit TS32001), 152-13 (unit TF41822), and S34031, S34032, S34033, and S34034 shall be performed once per week during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- For processes operated continuously, "normal" means those conditions prevailing, or (b) expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.3.7 Parametric Monitoring for Baghouses

The Permittee shall monitor and record the pressure drop across the baghouses used in conjunction with units TF41818, 152-15, TF41820, and TR31913 at least once per week when units TF41818, 152-15, TF41820, and TR31913 are in operation. When, for any one reading, the pressure drop across a baghouse is outside the normal range, the Permittee shall take a reasonable response. The normal ranges for these units are indicated in the table below, 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.

Unit ID	Stack ID	Normal Pressure Drop Range (inches of water)
TF41818	TF41818	1.0 - 8.0
152-15	DC41819	1.0 - 8.0
TF41820	152-3	1.0 - 8.0
TR31913	9-158	1.0 - 8.0

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 ever six (6) months.

D.3.8 Broken or Failed Bag Detection

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

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

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D.3.9 Cyclone Failure Detection

In the event that cyclone failure has been observed:

Failed units and the associated process will be shut down immediately until the failed units have been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the emissions 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).

Record Keeping and Reporting Requirements [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.3.6, the Permittee shall maintain records of the weekly visible emission notations of the exhaust from stacks 40-1A, 40-1B, 152-7, 152-8, 152-9, 152-10, 152-11, FA-60582, 152-12, 106 (unit 42-13), 10-158 (unit TF31980), 11-158 (unit TF31981), 12-158 (unit TF31982), 14-158 (unit TR31922), 15-158 (unit TR31923), 13-158 (unit TF31990), 71-10 (unit TS32001), 152-13 (unit TF41822), and S34031, S34032, S34033, and S34034. The Permittee shall include in its weekly record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that week).
- (b) To document the compliance status with Condition D.3.7, the Permittee shall maintain records of the weekly pressure drop readings across the baghouses used in conjunction with units TF41818, 152-15, TF41820, and TR31913. The Permittee shall include in its weekly record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that week).
- (c) Section C General Record Keeping Requirements of this permit contains the Permittee's obligation with regard to the records required by this condition.

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SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities:

- (a) Stationary fire pump engines, including:
 - (1) One (1) 210-horsepower diesel-fired emergency fire pump engine, identified as FP1, constructed in 2003. Under 40 CFR 63, Subpart ZZZZ, FP1 is considered an existing affected source.
 - (2) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP2, constructed in 2003. Under 40 CFR 63, Subpart ZZZZ, FP2 is considered an existing affected source.
 - (3) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP3, constructed in 2006. Under 40 CFR 63, Subpart ZZZZ, FP3 is considered a new affected source. Under 40 CFR 60, Subpart IIII, FP3 is considered an affected facility.
- (b) Combustion related activities including spaces heaters, process heaters, or boilers using natural gas-fired with heat input equal to or less than ten million (10,000,000) British thermal units per hour:
 - (1) One (1) process heater, Bld 630, natural gas fired, with maximum heat input capacity of 5.1 MMBtu/hr, identified as emission unit YX31914A, constructed in 2004 and venting out stack 158-6.
 - One (1) natural gas-fired FBR2 Burner, identified as unit FH31924, with a maximum capacity of 3.0 MMBtu/hr, approved in 2015 for construction, and exhausting to stack 16-158.
 - (3) Two (2) natural gas-fired Air Heater Burners, identified as Air Heater 1 and Air Heater 2, units EF31926A and EF31927A, respectively, approved in 2015 for construction, each with a maximum heat input capacity of 0.4 MMBtu/hr, and exhausting to stacks 17-158 and 18-158.
 - (4) Drover CWS direct-fired air heaters, with a maximum total heat input capacity of 4.50 MMBtu/hr.
- (c) Three (3) degreasing operations, identified as D1, D2, and D3, each with a maximum annual solvent usage of 465 gallons, and each resulting in potential uncontrolled VOC emissions of less than three (3) pounds per hour and fifteen (15) pounds per day.
- (d) Paved and unpaved roads and parking lots with public access.
- (e) Emissions from a laboratory, as defined in 326 IAC 2-7-1(21)(G).
- (f) A gasoline fuel transfer dispensing operation handling less than or equal to 1,300 gallons per day and less than 10,000 gallons per month, filling storage tanks having a capacity equal to or less than 10,500 gallons. Under 40 CFR 63, Subpart CCCCCC, this is considered an existing affected source.
- (g) A petroleum fuel other than gasoline dispensing facility, having a storage tank capacity less than or equal to 10,500 gallons, and dispensing 3,500 gallons per day or less.

- (h) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs equal to or less than 12,000 gallons.
- (i) Vessels storing the following: Lubricating oils, Hydraulic oils, Machining oils, Machining fluids.
- (j) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: abrasive blasting, identified as S1.
- (k) Three (3) acetic acid storage tanks, identified as T1, with a capacity no greater than sixteen thousand (16,000) gallons each.
- (I) Four (4) hydrochloric acid storage tanks, identified as T2, with a capacity no greater than sixteen thousand (16,000) gallons each.
- (m) Ten (10) small batch reactors, identified as Tanks 190, 191, 192, 193, 200, 201, 203, 211, 212, and 213, using no controls and exhausting to stacks 190, 191, 193, 200, 201, 203, 211, 212, and 213, respectively.

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

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

D.4.1 Particulate Matter [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a), particulate matter emissions from emergency fire pump engines FP1, FP2, and FP3; process heater YX31914A; FBR2 burner FH31924; Air Heater Burners EF31926A and EF31927A; Drover CWS direct-fired air heaters; and abrasive blasting S1 shall each not exceed 0.03 grain per dry standard cubic foot (gr/dscf).

D.4.2 Cold Cleaner Degreaser Control Equipment and Operating Requirements [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Degreaser Control and Equipment Operating Requirements), the Permittee shall:

- (a) Ensure the following control equipment and operating requirements are met:
 - (1) Equip the degreaser with a cover.
 - (2) Equip the degreaser with a device for draining cleaned parts.
 - (3) Close the degreaser cover whenever parts are not being handled in the degreaser.
 - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
 - (5) Provide a permanent, conspicuous label that lists the operating requirements in subdivisions (3), (4), (6), and (7).
 - (6) Store waste solvent only in closed containers.
 - (7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.

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- (b) Ensure the following additional control equipment and operating requirements are met:
 - (1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent used is insoluble in, and heavier than, water.
 - (C) A refrigerated chiller.
 - (D) Carbon adsorption.
 - (E) An alternative system of demonstrated equivalent or better control as those outlined in clauses (A) through (D) that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.
 - (2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.
 - (3) If used, solvent spray:
 - (A) must be a solid, fluid stream; and
 - (B) shall be applied at a pressure that does not cause excessive splashing.

D.4.3 Material Requirements for Cold Cleaner Degreasers [326 IAC 8-3-8]

Pursuant to 326 IAC 8-3-8 (Material Requirements for Cold Cleaner Degreasers), the Permittee shall not operate a cold cleaning degreaser with a solvent vapor pressure that exceeds one (1) millimeter of mercury (nineteen-thousandths (0.019) pound per square inch) measured at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

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

D.4.4 Record Keeping Requirements

- (a) To document the compliance status with Condition D.4.3, the Permittee shall maintain the following records for each purchase of solvent used in the cold cleaner degreasing operations. These records shall be retained on-site or accessible electronically for the most recent three (3) year period and shall be reasonably accessible for an additional two (2) year period.
 - (1) The name and address of the solvent supplier.
 - (2) The date of purchase.
 - (3) The type of solvent purchased.
 - (4) The total volume of the solvent purchased.
 - (5) The true vapor pressure of the solvent measured in millimeters of mercury at twenty (20) degrees Celsius (sixty-eight (68) degrees Fahrenheit).

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

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SECTION E.1 NSPS

Emissions Unit Description:

Insignificant Activities:

- (a) Stationary fire pump engines, including:
 - (3) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP3, constructed in 2006.Under 40 CFR 63, Subpart ZZZZ, FP3 is considered a new affected source. Under 40 CFR 60, Subpart IIII, FP3 is considered an affected facility.

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

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

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

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated as 326 IAC 12-1, apply to the one (1) diesel-fired emergency fire pump engine, identified as FP3, except when otherwise specified in 40 CFR Part 60, Subpart IIII.

E.1.2 Stationary Compression Ignition Internal Combustion Engines NSPS Requirements [40 CFR Part 60, Subpart IIII][326 IAC 12]

The Permittee shall comply with the provisions of 40 CFR Part 60, Subpart IIII (included as Attachment A of the operating permit), which are incorporated by reference as 326 IAC 12, for FP3 as follows:

- (1) 40 CFR 60.4200(a)(2)(ii)
- (2) 40 CFR 60.4205(c)
- (3) 40 CFR 60.4206
- (4) 40 CFR 60.4207(b)
- (5) 40 CFR 60.4208
- (6) 40 CFR 60.4209(a)
- (7) 40 CFR 60.4211(a), (b), (f), (g)(2)
- (8) 40 CFR 60.4214(b)
- (9) 40 CFR 60.4218
- (10) 40 CFR 60.4219
- (11) Table 4 to Subpart IIII of Part 60
- (121) Table 8 to Subpart IIII of Part 60

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SECTION E.2

NESHAP

Emissions Unit Description:

Insignificant Activities:

- (a) Stationary fire pump engines, including:
 - (1) One (1) 210-horsepower diesel-fired emergency fire pump engine, identified as FP1, constructed in 2003. Under 40 CFR 63, Subpart ZZZZ, FP1 is considered an existing affected source.
 - (2) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP2, constructed in 2003. Under 40 CFR 63, Subpart ZZZZ, FP2 is considered an existing affected source.
 - (3) One (1) 300-horsepower diesel-fired emergency fire pump engine, identified as FP3, constructed in 2006. Under 40 CFR 63, Subpart ZZZZ, FP3 is considered a new affected source. Under 40 CFR 60, Subpart IIII, FP3 is considered an affected facility.

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

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

- E.2.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [326 IAC 20-1][40 CFR 63, Subpart A]
 - (a) Pursuant to 40 CFR 63.6665, the Permittee shall comply with the provisions of 40 CFR 63, Subpart A General Provisions, which are incorporated by reference in 326 IAC 20-1, as specified in Table 8 of 40 CFR 63, Subpart ZZZZ in accordance with the schedule in 40 CFR 63, Subpart ZZZZ for FP1 and FP2.
 - (b) Pursuant to 40 CFR 63.6665, the Permittee is not required to comply with any of the requirements of 40 CFR 63, Subpart A General Provisions for FP3.
- E.2.2 Stationary Reciprocating Internal Combustion Engines NESHAP Requirements [40 CFR 63, Subpart ZZZZ][326 IAC 20-82]

The Permittee shall comply with the provisions of 40 CFR Part 63, Subpart ZZZZ (included as Attachment B of the operating permit), which are incorporated by reference as 326 IAC 20-82 for FP-1, FP2, and FP-3 as follows:

- (a) For FP-1 and FP-2:
 - (1) 40 CFR 63.6580
 - (2) 40 CFR 63.6585
 - (3) 40 CFR 63.6590(a)(1)(iii) and (iv)
 - (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), (i)
 - (8) 40 CFR 63.6635
 - (9) 40 CFR 63.6640(a), (b), (e), (f)
 - (10) 40 CFR 63.6645(a)(5)
 - (11) 40 CFR 63.6650

- (12) 40 CFR 63.6655
- (13) 40 CFR 63.6660
- (14) 40 CFR 63.6665
- (15) 40 CFR 63.6670
- (16) 40 CFR 63.6675
- (17) Table 2d to Subpart ZZZZ of Part 63 (item 4)
- (18) Table 6 to Subpart ZZZZ of Part 63 (item 9)
- (19) Table 8 to Subpart ZZZZ of Part 63

(b) For FP3:

- (1) 40 CFR 63.6580
- (2) 40 CFR 63.6585(a), (c)
- (3) 40 CFR 63.6590(a)(2)(iii), (c)(1)
- (4) 40 CFR 63.6595(a)(6)
- (5) 40 CFR 63.6665
- (6) 40 CFR 63.6670
- (7) 40 CFR 63.6675

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SECTION E.3

NESHAP

Emissions Unit Description:

Insignificant Activities:

A gasoline fuel transfer dispensing operation handling less than or equal to 1,300 gallons per (f) day and less than 10.000 gallons per month, filling storage tanks having a capacity equal to or less than 10,500 gallons. Under 40 CFR 63, Subpart CCCCC, this is considered an existing affected source.

(The information describing the process contained in this emissions unit 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)]

- E.3.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants (NESHAP) [326 IAC 20-1][40 CFR 63, Subpart A]
 - Pursuant to 40 CFR 63.11130, the Permittee shall comply with the provisions of 40 CFR (a) 63, Subpart A - General Provisions, which are incorporated by reference in 326 IAC 20-1, as specified in Table 3 of 40 CFR 63, Subpart CCCCCC in accordance with the schedule in 40 CFR 63, Subpart CCCCCC for the gasoline transfer dispensing operation.
 - (b) Pursuant to 40 CFR 63.13, the Permittee shall submit all required notifications and reports to:

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

E.3.2 Source Category: Gasoline Dispensing Facilities NESHAP Requirements [40 CFR 63, Subpart CCCCCC]

The Permittee shall comply with the provisions of 40 CFR Part 63, Subpart CCCCCC (included as Attachment C of the operating permit) for the gasoline dispensing operation as follows:

- (1)40 CFR 63.11110
- (2) 40 CFR 63.11111(a), (b), (e), (h), (i), (j), (k)
- 40 CFR 63.11112(a), (d) (3)
- 40 CFR 63.11113(b), (c) (4)
- 40 CFR 63.11115
- 40 CFR 63.11116
- 40 CFR 63.11130 (7)
- 40 CFR 63.11131 (8)
- 40 CFR 63.11132
- (9)
- Table 3 to Subpart CCCCCC of Part 63 (10)

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

Source Name: Ingredion Incorporated Indianapolis Plant

Source Address: 1515 South Drover Street, Indianapolis, Indiana 46221

Part 70 Permit No.: T097-34650-00042

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:

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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: Ingredion Incorporated Indianapolis Plant

Source Address: 1515 South Drover Street, Indianapolis, Indiana 46221

Part 70 Permit No.: T097-34650-00042

This form consists of 2 pages

Page 1 of 2

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

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:

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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? Ν Type of Pollutants Emitted: TSP, PM-10, SO₂, 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:

-orm Completed by:
Fitle / Position:
Date:
Jaic
Phone:

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

Part 70 Quarterly Report

Source Name: Source Address: Part 70 Permit No.: Facilities: Parameter: Limit:	Ingredion Incorporated Indianapolis Plant 1515 South Drover Street, Indianapolis, Indiana 46221 T097-34650-00042 5549-1 and 5549-2 Combined input of starch The combined input of starch for units 5549-1 and 5549-2 shall not exceed 30,000 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.			
	QUARTER:	YEAR:	_	
	Starch (tons)	Starch (tons)	Starch (tons)	
Month	This Month	Previous 11 Months	12 Month Total	
□ Dev	deviation occurred in the viation/s occurred in this viation has been reported	quarter.		
Title / Signa	Position:ture:		<u></u>	

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

Part 70 Quarterly Report

Source Name: Source Address: Part 70 Permit No.: Facilities: Parameter: Limit:	Ingredion Incorporated Indianapolis Plant 1515 South Drover Street, Indianapolis, Indiana 46221 T097-34650-00042 5502-1A, 5502-1B, 5502-1C, and 5502-1D Total natural gas usage The combined input of natural gas to 5502-1A, 5502-1B, 5502-1C, and 5502-1D shall not exceed 1,263 million cubic feet (MMcf) per twelve (12) consecutive month period, with compliance determined at the end of each month. QUARTER:YEAR:			
	Natural Gas (MMscf)	Natural Gas (MMscf)	Natural Gas (MMscf)	
Month	This Month	Previous 11 Months	12 Month Total	
□ Dev De Subm Title / Signa	Position:ture:	uarter.		

Date:

Phone:

Permit Reviewer: Laura Thompson

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

Part 70 Quarterly Report

Source Name: Source Address: Part 70 Permit No.: Facilities: Parameter: Limit:	Ingredion Incorporated Indianapolis Plant 1515 South Drover Street, Indianapolis, Indiana 46221 T097-34650-00042 5549-13 Input of starch The input of starch to unit 5549-13 shall not exceed 14,010 tons per twelve (12) consecutive month period, with compliance determined at the end of each month			
	QUARTER:	YEAR:		
	г			
Month	Starch (tons)	Starch (tons)	Starch (tons)	
MONTH	This Month	Previous 11 Months	12 Month Total	
	deviation occurred in this	•		
	viation/s occurred in this viation has been reporte			
	Position:		<u></u>	

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

Part 70 Quarterly Report

Source Name: Source Address: Part 70 Permit No.: Facility: Parameter: Limit:	T097-34650-00042 40-3 Amount of starch prod The starch produced fi (12) consecutive mont month.	eet, Indianapolis, Indiana 462	I 127,000 tons per twelve ermined at the end of each
Month	Starch produced (tons)	Starch produced (tons)	Starch produced (tons)
	This Month	Previous 11 Months	12 Month Total
□ De	deviation occurred in this viation/s occurred in this viation has been reported	quarter.	
Title /	Position:		

Phone:

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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: Ingredion Incorporated Indianapolis Plant Source Address: 1515 South Drover Street, Indianapolis, Indiana 46221 Part 70 Permit No.: T097-34650-00042 Months: _____ to ____ Year: _____ Page 1 of 2 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:**

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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 Source Modification and Significant Permit Modification

Source Description and Location

Source Name: Ingredion Incorporated Indianapolis Plant
Source Location: 1515 South Drover Street, Indianapolis, IN 46221

County: Marion (Center Township)
SIC Code: 2046 (Wet Corn Milling)
Operation Permit No.: T 097-34650-00042
Operation Permit Issuance Date: September 22, 2015
Significant Source Modification No.: 097-40296-00042
Significant Permit Modification No.: 097-40627-00042
Permit Reviewer: Deena P. Levering

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. 097-34650-00042 on September 22, 2015. The source has since received the following approvals:

- (a) Administrative Amendment No.: 097-37105-00042, issued on June 8, 2016;
- (b) Significant Permit Modification No.: 097-36989-00042, issued on October 4, 2016;
- (c) Significant Permit Modification No.: 097-37637-00042, issued on May 4, 2017;
- (d) Administrative Amendment No.: 097-39102-00042, issued on November 3, 2017; and
- (e) Administrative Amendment No.: 097-39541-00042, issued on June 20, 2018.

County Attainment Status

The source is located in Marion County Center Township.

Designation
Non-attainment effective October 4, 2013, for the Center Township, Perry Township, and Wayne
Township. Better than national standards for the remainder of the county.
Attainment effective February 18, 2000, for the part of the city of Indianapolis bounded by 11 th Street on the north; Capitol Avenue on the west; Georgia Street on the south; and Delaware Street on the east. Unclassifiable or attainment effective November 15, 1990, for the remainder of Indianapolis and Marion County.
Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard.1
Attainment effective July 11, 2013, for the annual PM _{2.5} standard.
Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM _{2.5} standard.
Unclassifiable effective November 15, 1990.
Cannot be classified or better than national standards.
Unclassifiable or attainment effective December 31, 2011.

¹Attainment effective October 18, 2000, for the 1-hour ozone standard for the Indianapolis area, including Marion 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 designation 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

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evaluating the rule applicability relating to ozone. Marion 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)
 - Marion County has been classified as attainment for PM_{2.5}. Therefore, direct PM_{2.5}, SO₂, and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c)
 - U.S. EPA, in the Federal Register Notice 78 FR 47191 dated August 5, 2013, designated Marion County, Center Township, as nonattainment for SO₂. Therefore, SO₂ emissions were reviewed pursuant to the requirements of Emission Offset, 326 IAC 2-3.
- Other Criteria Pollutants (d)

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

Fugitive Emissions

Since this type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B), and there is no applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

Greenhouse Gas (GHG) Emissions

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 GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

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:

		Source-Wide Emissions Before Modification (ton/year)									
Process / Emission Unit	PM	PM ₁₀	PM _{2.5}	SO ₂	NOx	voc	СО	Single HAP ¹	Combined HAPs		
Total for Source	624.2	730.2	775.1	45.1	179.9	44.5	167.4	9.80	24.50		
PSD Major Source Thresholds	250	250	250		250	250	250				

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Indianapolis, Indiana

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		Source-Wide Emissions Before Modification (ton/year)									
Process / Emission Unit	РМ	PM ₁₀	PM _{2.5}	SO ₂	NOx	voc	СО	Single HAP ¹	Combined HAPs		
Emission Offset Major Source Thresholds				100							

- (a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a PSD regulated pollutant, PM, PM10, and PM2.5, are 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) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).
- (d) These emissions are based on the TSD of Administrative Amendment No.: 097-39541-00042, issued on June 20,2018.

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed an application, submitted by Ingredion Incorporated Indianapolis Plant on August 7, 2018, relating to construct and operate four (4) new bins with a baghouse to the dry starch west (DSW) area. The following is a list of the proposed emission units and pollution control device(s):

- (a) One (1) DSW Product Silo, identified as unit TF34031, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34031 for particulate control, exhausting to stack S34031.
- (b) One (1) DSW Product Silo, identified as unit TF34032, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34032 for particulate control, exhausting to stack S34032.
- (c) One (1) DSW Product Silo, identified as unit TF34033, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34033 for particulate control, exhausting to stack S34033.
- (d) One (1) DSW Product Silo, identified as unit TF34034, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34034 for particulate control, exhausting to stack S34034.

"Integral Part of the Process" Determination

The Permittee has submitted the following information to justify why the baghouses on the product bins for the Dry Starch West (DSW) product silos should be considered an integral part of the product bins. Baghouse Determination:

(a) The source states that the primary purpose of the baghouses on the product bins are for material recovery. "The bins are used to store dry starch prior to conversion to a saleable product at Ingredion Incorporated Indianapolis Plant (Ingredion). Product will flow from the North and South drum dryer systems to the bins, where at least 99% recovery of the product will be achieved."

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U.S. EPA's guiding questions include consideration of whether the "control equipment" would be operated if no air quality regulations were in place. As demonstrated in the next section, the baghouses provide a substantial economic function wholly apart from any air pollution control regulation.

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(b) "As the primary purpose of the [baghouses] are to recover product and there is a significant cost advantage to do so, there is a significant incentive for the source to operate even if no regulatory existed.

Calculating Uncontrolled Emission Factor

Uncontrolled	Controlled
Emission	Emission
Factor (lb/ton)	Factor (lb/ton)
3.14	0.0089

Product Recovered by Baghouse

Maximum	Product	Product	Product	Product
Product	Emitted	Emitted after	Recovered by	Recovered by
Throughput	Uncontrolled	Control	Baghouses	Baghouses
(ton/hr), total	(lb/hr)	(lb/hr)*	(lb/hr)**	(ton/hr)***
3100	4.867	0.014	4.853	0.00243

Product Emitted Uncontrolled (lb/hr) = Maximum Product Throughput (ton/hr), total * Uncontrolled Emission Factor (lb/ton)

The following information summarizes the amount of material recovered as well as the value of the product recovered and the annual cost of the equipment.

Exhibit A: Cost Analysis

Capital Cost		
Baghouse cost (4 baghouses)	\$ 26,820	each
Total Capital Cost, P	\$ 107,280	
Lifetime of Equipment (years), N	10	years
Interest Rate (%), i	10	%
Annualized Capital Cost, A	\$ 17,459.33	
$A = P[(i(1+i)^{N})/((1+i)^{N}-1)]$	17,459.55	
Operational Cost		
Bag Replacement Cost - \$27/bag	\$ 864	each
Each Baghouse has 32 bags		baghouse
Total Bag Replacements for all 4 baghouses	\$ 3,456	
Operating Cost: \$0.30/hr (based on air usage bag	\$ 9,460.80	per year for
pulsing & blowdowns, energy for fans, etc.)*		all
Total Operational Costs	\$ 12,916.80	
Total Annual Cost	\$ 30,376.13	for all
Value of Product ¹	\$ 70	\$/100 lb
value of Product	\$ 1,400	\$/ton
Product Recovery Rate	0.00243	ton/hour
	\$ 3.40	\$/hour ²
Product Recovery Value	\$ 29,759.85	\$/year for
-		all
Total Annual Savings	\$ 0	per year

^{*}Product Emitted after Control (lb/hr) = Maximum Product Throughput (ton/hr), total * Controlled Loading Emission Factor (lb/ton)

^{**} Product Recovered by Baghouses (lb/hr) = Product Emitted Uncontrolled (lb/hr) - Product Emitted after Control (lb/hr)

^{***}Product Recovered by Baghouses (ton/hr) = Product Recovered by Baghouses (lb/hr) ÷ 2000 lb/ton ¹Emission factor from AP 42 Chapter 11.12 Table 11.12-2 Concrete Batching.

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(c) The source states that the primary function of the baghouses "specifically for collecting valuable raw material and recycling this material back in to the process. Ingredion cannot bypass either the bins or baghouses without process modifications."

IDEM, OAQ evaluated the information submitted and has determined that the baghouses should not be considered an integral part of the bins. This determination is based on the fact that while the control device recovers product, there is not an overwhelming significant cost savings. Therefore, the permitting level will be determined using the potential to emit before the baghouses.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

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

Permit Level Determination – Part 70 Modification to an Existing Source

Pursuant to 326 IAC 2-1.1-1(12), Potential to Emit is defined as "the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency."

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5 and 326 IAC 2-7-11. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit. If the control equipment has been determined to be integral, the table reflects the PTE after consideration of the integral control device.

		PTE Before Controls of the New Emission Units (ton/year)										
Process / Emission Unit	PM	PM ₁₀	PM _{2.5}	SO ₂	NO x	voc	со	Single HAP	Combined HAPs			
TF34031 DSW Product Silo	21.32	21.32	21.32									
TF34032 DSW Product Silo	21.32	21.32	21.32									
TF34033 DSW Product Silo	21.32	21.32	21.32									
TF34034 DSW Product Silo	21.32	21.32	21.32									
Total:	85.27	85.27	85.27									

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

^{* \$0.30} x 7884 hours/year x 4 baghouses

¹ This value is based off the low end of the range for this product. The range is between \$70 to \$90 per 100 pounds (or \$1,400 to \$1,800 per ton).

²Product Recovery Value (\$/hour) = Value of Product (\$/ton) x Product Recovered by baghouses (ton/hr)

³ The process runs full time except for maintenance and cleaning. The source targets at least 90% uptime, or 7884 hours of operation.

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Pursuant to 326 IAC 2-7-10.5(g)(4), a Significant Source Modification is required because this modification has the potential to emit PM, PM10, and direct PM2.5 at greater than or equal to twenty-five (25) tons per year.

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(b) Approval to Operate

Pursuant to 326 IAC 2-7-12(d)(1), this change to the permit is being made through a Significant Permit Modification because this modification does not qualify as a Minor Permit Modification or as an Administrative Amendment.

Permit Level Determination - PSD Actual to Potential (ATP) Emissions Test

(a) Actual to Potential (ATP) Applicability Test

The source is using the Actual to Potential (ATP) applicability test, specified in 326 IAC 2-2-2(d)(4), to demonstrate that the modification is not subject to PSD major review.

(b) New Emissions Units Only

This project only involves the construction of new emission units and/or emissions units considered as new for this evaluation.

Pursuant to 326 IAC 2-2-1(t)(1), a new emissions unit is any emissions unit that is, or will be, newly constructed and that has existed for less than two (2) years from the date the emissions unit first operated.

There are no existing emissions units involved in this applicability test.

The following emissions unit(s) are considered as new emissions units for this evaluation.

- (1) One (1) DSW Product Silo, identified as unit TF34031, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34031 for particulate control, exhausting to stack S34031.
- (2) One (1) DSW Product Silo, identified as unit TF34032, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34032 for particulate control, exhausting to stack S34032.
- (3) One (1) DSW Product Silo, identified as unit TF34033, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34033 for particulate control, exhausting to stack S34033.
- (4) One (1) DSW Product Silo, identified as unit TF34034, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using an baghouse DC34034 for particulate control, exhausting to stack 34034.per hour, using baghouse DC34034 for particulate control, exhausting to stack S34034.

(c) <u>Baseline Actual Emissions</u>

For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of the unit shall equal zero (0) and thereafter, for all other purposes, shall equal the unit's potential to emit.

(d) <u>Actual to Potential (ATP) Summary</u>

Since this project only involves the construction of new emission units and/or emissions units considered new for this evaluation, an Actual to Potential (ATP) applicability test has been conducted. The emissions increase of the project is the sum of the difference between the potential to emit (PTE) from each new emissions unit following completion of the project and the baseline actual emissions of these units before the project (which are equal to zero).

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 $ATP_{(new\ unit)} = PTE_{(new\ unit)} - 0.$

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

Project Emissions (ton/year)											
Process/Emission Unit	PM	PM ₁₀	PM _{2.5} *	SO ₂	NOx	voc	СО	GHGs	Pb		
TF34031 DSW Product Silo	2.25	2.25	2.25								
TF34032 DSW Product Silo	2.25	2.25	2.25								
TF34033 DSW Product Silo	2.25	2.25	2.25								
TF34034 DSW Product Silo	2.25	2.25	2.25								
Project Emissions	9.01	9.01	9.01								
Significant Levels	25	15	10	40	40	40	100	75,000 CO ₂ e			
*PM2.5 listed is direct PM2.5	5.						•				

For these new emissions units, the source has taken the following limits in order to render the requirements of 326 IAC 2-2 not applicable:

Emission Unit	PM (lb/hr)	PM10 (lb/hr)	PM2.5 (lb/hr)
DSW Product Silo TF34031	0.51	0.51	0.51
DSW Product Silo TF34032	0.51	0.51	0.51
DSW Product Silo TF34033	0.51	0.51	0.51
DSW Product Silo TF34034	0.51	0.51	0.51

(e) Conclusion

Based on this ATP applicability test, this proposed modification is not subject to PSD major review under 326 IAC 2-2-1, because the project emissions are less than the significance levels (i.e., the modification does not cause a significant emissions increase).

Federal Rule Applicability Determination

Due to the modification at this source, federal rule applicability has been reviewed as follows:

New Source Performance Standards (NSPS):

- (a) The requirements of the New Source Performance Standard for Grain Elevators 40 CFR 60, Subpart DD and 326 IAC 12, are not included in the permit for the DWS Product Silos, because these silos are not a grain elevator as defined in section 40 CFR 60.301(b).
- (b) The requirements of the New Source Performance Standard for Nonmetallic Mineral Processing Plants 40 CFR 60, Subpart OOO and 326 IAC 12, are not included in the permit for the DWS Product Silos, because these silos do not process nonmetallic mineral as defined in section 40 CFR 60.671.
- (c) There are no New Source Performance Standards (40 CFR Part 60) and 326 IAC 12 included in the permit for this proposed modification.

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National Emission Standards for Hazardous Air Pollutants (NESHAP):

There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (40 CFR (a) Part 63, 326 IAC 14, and 326 IAC 20) included in the permit for this proposed modification.

Compliance Assurance Monitoring (CAM):

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:
 - (1) has a potential to emit before controls equal to or greater than the major source threshold for the regulated pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant (or a surrogate thereof); and
 - uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or (3)standard.
- (b) Pursuant to 40 CFR 64.2(b)(1)(i), emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act are exempt from the requirements of CAM. Therefore, an evaluation was not conducted for any emission limitations or standards proposed after November 15, 1990 pursuant to a NSPS or NESHAP under Section 111 or 112 of the Clean Air Act.
- (c) Pursuant to 40 CFR 64.2(b)(1)(iii), Acid Rain requirements pursuant to Sections 404, 405, 406, 407(a), 407(b), or 410 of the Clean Air Act are exempt emission limitations or standards. Therefore, CAM was not evaluated for emission limitations or standards for SO2 and NOx under the Acid Rain Program.
- (d) Pursuant to 40 CFR 64.3(d), if a continuous emission monitoring system (CEMS) is required pursuant to other federal or state authority, the owner or operator shall use the CEMS to satisfy the requirements of CAM according to the criteria contained in 40 CFR 64.3(d).

The following table is used to identify the applicability of CAM to each existing emission unit and each emission limitation or standard for a specified pollutant based on the criteria specified under 40 CFR 64.2:

Emission Unit/Pollutant	Control Device	Applicable Emission Limitation	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
TF34031 DSW Product Silo/PM*	ВН	326 IAC 6.5	<100	<100	N	N
TF34031 DSW Product Silo/PM	ВН	326 IAC 2-2			N 1	N
TF34031 DSW Product Silo/PM10	ВН	326 IAC 2-2	<100	<100	N	N
TF34031 DSW Product Silo/PM2.5	ВН	326 IAC 2-2	<100	<100	N	N
TF34032 DSW Product Silo/ PM*	ВН	326 IAC 6.5	<100	<100	N	N
TF34032 DSW Product Silo/ PM	ВН	326 IAC 2-2			N 1	N
TF34032 DSW Product Silo/ PM10	ВН	326 IAC 2-2	<100	<100	N	N
TF34032 DSW Product Silo/ PM2.5	ВН	326 IAC 2-2	<100	<100	N	N
TF34033 DSW Product Silo/ PM*	ВН	326 IAC 6.5	<100	<100	N	N

Ingredion Incorporated Indianapolis Plant

Indianapolis, Indiana

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Emission Unit/Pollutant	Control Device	Applicable Emission Limitation	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
TF34033 DSW Product Silo/ PM	ВН	326 IAC 2-2			N 1	N
TF34033 DSW Product Silo/ PM10	ВН	326 IAC 2-2	<100	<100	N	N
TF34033 DSW Product Silo/ PM2.5	ВН	326 IAC 2-2	<100	<100	N	N
TF34034 DSW Product Silo/ PM*	ВН	326 IAC 6.5	<100	<100	N	N
TF34034 DSW Product Silo/ PM	ВН	326 IAC 2-2			N 1	N
TF34034 DSW Product Silo/ PM10	ВН	326 IAC 2-2	<100	<100	N	N
TF34034 DSW Product Silo/ PM2.5	ВН	326 IAC 2-2	<100	<100	N	N

Uncontrolled PTE (tpy) and controlled PTE (tpy) are evaluated against the Major Source Threshold for each pollutant. Major Source Threshold for criteria pollutants (PM10, PM2.5, SO2, NOX, VOC and CO) is 100 tpy, for a single HAP ten (10) tpy, and for total HAPs twenty-five (25) tpy.

Under the Part 70 Permit program (40 CFR 70), PM is not a regulated pollutant.

- PM* For limitations under 326 IAC 6-3-2, 326 IAC 6.5, and 326 IAC 6.8, IDEM OAQ uses PM as a surrogate for the regulated air pollutant PM10. Therefore, uncontrolled PTE and controlled PTE reflect the emissions of the regulated air pollutant PM10.
- N ¹ Under 326 IAC 2-2, PM is not a surrogate for a regulated air pollutant. Therefore, CAM does not apply to these emission units for the 326 IAC 2-2 PM limitation.

Controls: BH = Baghouse, C = Cyclone, DC = Dust Collection System, RTO = Regenerative or Recuperative Thermal Oxidizer, WS = Wet Scrubber, ESP = Electrostatic Preciptator

Emission units without air pollution controls are not subject to CAM. Therefore, they are not listed.

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

State Rule Applicability Determination

Due to the modification at this source, state rule applicability has been reviewed as follows:

326 IAC 2-2 (PSD) and 2-3 (Emission Offset)

PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))

The operation of each of the DSW Product Silos will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

326 IAC 2-7-6(5) (Annual Compliance Certification)

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

326 IAC 6.5 (PM Limitations Except Lake County)

326 IAC 6.5 applies to sources or facilities located in Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo, or Wayne Counties. Sources specifically listed in the rule shall comply with the limitations in 326 IAC 6.5-2 through 326 IAC 6.5-10, as applicable. Sources not specifically listed in 326 IAC 6.5-2 through 326 IAC 6.5-10 shall comply with 326 IAC 6.5-1-2, if they have the potential to emit ten (10) tons or more of particulate matter (PM) and are not taking a limit of less than ten (10) tons of

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particulate matter (PM).

This source, located in Marion County, and has the potential to emit ten (10) tons or more of particulate

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matter (PM) and is not taking a limit of less than ten (10) tons of particulate matter (PM). Therefore, 326 IAC 6.5 applies and the requirements are included in the permit.

The DSW Product Silos (constructed in 2018) were not in existence on or before June 11, 1973. Therefore, pursuant to 6.5-1-2(a), PM emissions from the DSW Product Silos shall each not exceed seven hundredths (0.07) gram per dry standard cubic meter (g/dscm) (three-hundredths (0.03) grain per dry standard cubic foot (dscf)).

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to assure 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.

- There are no new testing requirements included in this modification. (a)
- The Compliance Monitoring Requirements applicable to this proposed modification are as follows: (b)

Control	Parameter	Frequency	Range	Excursions and Exceedances
TF34031 DSW Product Silo Baghouse	Visible Emissions	Daily	Normal- Abnormal	Response Steps
TF34032 DSW Product Silo Baghouse	Visible Emissions	Daily	Normal- Abnormal	Response Steps
TF34033 DSW Product Silo Baghouse	Visible Emissions	Daily	Normal- Abnormal	Response Steps
TF34034 DSW Product Silo Baghouse	Visible Emissions	Daily	Normal- Abnormal	Response Steps

These monitoring conditions are necessary because the baghouses for the four (4) DSW Product Silos (TF34031, TF34032, TF34033, and TF34034) must operate properly to assure compliance with 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) and 326 IAC 6.5 (Particulate Emissions Limitations Except Lake County).

Proposed Changes

The following changes listed below are due to the proposed modification. Deleted language appears as strikethrough text and new language appears as **bold** text:

(1) IDEM, OAQ updated the emission unit descriptions in Section A.2 and D.3 to illustrate the removal of emission units and the construction of the new DSW Product Silos.

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(2) IDEM, OAQ added the PSD limitations for the four (4) new DSW Product Silos to Condition D.3.1 as Condition D.3.1(f).

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- (3) IDEM, OAQ added the four (4) new DSW Product Silos to Conditions D.3.2 (326 IAC 6.5 Particulate Matter Limitation), D.3.7 (Visible Emission Notations), and D.3.11(a) (Record Keeping Requirements).
- (4) IDEM, OAQ added testing requirements for the four (4) DSW Product Silos, to assure compliance with 326 IAC 2-2 limitations.
- A.2 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:

- (ss) Starch operations, starch drying, starch handling and starch packaging consisting of the following units:
 - (36) Two (2) DSW Hoppers #17 and #18, identified as units 71-2A and 71-2B, each with a maximum throughput of 15 tons/hr, using two baghouses* for particulate control, constructed prior to 1968, and exhausting to stacks 58A and 58B.RESERVED
 - (37) One (1) Negative Receiver, identified as unit 71-3, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 71-3.
 - (38) One (1) DSW Hopper #13, identified as unit 71-4A, with a maximum throughput of 2.5 tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 67.RESERVED
 - (39) One (1) DSW Hopper #1, identified as unit 71-5A, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 59.RESERVED
 - (40) One (1) DSW Hopper #2, identified as unit 71-5B, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 60.RESERVED
 - (41) One (1) DSW Hopper #3, identified as unit 71-5C, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 61. RESERVED
 - (42) One (1) DSW Hopper #4, identified as unit 71-5D, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 62. RESERVED
 - (43) One (1) DSW Hopper #5, identified as unit 71-5E, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 63. RESERVED
 - (44) One (1) DSW Hopper #6, identified as unit 71-5F, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 64. RESERVED
 - (45) One (1) DSW Hopper #7, identified as unit 71-5G, with a maximum throughput of 2.5tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 65. RESERVED
 - (46) One (1) DSW Hopper #8, identified as unit 71-5H, with a maximum throughput of 2.5

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> tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 66. RESERVED

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- (47)One (1) DSW Hopper #9, identified as unit 71-51, with a maximum throughput of 2.5 tons/hr. using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 71-51. RESERVED
- (48)One (1) DSW Hopper #10, identified as unit 71-5J, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 8. RESERVED
- (49)One (1) DSW Hopper #11, identified as unit 71-5K, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 69. RESERVED
- (50)One (1) DSW Hopper #12, identified as unit 71-5L, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 70. RESERVED
- (75)One (1) DSW Product Silo, identified as unit TF34031, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34031 for particulate control, exhausting to stack \$34031.
- (76)One (1) DSW Product Silo, identified as unit TF34032, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34032 for particulate control, exhausting to stack \$34032.
- (77)One (1) DSW Product Silo, identified as unit TF34033, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34033 for particulate control, exhausting to stack S34033.
- (78)One (1) DSW Product Silo, identified as unit TF34034, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34034 for particulate control, exhausting to stack \$34034.

SECTION D.3 **EMISSIONS UNIT OPERATION CONDITIONS**

Emissions Unit Description:

(ss) Starch operations, starch drying, starch handling and starch packaging consisting of the following units:

- (36)Two (2) DSW Hoppers #17 and #18, identified as units 71-2A and 71-2B, each with a maximum throughput of 15 tons/hr, using two baghouses* for particulate control, constructed prior to 1968, and exhausting to stacks 58A and 58B.RESERVED
- (37)One (1) Negative Receiver, identified as unit 71-3, with a maximum throughput of 15 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 71-3.
- (38)One (1) DSW Hopper #13, identified as unit 71-4A, with a maximum throughput of 2.5

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tons/hr, using a baghouse** for particulate control, constructed prior to 1968, and exhausting to stack 67. RESERVED

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- (39) One (1) DSW Hopper #1, identified as unit 71-5A, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 59. RESERVED
- (40) One (1) DSW Hopper #2, identified as unit 71-5B, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 60. RESERVED
- (41) One (1) DSW Hopper #3, identified as unit 71-5C, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 61. RESERVED
- (42) One (1) DSW Hopper #4, identified as unit 71-5D, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 62. RESERVED
- (43) One (1) DSW Hopper #5, identified as unit 71-5E, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 63. RESERVED
- (44) One (1) DSW Hopper #6, identified as unit 71-5F, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 64. RESERVED
- (45) One (1) DSW Hopper #7, identified as unit 71-5G, with a maximum throughput of 2.5tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 65. RESERVED
- (46) One (1) DSW Hopper #8, identified as unit 71-5H, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 66. RESERVED
- (47) One (1) DSW Hopper #9, identified as unit 71-5I, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 71-5I. RESERVED
- (48) One (1) DSW Hopper #10, identified as unit 71-5J, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 8. RESERVED
- (49) One (1) DSW Hopper #11, identified as unit 71-5K, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 69. RESERVED
- (50) One (1) DSW Hopper #12, identified as unit 71-5L, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 70. RESERVED
- (51) ***

(75) One (1) DSW Product Silo, identified as unit TF34031, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34031 for particulate control, exhausting to stack S34031.

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(76) One (1) DSW Product Silo, identified as unit TF34032, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34032 for particulate control, exhausting to stack S34032.

- (77) One (1) DSW Product Silo, identified as unit TF34033, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34033 for particulate control, exhausting to stack S34033.
- (78) One (1) DSW Product Silo, identified as unit TF34034, approved in 2018 for construction, with a maximum storage capacity of 45 tons and a maximum throughput of 1.75 tons per hour, using baghouse DC34034 for particulate control, exhausting to stack S34034.

*The control device is considered both integral to the process and inherent to the process for CAM applicability. Inherent process equipment is not subject to Compliance Assurance Monitoring (CAM).

**The control device is considered inherent to the process for CAM applicability. Inherent process equipment is not subject to Compliance Assurance Monitoring (CAM).

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

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

D.3.1 PSD and Nonattainment NSR Minor Limits [326 IAC 2-2][326 IAC 2-1.1-5]

(a) ***

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

Emission Unit	PM (lb/hr)	PM10 (lb/hr)	PM2.5 (lb/hr)
DSW Product Silo TF34031	0.51	0.51	0.51
DSW Product Silo TF34032	0.51	0.51	0.51
DSW Product Silo TF34033	0.51	0.51	0.51
DSW Product Silo TF34034	0.51	0.51	0.51

Compliance with these limits, shall limit the potential to emit from the four (4) new DSW Product Silos of PM to less than twenty-five (25) tons per twelve (12) consecutive month period, PM_{10} to less than fifteen (15) tons per twelve (12) consecutive month period, and $PM_{2.5}$ to less than ten (10) tons per twelve (12) consecutive month period, and shall render the requirements of 326 IAC 2-2 (PSD) not applicable to the 2018 modification.

D.3.2 Particulate Matter [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a), particulate matter emissions from units 40-1A, 40-1B, 42-9, 42-11, 42-12, 42-13, 61-15, 63-1A, 63-1B, 63-3, 63-4, 63-5, 63-9, 63-12, 63-15, 63-16A, 63-16B, 63-17, 63-18, 63-20, 71-3, 71-8, 128-3, 152-1, 152-2, 152-4 through 152-12, 152-15, 577-1, 577-3, 577-4, 577-4A, 578-1, 578-2, 578-3, DC700, DC701, 5549-22, DC-31900, FA-60582, SH31913, TF31993, TF31992, TR31912, TR31913, TF31991, T-1, TF41818, TF41820, TF31980, TF31981, TF31982, TR31922, TR31923, TF31990, TS32001, and TF41822, and TF34031, TF34032, TF34033, and TF34034 shall each not exceed 0.03 grain per dry standard cubic foot (gr/dscf).

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D.3.3 Particulate Matter [326 IAC 6.5-6-25]

Pursuant to 326 IAC 6.5-6-25(a), the following units shall meet the emission limits as indicated in the table below:

Unit	PM Limit (gr/dscf)	PM Limit (ton/yr)
56-2	0.010	11.3
71-2 (71-2A and 71-2B)	0.030	2.6
61-14A	0.029	0.6
61-14	0.028	1.2
42-4	0.029	2.3
42-1	0.030	0.9
42-6	0.03	2.5
42-8(A, B, C, and D)	0.030	4.2
42-7A	0.032	1.7
42-7B	0.032	1.7
42-7C	0.032	1.7
42-3A	0.032	1.8
42-3B	0.032	1.8
42-3C	0.032	1.8
42-3D	0.032	1.8
42-3E	0.032	1.8
42-3F	0.032	1.8
71-4A	0.026	0.3
71-5A	0.026	0.3
71-5B	0.026	0.3
71-5C	0.026	0.3
71-5D	0.026	0.3
71-5E	0.026	0.3
71-5F	0.026	0.3
71-5G	0.026	0.3
71-5H	0.026	0.3
71-5l	0.026	0.3
71-5J	0.026	0.3
71-5K	0.026	0.3
71-5L	0.026	0.3

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

D.3.6 Visible Emissions Notations

(a) Visible emission notations of the exhaust from stacks 40-1A, 40-1B, 152-7, 152-8, 152-9, 152-10, 152-11, FA-60582, 152-12, 53 (unit 63-17), 106 (unit 42-13), 10-158 (unit TF31980), 11-158 (unit TF31981), 12-158 (unit TF31982), 14-158 (unit TR31922), 15-158 (unit TR31923), 13-158 (unit TF31990), 71-10 (unit TS32001), and 152-13 (unit TF41822), and S34031, S34032, S34033, and S34034 shall be performed once per week during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.

Record Keeping and Reporting Requirements [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.3.6, the Permittee shall maintain records of the weekly visible emission notations of the exhaust from stacks 40-1A, 40-1B, 152-7, 152-8, 152-9, 152-10, 152-11, FA-60582, 152-12, 106 (unit 42-13), 10-158 (unit TF31980), 11-158 (unit TF31981), 12-158 (unit TF31982), 14-158 (unit TR31922), 15-158 (unit TR31923), 13-158 (unit TF31990), 71-10 (unit TS32001), and 152-13 (unit TF41822), and S34031, S34032, S34033, and S34034. The Permittee shall include in

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its weekly record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that week).

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Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on August 7, 2018.

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 097-40296-00042. The operation of this proposed modification shall be subject to the conditions of the attached Administrative Amendment.

The staff recommends to the Commissioner that the Part 70 Minor Source Modification and Administrative Amendment be approved.

IDEM Contact

- (a) If you have any questions regarding this permit, please contact Deena P. Levering, 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) 234-5400 or (800) 451-6027, and ask for Deena P. Levering or (317) 234-5400.
- A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/ (b)
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: http://www.in.gov/idem/airquality/2356.htm; and the Citizens' Guide to IDEM on the Internet at: http://www.in.gov/idem/6900.htm.

Source: Ingredion Incorporated Indianapolis Plant Address: 1515 South Drover Street, Indianapolis, IN 46221

Significant Source Modification No.: 097-40296-00042 Significant Permit Modification No.: 097-40627-00042 Permit Reviewer: Deena P. Levering

Permit List No.	Unit Number	Equipment Description	Stack	Control Equipment	Integral/		ter Controls	. , ,		ore Control	- (, ,		rolled PTE fo (ton/yr)			TE for PSD (ton/yr)	
						PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5
(a)	40-4	#1 Starch Flash Dryer (30 MMBtu/hr)	40-4	WS: Particulate	no	31.69	31.69	31.69	275.29	275.29	275.29	275.29	275.29	275.29	44.10	44.10	44.10
(b)	40-3	#2 Starch Flash Dryer (36 MMBtu/hr)	40-3	WS: Particulate	no	54.81	54.81	54.81	943.42	943.42	943.42	943.42	943.42	943.42	35.94	35.94	54.81
(c)	40-2	#3 Starch Flash Dryer (36 MMBtu/hr)	40-2	WS: Particulate	no	45.05	45.05	45.05	863.05	863.05	863.05	863.05	863.05	863.05	31.90	45.05	45.05
(d)	575-1	#4 Starch Flash Dryer (43 MMBtu/hr)	575-1	WS: Particulate	no	56.83	56.83	56.83	11366.48	11366.48	11366.48	11366.48	11366.48	11366.48	32.40	56.83	56.83
(e)	575-2	#5 Starch Flash Dryer (38 MMBtu/hr)	575-2	WS: Particulate	no	34.77	34.77	34.77	6954.44	6954.44	6954.44	6954.44	6954.44	6954.44	32.40	34.77	34.77
(f)	575-3	#6 Starch Flash Dryer (40 MMBtu/hr)	575-3	WS: Particulate	no	37.89	37.89	37.89	7577.65	7577.65	7577.65	7577.65	7577.65	7577.65	34.25	27.39	37.89
(g)	5549-1	#1 Spray Dryer (25 MMBtu/hr)	5549-1	WS: Particulate	no	29.28	29.28	29.28	5856.69	5856.69	5856.69	5856.69	5856.69	5856.69	37.50	37.50	29.28
(h)	5549-2	#2 Spray Dryer (25 MMBtu/hr)	5549-2	WS: Particulate	no	29.28	29.28	29.28	5856.69	5856.69	5856.69	5856.69	5856.69	5856.69	07.00	07.00	29.28
(i)	5502-1A	Feed Dryer (77 MMBtu/hr)	5502-7	First Effect Wash Water System: SO2; RTO: Particulate and VOC	no	40.00	40.00	40.00	000.74	000.74	000.74	000.74	000.74	000.74	40.05	40.05	40.05
(j)	5502-1B	Germ Dryer (20 MMBtu/hr)	5502-7	RTO: Particulate and VOC	no	19.32	19.32	19.32	392.74	392.74	392.74	392.74	392.74	392.74	19.85	19.85	19.85
(k)	5502-1C	Gluten Dryer (32 MMBtu/hr)	5502-7	RTO: Particulate and VOC	no												
(I)	5502-1D	RTO (18 MMBtu/hr)	5502-7	N/A	no												
(m)	5549-28	Spray Agglomerator #3	5549-28	WS: Particulate	no	35.67	35.67	35.67	3566.57	3566.57	3566.57	3566.57	3566.57	3566.57	35.67	35.67	35.67
(n)	5552-1	Product Storage Hopper	5552-1	BH: Particulate	*	0.92	0.92	0.92	91.98	91.98	91.98	0.92	0.92	0.92	0.92	0.92	0.92
(0)	5552-2	Product Transfer Hopper	5552-2	BH: Particulate	*	0.13	0.13	0.13	13.14	13.14	13.14	0.13	0.13	0.13	0.13	0.13	0.13
(p)	5503-6	Truck Loadout	5502-3	BH: Particulate	no	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3
(q)	5503-2	Germ Bin	5503-2	DCS (5503-5): Particulate	no	3.24	3.24	3.24	324.37	324.37	324.37	324.37	324.37	324.37	3.24	3.24	3.24
(q)	5503-3	Pellet Bin #1	5503-2	DCS (5503-5): Particulate	no	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2
(p)	5503-4	Pellet Bin #2	5503-2	DCS (5503-5): Particulate	no	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2
(r)	71-7	DSW Packing Fugitive Dust Collector	71-7	BH: Particulate	no	10.14	10.14	10.14	1013.66	1013.66	1013.66	1013.66	1013.66	1013.66	10.14	10.14	10.14
(s)	577-2	RSP North Packing Line	577-2	BH: Particulate	*	3.60	3.60	3.60	360.41	360.41	360.41	3.60	3.60	3.60	3.59	3.59	3.60
(t)	5503-1	Gluten Receiver	5503-1	BH: Particulate	*	6.98	6.98	6.98	1395.09	1395.09	1395.09	6.98	6.98	6.98	6.98	6.98	6.98
(u)	5502-5	Pellet Cooler	5502-5	CY: Particulate	no	5.18	5.18	5.18	517.72	517.72	517.72	517.72	517.72	517.72	5.18	5.18	5.18
(u)	5502-6	Germ Cooler	5502-6	CY: Particulate	no	4.54	4.54	4.54	453.52	453.52	453.52	453.52	453.52	453.52	4.53	4.53	4.54
(v)	5502-4	2 Loose Feed Bins	5502-3	BH: Particulate	no	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3
(w)	5502-3	Hammer Mill	5502-3	BH: Particulate	no	4.39	4.39	4.39	878.50	878.50	878.50	878.50	878.50	878.50	4.39	4.39	4.39
(x)	42-10	DSE Bag Slitter	42-10	BH: Particulate	no	5.63	5.63	5.63	563.14	563.14	563.14	563.14	563.14	563.14	2.40	5.63	5.63
(y)	54-1	P-6 Rework Station ⁴	54-1	BH: Particulate	no	0.29	0.29	0.29	28.58	28.58	28.58	28.58	28.58	28.58	5.63	5.63	5.63
(z)	577-5	RSP Hopper #4	577-5	BH: Particulate	*	1.69	1.69	1.69	168.94	168.94	168.94	1.69	1.69	1.69	1.69	1.69	1.69
(aa)	577-6	RSP Hopper #6	577-6	BH: Particulate	*	1.69	1.69	1.69	168.94	168.94	168.94	1.69	1.69	1.69	1.69	1.69	1.69
(bb)	577-7	RSP Hopper #5	577-7	BH: Particulate	*	1.69	1.69	1.69	168.94	168.94	168.94	1.69	1.69	1.69	1.69	1.69	1.69
(cc)	577-8	RSP Hopper #1	577-8	BH: Particulate	*	1.69	1.69	1.69	168.94	168.94	168.94	1.69	1.69	1.69	1.69	1.69	1.69
(dd)	577-9	RSP Hopper #2	577-9	BH: Particulate	*	1.69	1.69	1.69	168.94	168.94	168.94	1.69	1.69	1.69	1.69	1.69	1.69
(ee)	577-10	RSP Hopper #3	577-10	BH: Particulate	*	1.69	1.69	1.69	168.94	168.94	168.94	1.69	1.69	1.69	1.69	1.69	1.69
(ff)	71-1	Industrial Packer	71-1	BH: Particulate	no	5.97	5.97	5.97	59.69	59.69	59.69	59.69	59.69	59.69	0.90	5.97	5.97
(gg)	5549-3	Spray Dryer Products Receiver	5549-3	BH: Particulate	*	0.64	0.64	0.64	63.82	63.82	63.82	0.64	0.64	0.64	0.64	0.64	0.64
(gg)	5549-4	Spray Dryer Products Receiver	5549-4	BH: Particulate	*	0.64	0.64	0.64	63.82	63.82	63.82	0.64	0.64	0.64	0.64	0.64	0.64
(hh)	5549-7	Spray Dryer Storage Hopper #1	5549-7	BH: Particulate	*	0.17	0.17	0.17	16.89	16.89	16.89	0.17	0.17	0.17	0.17	0.17	0.17
(ii)	5549-8	Spray Dryer Storage Hopper #2	5549-8	BH: Particulate	*	0.17	0.17	0.17	16.89	16.89	16.89	0.17	0.17	0.17	0.17	0.17	0.17
(jj)	5549-9	Spray Dryer Storage Hopper #3	5549-9	BH: Particulate	*	0.17	0.17	0.17	16.89	16.89	16.89	0.17	0.17	0.17	0.17	0.17	0.17
(kk)	5549-10	Spray Dryer Storage Hopper #4	5549-10	BH: Particulate	*	0.17	0.17	0.17	16.89	16.89	16.89	0.17	0.17	0.17	0.17	0.17	0.17
(II)	5549-12	Agglomerator Feed storage bin	5549-12	BH: Particulate	*	0.57	0.57	0.57	57.44	57.44	57.44	0.57	0.57	0.57	0.57	0.57	0.57
(mm)	5549-13	Agglomerator (includes 1.824 MMBtu/hr burner)	5549-13	BH: Particulate	no	4.69	4.69	4.69	234.64	234.64	234.64	234.64	234.64	234.64	4.27	4.27	4.69
(nn)	5549-14	Agglomerator Equipment Aspiration	5549-14	BH: Particulate	**	1.07	1.07	1.07	106.62	106.62	106.62	106.62	106.62	106.62	1.07	1.07	1.07
(00)(1)	5549-17	Bulk Bag Packer Filter Receiver	5549-17	BH: Particulate	*	0.17	0.17	0.17	16.89	16.89	16.89	0.17	0.17	0.17	0.18	0.18	0.17
(00)(2)	5549-18	Line 1 Middle Packer	5549-18	BH: Particulate	*	1.73	1.73	1.73	172.70	172.70	172.70	1.73	1.73	1.73	1.23	1.23	1.73
(00)(3)	5549-19	Line 1 North Packer	5549-19	BH: Particulate	*	2.03	2.03	2.03	202.73	202.73	202.73	2.03	2.03	2.03	1.05	1.05	2.03

Source: Ingredion Incorporated Indianapolis Plant Address: 1515 South Drover Street, Indianapolis, IN 46221

Significant Source Modification No.: 097-40296-00042 Significant Permit Modification No.: 097-40627-00042 Permit Reviewer: Deena P. Levering

(oo)(4) 5549- (oo)(5) 5549- (oo)(6) 5549-			Stack	Control Equipment	Integral/ Inherent	1112711	ter Controls	` ,,		ore Control	` ,,		(ton/yr)			(ton/yr)	Purposes
(oo)(5) 5549- (oo)(6) 5549-	49-20					PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5
(00)(6) 5549-		#2 Fugitive Dust Collector	5549-20	BH: Particulate	no	5.26	5.26	5.26	525.60	525.60	525.60	525.60	525.60	525.60	4.07	4.07	5.26
(/(-/		Line 1 Fugitive Dust Collector	5549-21	BH: Particulate	no	5.26	5.26	5.26	525.60	525.60	525.60	525.60	525.60	525.60	5.26	5.26	5.26
/ \	49-26	Line 2 Packer	5549-26	BH: Particulate	*	2.03	2.03	2.03	202.73	202.73	202.73	2.03	2.03	2.03	1.14	1.14	2.03
(pp) 56-	6-1	Corn Dump Truck	56-1	BH: Particulate	no	26.28	26.28	26.28	2628.00	2628.00	2628.00	2628.00	2628.00	2628.00	7.02	26.28	26.28
(qq)(1) 42-3	2-3A	DSE Hopper #9	6	BH: Particulate	*	4.32	4.32	4.32	432.49	432.49	432.49	4.32	4.32	4.32	1.80	4.32	4.32
(qq)(2) 42-3	2-3B	DSE Hopper #10	7	BH: Particulate	*	4.32	4.32	4.32	432.49	432.49	432.49	4.32	4.32	4.32	1.80	4.32	4.32
(qq)(3) 42-3	2-3C	DSE Hopper #11	43-3C	BH: Particulate	*	4.32	4.32	4.32	432.49	432.49	432.49	4.32	4.32	4.32	1.80	4.32	4.32
(qq)(4) 42-3	2-3D	DSE Hopper #12	9	BH: Particulate	*	4.32	4.32	4.32	432.49	432.49	432.49	4.32	4.32	4.32	1.80	4.32	4.32
(qq)(5) 42-3	2-3E	DSE Hopper #13	10	BH: Particulate	*	4.32	4.32	4.32	432.49	432.49	432.49	4.32	4.32	4.32	1.80	4.32	4.32
(qq)(6) 42-3	2-3F	DSE Hopper #14	11	BH: Particulate	*	4.32	4.32	4.32	432.49	432.49	432.49	4.32	4.32	4.32	1.80	4.32	4.32
(qq)(7) 42-7	2-7A	DSE Hopper #2	14	BH: Particulate	*	3.12	3.12	3.12	312.36	312.36	312.36	3.12	3.12	3.12	1.70	3.12	3.12
(qq)(8) 42-7	2-7B	DSE Hopper #4	14	BH: Particulate	*	3.12	3.12	3.12	312.36	312.36	312.36	3.12	3.12	3.12	1.70	3.12	3.12
(qq)(9) 42-7	2-7C	DSE Hopper #6	16	BH: Particulate	*	3.12	3.12	3.12	312.36	312.36	312.36	3.12	3.12	3.12	1.70	3.12	3.12
(qq)(10) 42-8	2-8A	DSE Hopper #1	17A	BH: Particulate	**	2.25	2.25	2.25	225.26	225.26	225.26	225.26	225.26	225.26		2.25	2.25
(qq)(11) 42-8	2-8B	DSE Hopper #3	17B	BH: Particulate	**	2.25	2.25	2.25	225.26	225.26	225.26	225.26	225.26	225.26	4.20	2.25	2.25
(qq)(12) 42-8	2-8C	DSE Hopper #5	17C	BH: Particulate	**	2.25	2.25	2.25	225.26	225.26	225.26	225.26	225.26	225.26	4.20	2.25	2.25
(qq)(13) 42-8	2-8D	DSE Hopper #7	17D	BH: Particulate	**	2.25	2.25	2.25	225.26	225.26	225.26	225.26	225.26	225.26		2.25	2.25
(qq)(14) 63-1	3-1A	CWS #8	46A	BH: Particulate	*	2.70	2.70	2.70	270.31	270.31	270.31	2.70	2.70	2.70	2.70	2.70	2.70
(qq)(15) 63-1	3-1B	CWS South East	46B	BH: Particulate	*	2.70	2.70	2.70	270.31	270.31	270.31	2.70	2.70	2.70	2.70	2.70	2.70
(qq)(16) 63-1	3-17	CWS South Mill	53	BH: Particulate	**	3.94	3.94	3.94	394.20	394.20	394.20	394.20	394.20	394.20	3.94	3.94	3.94
(rr) 56-2	6-2	Grain Elevator	24	BH: Particulate	**	11.26	11.26	11.26	1126.29	1126.29	1126.29	1126.29	1126.29	1126.29	11.30	11.26	11.26
(ss)(1) 152-	52-1	Starch Mixer 1 Filter Receiver	152-1	BH: Particulate	*	0.56	0.56	0.56	56.31	56.31	56.31	0.56	0.56	0.56	0.56	0.56	0.56
(ss)(2) 152-	52-2	Mixer 1 Baghouse	152-2	BH: Particulate	*	1.13	1.13	1.13	112.63	112.63	112.63	1.13	1.13	1.13	1.13	1.13	1.13
(ss)(3) 152-	52-4	Starch Mixer 2 Filter/Receiver (Bld 852A)	152-4	BH: Particulate	*	0.68	0.68	0.68	67.58	67.58	67.58	0.68	0.68	0.68	0.68	0.68	0.68
(ss)(4) 152-	52-5	Starch Mixer 2 (Bld 852A)	152-5	BH: Particulate	*	1.13	1.13	1.13	112.63	112.63	112.63	1.13	1.13	1.13	1.13	1.13	1.13
(ss)(5) 152-	52-6	Starch Storage Hopper	152-6	BH: Particulate	**	0.96	0.96	0.96	95.73	95.73	95.73	95.73	95.73	95.73	0.96	0.96	0.96
(ss)(6) 152-	52-7	Starch Filter/Receiver 2 Bld 852	152-7	BH: Particulate	**	0.56	0.56	0.56	56.31	56.31	56.31	56.31	56.31	56.31	0.56	1.31	0.74
(ss)(7) 152-	52-8	Starch Mixer 4 Bld 852A Filter Receiver	152-8	BH: Particulate	**	0.68	0.68	0.68	67.58	67.58	67.58	67.58	67.58	67.58	0.68	1.58	0.92
(ss)(8) 152-	52-9	Starch Mixer 4 Bld 852A	152-9	BH: Particulate	**	0.02	0.02	0.02	2.25	2.25	2.25	2.25	2.25	2.25	0.02	0.22	0.22
(ss)(9) 152-	52-10	Starch Mixer 3 Bld 852A Filter Receiver	152-10	BH: Particulate	**	0.68	0.68	0.68	67.58	67.58	67.58	67.58	67.58	67.58	0.68	1.58	0.92
(ss)(10) 152-	52-11	Starch Mixer 3 Bld 852A	152-11	BH: Particulate	*	1.13	1.13	1.13	112.63	112.63	112.63	1.13	1.13	1.13	1.13	2.63	1.49
(ss)(11) 152-	52-12	Bulk Bag Receiver	152-12	BH: Particulate	*	0.90	0.90	0.90	90.10	90.10	90.10	0.90	0.90	0.90	0.90	2.10	1.23
TF418																	
(ss)(12) (former		Starch Storage Silo #2 Receiver	152-3	BH: Particulate	*	0.66	0.66	0.66	66.34	66.34	66.34	0.66	0.66	0.66	0.66	1.45	0.96
21)																	
TF418		Storch Cooling and Convoving System	TF41818	BH: Particulate	*	15.77	15.77	15.77	1576.80	1576.80	1576.80	15.77	15.77	15.77	15.77	10.42	6.96
(ss)(13) (forme		Starch Cooling and Conveying System	1F41818	BH: Particulate		15.77	15.77	15.77	15/6.80	1576.80	1576.80	15.77	15.77	15.77	15.77	10.42	6.96
152-1			+ +														
(ss)(14) (forme		Blendina Bin	DC41819	BH: Particulate	*	4.51	4.51	4.51	450.51	450.51	450.51	4.51	4.51	4.51	4.51	2.93	1.97
TF418		g															
	28-3	Starch Hopper D/C	128-3	BH: Particulate	*	1.24	1.24	1.24	123.89	123.89	123.89	1.24	1.24	1.24	1.24	1.24	1.24
(ss)(16) 61-1	1-15	DSW Chemical Blender Bag Slitter	35	BH: Particulate	**	5.63	5.63	5.63	563.14	563.14	563.14	563.14	563.14	563.14	5.63	5.63	5.63
(ss)(17) 40-1	0-1A	Sodium Sulfate Conveying System Silo	40-1A	BH: Particulate	*	1.58	1.58	1.58	157.68	157.68	157.68	1.58	1.58	1.58	0.57	0.57	0.57
(ss)(17) 40-1	0-1B S	odium Sulfate Conveying System Receiver	40-1B	BH: Particulate	*	1.41	1.41	1.41	140.79	140.79	140.79	1.41	1.41	1.41	0.57	0.57	0.57
(ss)(18) 42-		DSE North Packer	5	BH: Particulate	*	11.62	11.62	11.62	1162.33	1162.33	1162.33	11.62	11.62	11.62	0.90	11.62	11.62
(ss)(19) 42-4		DSE Hopper #8	17E	BH: Particulate	*	4.57	4.57	4.57	457.27	457.27	457.27	4.57	4.57	4.57	2.30	4.57	4.57
(ss)(20) 42-6	12-6	DSE Negative Receiver	13	BH: Particulate	*	2.70	2.70	2.70	270.31	270.31	270.31	2.70	2.70	2.70	2.50	2.70	2.70

Source: Ingredion Incorporated Indianapolis Plant Address: 1515 South Drover Street, Indianapolis, IN 46221

Significant Source Modification No.: 097-40296-00042 Significant Permit Modification No.: 097-40627-00042 Permit Reviewer: Deena P. Levering

Permit	Unit	Equipment Description	Stack	Control Equipment	Integral/	PTE Af	ter Controls	(ton/yr)	PTE Bef	ore Control:	s (ton/yr)	Uncont	rolled PTE fo	r Part 70	Limited P	TE for PSD (ton/yr)	Purposes
List No.	Number	The Property of the Property o		4.4	Inherent	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5
(ss)(21)	42-9	DSE South Packer	18	BH: Particulate	*	11.62	11.62	11.62	1162.33	1162.33	1162.33	11.62	11.62	11.62	11.62	11.62	11.62
(ss)(22)	42-11	DSE Railcar Loading - East Track	20	BH: Particulate	*	2.82	2.82	2.82	281.57	281.57	281.57	2.82	2.82	2.82	2.82	2.82	2.82
(ss)(23)	42-12	DSE Railcar Loading - West Track	21	BH: Particulate	*	2.82	2.82	2.82	281.57	281.57	281.57	2.82	2.82	2.82	2.82	2.82	2.82
(ss)(24)	42-13	DSE Bulk Bag System	106	BH: Particulate	*	5.07	5.07	5.07	506.83	506.83	506.83	5.07	5.07	5.07	2.19	0.44	0.44
(ss)(25)	61-14	Dextrin Blend	61-14	BH: Particulate	**	1.36	1.36	1.36	135.60	135.60	135.60	135.60	135.60	135.60	1.20	1.36	1.36
(ss)(26)	61-14A	DSW Chemical Blender Tank	34	BH: Particulate	*	1.40	1.40	1.40	140.45	140.45	140.45	1.40	1.40	1.40	0.60	1.40	1.40
(ss)(27)	63-3	CWS #7 Dryer Receiver	47	BH: Particulate	*	2.25	2.25	2.25	225.26	225.26	225.26	2.25	2.25	2.25	2.25	2.25	2.25
(ss)(28)	63-4	CWS North Mill	48	BH: Particulate	*	7.32	7.32	7.32	732.09	732.09	732.09	7.32	7.32	7.32	7.32	7.32	7.32
(ss)(29)	63-5	CWS North Product	49	BH: Particulate	*	7.88	7.88	7.88	788.40	788.40	788.40	7.88	7.88	7.88	7.88	7.88	7.88
(ss)(30)	63-9	CWS Packer	50	BH: Particulate	*	1.23	1.23	1.23	123.22	123.22	123.22	1.23	1.23	1.23	1.23	1.23	1.23
(ss)(31)	63-12	Liquid Glue Bag Dump	51	BH: Particulate	**	1.69	1.69	1.69	168.94	168.94	168.94	168.94	168.94	168.94	1.69	1.69	1.69
(ss)(32)	63-15	CWS #9 and #10 Dryers Receiver	52	BH: Particulate	*	4.05	4.05	4.05	405.46	405.46	405.46	4.05	4.05	4.05	4.05	4.05	4.05
(ss)(33)	63-16A	CWS #11 Dryer	54A	BH: Particulate	*	3.72	3.72	3.72	371.67	371.67	371.67	3.72	3.72	3.72	3.72	3.72	3.72
(ss)(33)	63-16B	CWS #12 and #13 Dryers	54B	BH: Particulate	*	3.72	3.72	3.72	371.67	371.67	371.67	3.72	3.72	3.72	3.72	3.72	3.72
(ss)(34)	63-18	CWS South Raw Material Dump	55	BH: Particulate	**	1.69	1.69	1.69	168.94	168.94	168.94	168.94	168.94	168.94	1.69	1.69	1.69
(ss)(35)	63-20	DSW Negative Receiver	56	BH: Particulate	*	1.24	1.24	1.24	123.89	123.89	123.89	1.24	1.24	1.24	1.24	1.24	1.24
(ss)(37)	71-3	Negative Receiver	71-3	BH: Particulate	*	8.45	8.45	8.45	844.71	844.71	844.71	8.45	8.45	8.45	8.45	8.45	8.45
(ss)(75)	TF34031	DSW Product Silo	S34031	BH: Particulate		2.13E-03	2.13E-03	2.13E-03	21.32	21.32	21.32	21.32	21.32	21.32	2.25	2.25	2.25
(ss)(76)	TF34032	DSW Product Silo	S34032	BH: Particulate		2.13E-03	2.13E-03	2.13E-03	21.32	21.32	21.32	21.32	21.32	21.32	2.25	2.25	2.25
(ss)(77)	TF34033	DSW Product Silo	S34033	BH: Particulate		2.13E-03	2.13E-03	2.13E-03	21.32	21.32	21.32	21.32	21.32	21.32	2.25	2.25	2.25
(ss)(78)	TF34034	DSW Product Silo	S34034	BH: Particulate		2.13E-03	2.13E-03	2.13E-03	21.32	21.32	21.32	21.32	21.32	21.32	2.25	2.25	2.25
(ss)(51)	71-8	DSW Bulk Car Loading	72	BH: Particulate	*	2.25	2.25	2.25	225.26	225.26	225.26	2.25	2.25	2.25	2.25	2.25	2.25
(ss)(52)	577-1	RSP South Bulk Bag Packing	77	BH: Particulate	*	4.28	4.28	4.28	427.99	427.99	427.99	4.28	4.28	4.28	4.28	4.28	4.28
(ss)(53)	FA-60582	FG Bulk Bag Bin Vent Bld 800	FA- 60582	BH: Particulate	**	4.28	4.28	4.28	427.99	427.99	427.99	427.99	427.99	427.99	4.28	3.50	2.85
(ss)(54)	577-3	RSP South Packing Line	79	BH: Particulate	*	11.26	11.26	11.26	1126.29	1126.29	1126.29	11.26	11.26	11.26	11.26	11.26	11.26
(ss)(55)	577-4	RSP Bulk Loading System A	80	BH: Particulate	*	1.97	1.97	1.97	197.10	197.10	197.10	1.97	1.97	1.97	1.97	1.97	1.97
(ss)(56)	577-4A	RSP Bulk Loading Fugitive Dust Collector	81	BH: Particulate	**	0.08	0.08	0.08	8.11	8.11	8.11	8.11	8.11	8.11	0.08	0.08	0.08
(ss)(57)	578-1	CWS Conveying Cyclone Operation	578-1	BH: Particulate	**	4.51	4.51	4.51	450.51	450.51	450.51	450.51	450.51	450.51	4.51	4.51	4.51
(ss)(58)	578-2	CWS Packing Hopper	89	BH: Particulate	*	1.97	1.97	1.97	197.10	197.10	197.10	1.97	1.97	1.97	1.97	1.97	1.97
(ss)(59)	578-3	CWS Milling System	578-3	BH: Particulate	*	6.93	6.93	6.93	692.67	692.67	692.67	6.93	6.93	6.93	6.93	6.93	6.93
(ss)(59a)	DC700	Product Receiver Drum A	578-4			0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
(ss)(59b)	DC701	Product Receiver Drum B	578-5			0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
(ss)(60)	TF31993 (formerly TF31901)	Product Bin 93	1-158	BH: Particulate	*	3.38	3.38	3.38	337.89	337.89	337.89	3.38	3.38	3.38	3.38	3.38	3.38
(ss)(61)	TF31992 (formerly TF31902)	Product Bin 92	2-158	BH: Particulate	*	2.25	2.25	2.25	225.26	225.26	225.26	2.25	2.25	2.25	2.25	2.25	2.25

Source: Ingredion Incorporated Indianapolis Plant Address: 1515 South Drover Street, Indianapolis, IN 46221

Significant Source Modification No.: 097-40296-00042 Significant Permit Modification No.: 097-40627-00042 Permit Reviewer: Deena P. Levering

Permit List No.	Unit Number	Equipment Description	Stack	Control Equipment	Integral/	PTE Af	ter Controls	(ton/yr)	PTE Bef	ore Control	s (ton/yr)	Unconti	rolled PTE fo (ton/yr)	r Part 70	Limited P	TE for PSD (ton/yr)	Purposes
LIST NO.	Number				innerent	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5
(ss)(62)	TF31991	Product Bin 91	3-158	BH: Particulate	*	2.25	2.25	2.25	225.26	225.26	225.26	2.25	2.25	2.25	2.25	2.25	2.25
(ss)(63)	SH31913	Surge Tank Bin 158-3	7-158	BH: Particulate	**	0.23	0.23	0.23	22.53	22.53	22.53	22.53	22.53	22.53	0.23	0.23	0.23
(ss)(64)	DC-31900	Bulk Bag Unload Bin 158-4	8-158	DCS: Particulate	*	0.68	0.68	0.68	67.58	67.58	67.58	0.68	0.68	0.68	0.68	0.68	0.68
(ss)(65)	TR31912	FBR1 Exhaust	5-158	MF: Particulate	**	9.91	9.91	9.91	991.13	991.13	991.13	991.13	991.13	991.13	9.91	9.91	9.91
(ss)(66)	TR31913	FBR1 Cooling System	9-158	CY and BH: Particulate	*	22.53	22.53	22.53	2252.57	2252.57	2252.57	22.53	22.53	22.53	7.49	7.49	7.49
(ss)(67)	T-1	Starch Dryer	T-1	CY and DCS: Particulate	*	0.56	0.56	0.56	56.31	56.31	56.31	0.56	0.56	0.56	0.56	0.56	0.56
(ss)(68)	5549-22	Line 1 South Packing Hopper	5549-22	BH: Particulate	*	5.41	5.41	5.41	5406.17	5406.17	5406.17	5.41	5.41	5.41	5.41	5.41	5.41
(ss)(69)	TF31980	Base Bin 80	10-158	BH: Particulate	*	1.44	1.44	1.44	143.60	143.60	143.60	1.44	1.44	1.44	0.24	0.24	0.24
(ss)(69)	TF31981	Base Bin 81	11-158	BH: Particulate	*	1.44	1.44	1.44	143.60	143.60	143.60	1.44	1.44	1.44	0.24	0.24	0.24
(ss)(69)	TF31982	Base Bin 82	12-158	BH: Particulate	*	1.44	1.44	1.44	143.60	143.60	143.60	1.44	1.44	1.44	0.24	0.24	0.24
(ss)(70)	TR31922	FBR2 Exhaust	14-158	MF: Particulate	*	6.76	6.76	6.76	675.77	675.77	675.77	6.76	6.76	6.76	2.25	2.25	2.25
(ss)(71)	TR31923	FBR2 Cooling Reactor	15-158	MF: Particulate	*	4.84	4.84	4.84	484.30	484.30	484.30	4.84	4.84	4.84	1.62	1.62	1.62
(ss)(72)	TF31990	Product Bin 90	13-158	MF: Particulate	*	2.48	2.48	2.48	247.78	247.78	247.78	2.48	2.48	2.48	0.41	0.41	0.41
(ss)(73)	TS32001	Packing Receiver	71-10	BH: Particulate	*	3.72	3.72	3.72	371.67	371.67	371.67	3.72	3.72	3.72	1.24	1.24	1.24
(ss)(74)	TF41822	Base Bin	152-13	BH: Particulate	*	1.55	1.55	1.55	154.68	154.68	154.68	1.55	1.55	1.55	1.55	1.55	1.55
Insignificant	t Activities																
(a)(1)	FP1	Emergency Fire Pump Engine		None	N/A	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
(a)(2)	FP2	Emergency Fire Pump Engine		None	N/A	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
(a)(3)	FP3	Emergency Fire Pump Engine		None	N/A	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17	0.17
(b)(1)	YX31914A	Process Heater	158-6	None	N/A	0.04	0.17	0.17	0.04	0.17	0.17	0.04	0.17	0.17	0.04	0.17	0.17
(b)(2)	FH31924	FBR2 Burner	16-158	None	N/A	0.02	0.10	0.10	0.02	0.10	0.10	0.02	0.10	0.10	0.02	0.10	0.10
(b)(3)	EF31926A	Air Heater 1	17-158	None	N/A	0.003	0.01	0.01	0.003	0.01	0.01	0.003	0.01	0.01	0.003	0.01	0.01
(b)(3)	EF31927A	Air Heater 2	18-158	None	N/A	0.003	0.01	0.01	0.003	0.01	0.01	0.003	0.01	0.01	0.003	0.01	0.01
(b)(4)		Drover CWS air heaters		None	N/A	0.04	0.15	0.15	0.04	0.15	0.15	0.04	0.15	0.15	0.04	0.15	0.15
(c)	D1/D2/D3	3 Degreasing Operations		None	N/A												
(f)		Gasoline fuel transfer dispensing operation		None	N/A												
(j)	S1	Abrasive Blasting		BH: Particulate	no	0.10	0.10	0.10	10.14	10.14	10.14	10.14	10.14	10.14	0.10	0.10	0.10
(k)	T1	3 Acetic Acid Storage Tanks		None	N/A												
(1)	T2	4 Hydrochloric Acid Storage Tanks		None	N/A												
(m)		10 Small Batch Reactors		None	N/A												
(n)	ST1-ST21	Steeping Tanks	ST1- ST21	None	N/A	-											
(o)		7 Millhouse Vent Fans		None	N/A												
					Total:	788.5	788.8	788.8	90171.8	90172.1	90172.1	57531.3	57531.6	57531.6	626.7	722.9	767.8

The unit has a specific limit for this pollutant.

The unit does not have a specific limit for this pollutant. However, a control device is required to meet a limit for PM and/or PM10, so the PTE is being shown after control.

Controls: BH = Baghouse, CY = Cyclone, DCS = Dust Collection System, MF = Metal Filter, RTO = Regenerative Thermal Oxidizer, WS = Wet Scrubber

^{*}Control has been determined to be both integral and inherent to the process.

^{**}Control has been determined to be inherent to the process.

Appendix A: Emissions Calculations Summary of SO2, NOx, VOC, and CO Emissions

Source: Ingredion Incorporated Indianapolis Plant Address: 1515 South Drover Street, Indianapolis, IN 46221

Significant Source Modification No.: 097-40296-00042 Significant Permit Modification No.: 097-40627-00042 Permit Reviewer: Deena P. Levering

Permit List	Unit Number	Equipment Description	Stack	Control Equipment		Uncontrolled	d PTE (ton/yı	r)		Controlled	PTE (ton/yr)			Limited P	12.88 0.71 15.46 0.85 15.46 0.85 18.46 1.02 16.32 0.90 17.18 0.94 10.74 0.59 10.74 0.59 10.74 0.59 0.78 0.04 1.63 0.13 2.33 0.19 2.33 0.19 2.19 0.12 1.29 0.07 0.17 0.01 0.17 0.01				
No.	Onit Number	Equipment Description	Stack	Control Equipment	SO2	NOx	voc	СО	SO2	NOx	voc	СО	SO2	NOx	VOC	co			
(a)	40-4	#1 Starch Flash Dryer (30 MMBtu/hr)	40-4	WS: Particulate	0.08	12.88	0.71	10.82	0.08	12.88	0.71	10.82	0.08	12.88	0.71	10.82			
(b)	40-3	#2 Starch Flash Dryer (36 MMBtu/hr)	40-3	WS: Particulate	0.09	15.46	0.85	12.99	0.09	15.46	0.85	12.99	0.09	15.46	0.85	12.99			
(c)	40-2	#3 Starch Flash Dryer (36 MMBtu/hr)	40-2	WS: Particulate	0.09	15.46	0.85	12.99	0.09	15.46	0.85	12.99	0.09	15.46	0.85	12.99			
(d)	575-1	#4 Starch Flash Dryer (43 MMBtu/hr)	575-1	WS: Particulate	0.11	18.46	1.02	15.51	0.11	18.46	1.02	15.51	0.11	18.46	1.02	15.51			
(e)	575-2	#5 Starch Flash Dryer (38 MMBtu/hr)	575-2	WS: Particulate	0.10	16.32	0.90	13.71	0.10	16.32	0.90	13.71	0.10	16.32	0.90	13.71			
(f)	575-3	#6 Starch Flash Dryer (40 MMBtu/hr)	575-3	WS: Particulate	0.10	17.18	0.94	14.43	0.10	17.18	0.94	14.43	0.10	17.18	0.94	14.43			
(g)	5549-1	#1 Spray Dryer (25 MMBtu/hr)	5549-1	WS: Particulate	0.06	10.74	0.59	9.02	0.06	10.74	0.59	9.02	0.06	10.74	0.59	9.02			
(h)	5549-2	#2 Spray Dryer (25 MMBtu/hr)	5549-2	WS: Particulate	0.06	10.74	0.59	9.02	0.06	10.74	0.59	9.02	0.06	10.74	0.59	9.02			
(i)	5502-1A	Feed Dryer (77 MMBtu/hr)	5502-7	First Effect Wash Water System: SO2; RTO: Particulate and VOC	00.00	33.06	400.70	27.77	04.07	33.06	40.70	27.77	25.00	20.45	04.40	27.77			
(j)	5502-1B	Germ Dryer (20 MMBtu/hr)	5502-7	RTO: Particulate and VOC	60.66	8.59	469.76	7.21	24.27	8.59	18.79	7.21	35.26	39.15	21.42	7.21			
(k)	5502-1C	Gluten Dryer (32 MMBtu/hr)	5502-7	RTO: Particulate and VOC	,	13.74	Ī	11.54		13.74		11.54				11.54			
(I)	5502-1D	RTO (18 MMBtu/hr)	5502-7	N/A		7.73		6.49		7.73		6.49				6.49			
(m)	5549-28	Spray Agglomerator #3	5549-28	WS: Particulate	0.06	10.74	0.59	9.02	0.06	10.74	0.59	9.02	0.06	10.74	0.59	9.02			
(mm)	5549-13	Agglomerator (includes 1.824 MMBtu/hr burner)	5549-13	BH: Particulate	0.005	0.78	0.04	0.66	0.005	0.78	0.04	0.66	0.005	0.78	0.04	0.66			
Insignificant	Activities																		
(a)(1)	FP1	Emergency Fire Pump Engine		None	0.11	1.63	0.13	0.35	0.11	1.63	0.13	0.35	0.11			0.35			
(a)(2)	FP2	Emergency Fire Pump Engine		None	0.15	2.33	0.19	0.50	0.15	2.33	0.19	0.50	0.15	2.33	0.19	0.50			
(a)(3)	FP3	Emergency Fire Pump Engine		None	0.15	2.33	0.19	0.50	0.15	2.33	0.19	0.50	0.15			0.50			
(b)(1)	YX31914A	Process Heater	158-6	None	0.01	2.19	0.12	1.84	0.01	2.19	0.12	1.84	0.01		0.12	1.84			
(b)(2)	FH31924	FBR2 Burner	16-158	None	0.01	1.29	0.07	1.08	0.01	1.29	0.07	1.08	0.01	1.29	0.07	1.08			
(b)(3)	EF31926A	Air Heater 1	17-158	None	0.001	0.17	0.01	0.14	0.001	0.17	0.01	0.14	0.001	0.17	0.01	0.14			
(b)(3)	EF31927A	Air Heater 2	18-158	None	0.001	0.17	0.01	0.14	0.001	0.17	0.01	0.14	0.001		0.01	0.14			
(b)(4)		Drover CWS air heaters		None	0.01	1.93	0.11	1.62	0.01	1.93	0.11	1.62	0.01	1.93		1.62			
(c)	D1/D2/D3	3 Degreasing Operations		None			4.67				4.67				4.67				
(f)		Gasoline fuel transfer dispensing operation		None			1.47				1.47				1.47				
(k)	T1	3 Acetic Acid Storage Tanks		None			0.04				0.04				0.04				
(I)	T2	4 Hydrochloric Acid Storage Tanks		None															
(m)	_	10 Small Batch Reactors		None			9.04				9.04				9.04				
(n)	ST1 through ST21	Steeping Tanks	ST1 - ST21	None	0.77				0.77				0.77						
(o)		7 millhouse vent fans		None	7.89				7.89				7.89						
				Total:	70.5	203.9	492.9	167.4	34.1	203.9	41.9	167.4	45.1	179.9	44.5	167.4			

The unit has a specific limit for this pollutant.

Controls: BH = Baghouse, RTO = Regenerative Thermal Oxidizer, WS = Wet Scrubber

Appendix A: Emissions Calculations HAPs Emissions -Uncontrolled

Source: Ingredion Incorporated Indianapolis Plant Address: 1515 South Drover Street, Indianapolis, IN 46221 Significant Source Modification No.: 097-40296-00042 Significant Permit Modification No.: 097-40627-00042 Permit Reviewer: Deena P. Levering

												PTE (to	n/yr)											
Permit List No.	Unit Number	Equipment Description	Stack	Acetaldehyde	Acrolein	Benzene	1,3-Butadiene	Dichlorobenzene	Formaldehyde	Hexane	Methanol	Propylene Oxide	Total PAH HAPs	Toluene	Xylene	Lead	Cadmium	Chromium	Manganese	Nickel	HCI	Total HAPs	Worst Single HAP	HAP
(a)	40-4	#1 Starch Flash Dryer (30 MMBtu/hr)	40-4			2.71E-04		1.55E-04	9.66E-03	0.23			1.47E-06	4.38E-04	-	6.44E-05	1.42E-04	1.80E-04	4.90E-05	2.71E-04	-	0.24	0.23	Hexane
(b)	40-3	#2 Starch Flash Dryer (36 MMBtu/hr)	40-3			3.25E-04		1.86E-04	1.16E-02	0.28			1.76E-06	5.26E-04		7.73E-05	1.70E-04	2.16E-04	5.87E-05	3.25E-04		0.29	0.28	Hexane
(c)	40-2	#3 Starch Flash Dryer (36 MMBtu/hr)	40-2			3.25E-04		1.86E-04	1.16E-02	0.28			1.76E-06	5.26E-04		7.73E-05	1.70E-04	2.16E-04	5.87E-05	3.25E-04		0.29	0.28	Hexane
(d)	575-1	#4 Starch Flash Dryer (43 MMBtu/hr)	575-1			3.88E-04		2.22E-04	1.38E-02	0.33	1		2.10E-06	6.28E-04	-	9.23E-05	2.03E-04	2.59E-04	7.02E-05	3.88E-04		0.35	0.33	Hexane
(e)	575-2	#5 Starch Flash Dryer (38 MMBtu/hr)	575-2		-	3.43E-04		1.96E-04	1.22E-02	0.29	1		1.86E-06	5.55E-04	1	8.16E-05	1.79E-04	2.28E-04	6.20E-05	3.43E-04	1	0.31	0.29	Hexane
(f)	575-3	#6 Starch Flash Dryer (40 MMBtu/hr)	575-3		-	3.61E-04		2.06E-04	1.29E-02	0.31	1		1.96E-06	5.84E-04	1	8.59E-05	1.89E-04	2.40E-04	6.53E-05	3.61E-04	1	0.32	0.31	Hexane
(g)	5549-1	#1 Spray Dryer (25 MMBtu/hr)	5549-1			2.25E-04		1.29E-04	8.05E-03	0.19	1		1.22E-06	3.65E-04	-	5.37E-05	1.18E-04	1.50E-04	4.08E-05	2.25E-04		0.20	0.19	Hexane
(h)	5549-2	#2 Spray Dryer (25 MMBtu/hr)	5549-2			2.25E-04		1.29E-04	8.05E-03	0.19			1.22E-06	3.65E-04		5.37E-05		1.50E-04	4.08E-05	2.25E-04		0.20	0.19	Hexane
(i)*	5502-1A	Feed Dryer (77 MMBtu/hr)	5502-7			6.94E-04		3.97E-04		5.95E-01		-	3.77E-06	1.12E-03		1.65E-04	3.64E-04	4.63E-04	1.26E-04	6.94E-04				
(j)*	5502-1B	Germ Dryer (20 MMBtu/hr)	5502-7	111.43	0.55	1.80E-04		1.03E-04	2.23	1.55E-01	6.22		9.79E-07	2.92E-04		4.29E-05	9.45E-05	1.20E-04	3.26E-05	1.80E-04		121.56	111.43	Acetaldehyde
(k)*	5502-1C	Gluten Dryer (32 MMBtu/hr)	5502-7			2.89E-04		1.65E-04		2.47E-01			1.57E-06	4.67E-04	-	6.87E-05		1.92E-04	5.22E-05	2.89E-04				
(I)*	5502-1D	RTO (18 MMBtu/hr)	5502-7			1.62E-04		9.28E-05		1.39E-01			8.81E-07	2.63E-04		3.86E-05		1.08E-04	2.94E-05	1.62E-04				
(m)	5549-28	Spray Agglomerator #3	5549-28			2.25E-04		1.29E-04	8.05E-03	1.93E-01			1.22E-06	3.65E-04		5.37E-05	1.18E-04	1.50E-04	4.08E-05	2.25E-04		0.20	0.19	Hexane
(mm)	5549-13	Agglomerator (includes 1.824 MMBtu/hr burner)	5549-13			1.64E-05		9.40E-06	5.87E-04	1.41E-02			8.93E-08	2.66E-05		3.92E-06	8.62E-06	1.10E-05	2.98E-06	1.64E-05		1.48E-02	1.41E-02	Hexane
Insignifica	nt Activities																							
(a)(1)	FP1	Emergency Fire Pump Engine		2.82E-04	3.40E-05	3.43E-04	1.44E-05	-	4.34E-04		-		6.17E-05	1.50E-04	1.05E-04							1.42E-03	4.34E-04	Formaldehyde
(a)(2)	FP2	Emergency Fire Pump Engine		4.03E-04	4.86E-05	4.90E-04	2.05E-05		6.20E-04				8.82E-05	2.15E-04	1.50E-04							2.03E-03	6.20E-04	Formaldehyde
(a)(3)	FP3	Emergency Fire Pump Engine		4.03E-04	4.86E-05	4.90E-04	2.05E-05		6.20E-04						1.50E-04							2.03E-03	6.20E-04	Formaldehyde
(b)(1)	YX31914A	Process Heater	158-6			4.60E-05		2.63E-05	1.64E-03	3.94E-02							2.41E-05	3.07E-05	8.32E-06	4.60E-05		4.13E-02	3.94E-02	Hexane
(b)(2)	FH31924	FBR2 Burner	16-158			2.71E-05		1.55E-05	9.66E-04	2.32E-02			1.47E-07	4.38E-05		6.44E-06	== 00	1.80E-05	4.90E-06	2.71E-05		2.43E-02	2.32E-02	Hexane
(b)(3)	EF31926A	Air Heater 1	17-158			3.61E-06		2.06E-06	1.29E-04	3.09E-03			1.96E-08	5.84E-06		8.59E-07		2.40E-06	6.53E-07	3.61E-06		3.24E-03	3.09E-03	Hexane
(b)(3)	EF31927A	Air Heater 2	18-158			3.61E-06		2.06E-06	1.29E-04	3.09E-03				5.84E-06	-	8.59E-07		2.40E-06	6.53E-07	3.61E-06		3.24E-03	3.09E-03	Hexane
(b)(4)	D1/D2/D2	Drover CWS air heaters				4.06E-05		2.32E-05	1.45E-03	3.48E-02			2.20E-07	6.57E-05		9.66E-06		2.71E-05	7.34E-06	4.06E-05		3.65E-02	3.48E-02	Hexane N/A
(c)	D1/D2/D3	3 Degreasing Operations														-						U	N/A	IN/A
(f)		Gasoline fuel transfer dispensing operation				5.45E-03		-		5.00E-03				5.89E-03	1.62E-03							1.80E-02	5.89E-03	Toluene
(k)	T1	3 Acetic Acid Storage Tanks									-											0	N/A	N/A
(I)	T2	4 Hydrochloric Acid Storage Tanks									-										0.10	0.10	0.10	HCI
(m)		10 Small Batch Reactors			-	-	-	1			-	9.04	-		-	-	-			-	-	9.04	9.04	Propylene Oxide
			Total:	1.11E+02	5.49E-01	1.09E-02	5.54E-05	2.37E-03	2.33	3.56	6.2173823	9.04	2.61E-04	1.32E-02	2.02E-03	9.88E-04	2.17E-03	2.77E-03	7.51E-04	4.15E-03	0.10	133.27	111.43	Acetaldehyde

*Process HAP emissions from testing conducted February 23, 2016 on inlet and outlet of RTO Unit 5502-1D and scaled to maximum operating capacity.

Maximum Operating Capacity = 55,000 bushel/day; Testing throughput = 53,077 bushels/day on February 23, 2016.

Appendix A: Emissions Calculations HAPs Emissions - Controlled

Source: Ingredion Incorporated Indianapolis Plant Address: 1515 South Drover Street, Indianapolis, IN 46221 Significant Source Modification No.: 097-40296-00042 Significant Permit Modification No.: 097-40627-00042 Permit Reviewer: Deena P. Levering

												PTE (to	n/yr)											
Permit List No.	Unit Number	Equipment Description	Stack	Acetaldehyde	Acrolein	Benzene	1,3-Butadiene	Dichlorobenzene	Formaldehyde	Hexane	Methanol	Propylene Oxide	Total PAH HAPs	Toluene	Xylene	Lead	Cadmium	Chromium	Manganese	Nickel	HCI	Total HAPs	Worst Single HAP	HAP
(a)	40-4	#1 Starch Flash Dryer (30 MMBtu/hr)	40-4			2.71E-04		1.55E-04	9.66E-03	2.32E-01			1.47E-06	4.38E-04		6.44E-05	1.42E-04	1.80E-04	4.90E-05	2.71E-04		0.24	0.23	Hexane
(b)	40-3	#2 Starch Flash Dryer (36 MMBtu/hr)	40-3			3.25E-04		1.86E-04	1.16E-02	2.78E-01			1.76E-06	5.26E-04		7.73E-05	1.70E-04	2.16E-04	5.87E-05	3.25E-04		0.29	0.28	Hexane
(c)	40-2	#3 Starch Flash Dryer (36 MMBtu/hr)	40-2		-	3.25E-04	1	1.86E-04	1.16E-02	2.78E-01	1		1.76E-06	5.26E-04	1	7.73E-05	1.70E-04	2.16E-04	5.87E-05	3.25E-04		0.29	0.28	Hexane
(d)	575-1	#4 Starch Flash Dryer (43 MMBtu/hr)	575-1		1	3.88E-04	-	2.22E-04	1.38E-02	3.32E-01	1		2.10E-06	6.28E-04		9.23E-05	2.03E-04	2.59E-04	7.02E-05	3.88E-04		0.35	0.33	Hexane
(e)	575-2	#5 Starch Flash Dryer (38 MMBtu/hr)	575-2		1	3.43E-04	1	1.96E-04	1.22E-02	2.94E-01	1		1.86E-06	5.55E-04	1	8.16E-05	1.79E-04	2.28E-04	6.20E-05	3.43E-04		0.31	0.29	Hexane
(f)	575-3	#6 Starch Flash Dryer (40 MMBtu/hr)	575-3		1	3.61E-04	1	2.06E-04	1.29E-02	3.09E-01	1		1.96E-06	5.84E-04	1	8.59E-05	1.89E-04	2.40E-04	6.53E-05	3.61E-04		0.32	0.31	Hexane
(g)	5549-1	#1 Spray Dryer (25 MMBtu/hr)	5549-1		1	2.25E-04	-	1.29E-04	8.05E-03	1.93E-01	1		1.22E-06	3.65E-04		5.37E-05	1.18E-04	1.50E-04	4.08E-05	2.25E-04		0.20	0.19	Hexane
(h)	5549-2	#2 Spray Dryer (25 MMBtu/hr)	5549-2			2.25E-04		1.29E-04	8.05E-03	1.93E-01			1.22E-06	3.65E-04		5.37E-05	1.18E-04	1.50E-04	4.08E-05	2.25E-04		0.20	0.19	Hexane
(i)*	5502-1A	Feed Dryer (77 MMBtu/hr)	5502-7			6.94E-04		3.97E-04		5.95E-01			3.77E-06	1.12E-03		1.65E-04	3.64E-04	4.63E-04	1.26E-04	6.94E-04				
(j)*	5502-1B	Germ Dryer (20 MMBtu/hr)	5502-7	4.60	0.40	1.80E-04		1.03E-04	0.39	1.55E-01	0.50		9.79E-07	2.92E-04		4.29E-05	9.45E-05	1.20E-04	3.26E-05	1.80E-04		5.00	4.00	A = 44= d = d =
(k)*	5502-1C	Gluten Dryer (32 MMBtu/hr)	5502-7	4.60	0.18	2.89E-04		1.65E-04	0.39	2.47E-01	0.53		1.57E-06	4.67E-04		6.87E-05	1.51E-04	1.92E-04	5.22E-05	2.89E-04		5.69	4.60	Acetaldehyde
(l)*	5502-1D	RTO (18 MMBtu/hr)	5502-7			1.62E-04	-	9.28E-05		1.39E-01		-	8.81E-07	2.63E-04		3.86E-05	8.50E-05	1.08E-04	2.94E-05	1.62E-04				
(m)	5549-28	Cp. co. y	5549-28			2.25E-04	-	1.29E-04	8.05E-03	1.93E-01			1.22E-06	3.65E-04		5.37E-05	1.18E-04	1.50E-04	4.08E-05	2.25E-04		2.03E-01	0.19	Hexane
(mm)	5549-13	Agglomerator (includes 1.824 MMBtu/hr burner)	5549-13		-	1.64E-05		9.40E-06	5.87E-04	1.41E-02			8.93E-08	2.66E-05		3.92E-06	8.62E-06	1.10E-05	2.98E-06	1.64E-05		1.48E-02	0.01	Hexane
Insignificar	nt Activities												,											
(a)(1)	FP1	Emergency Fire Pump Engine		2.82E-04	3.40E-05	3.43E-04	1.44E-05		4.34E-04				6.17E-05	1.50E-04	1.05E-04							1.42E-03	4.34E-04	Formaldehyde
(a)(2)	FP2	Emergency Fire Pump Engine		4.03E-04	4.86E-05	4.90E-04	2.05E-05		6.20E-04				8.82E-05	2.15E-04	1.50E-04							2.03E-03	6.20E-04	Formaldehyde
(a)(3)	FP3	Emergency Fire Pump Engine		4.03E-04	4.86E-05	4.90E-04	2.05E-05		6.20E-04				8.82E-05	2.15E-04	1.50E-04							2.03E-03	6.20E-04	Formaldehyde
(b)(1)	YX31914A	Process Heater	158-6			4.60E-05		2.63E-05	1.64E-03	3.94E-02			2.50E-07	7.45E-05		1.10E-05		3.07E-05	8.32E-06	4.60E-05		4.13E-02	3.94E-02	Hexane
(b)(2)	FH31924	FBR2 Burner	16-158			2.71E-05		1.55E-05	9.66E-04	2.32E-02			1.47E-07	4.38E-05		6.44E-06		1.80E-05	4.90E-06	2.71E-05		2.43E-02	2.32E-02	Hexane
	EF31926A	Air Heater 1	17-158			3.61E-06	-	2.06E-06	1.29E-04	3.09E-03				5.84E-06		8.59E-07		2.40E-06	6.53E-07	3.61E-06		3.24E-03	3.09E-03	Hexane
(b)(3) (b)(4)	EF31927A	Air Heater 2 Drover CWS air heaters	18-158			3.61E-06 4.06E-05		2.06E-06 2.32E-05	1.29E-04 1.45E-03	3.09E-03 3.48E-02			1.96E-08 2.20E-07	5.84E-06		8.59E-07		2.40E-06	6.53E-07 7.34E-06	3.61E-06 4.06E-05		3.24E-03 3.65E-02	3.09E-03 3.48E-02	Hexane Hexane
	D1/D2/D3	3 Degreasing Operations				4.06E-05		2.32E-05	1.45E-03	3.48E-02			2.20E-07	6.57E-05		9.66E-06	2.13E-05	2.71E-05	7.34E-06	4.06E-05		3.65E-02	3.48E-02 N/A	N/A
(f)	01/02/03	Gasoline fuel transfer dispensing operation				5.45E-03				5.00E-03				5.89E-03	1.62E-03				-			1.80E-02	5.89E-03	Toluene
(k)	T1	3 Acetic Acid Storage Tanks																				0	N/A	N/A
(I)	T2	4 Hydrochloric Acid Storage Tanks																			0.10	0.10	0.10	HCI
(m)		10 Small Batch Reactors									-	9.04										9.04	9.04	Propylene Oxide
,			Total:	4.60E+00	1.80E-01	1.09E-02	5.54E-05	2.37E-03	0.49	3.56	0.53	9.04	2.61E-04	1.32E-02	2.02E-03	9.88E-04	2.17E-03	2.77E-03	7.51E-04	4.15E-03	0.10	17.40	9.04	Propylene Oxide

*Process HAP emissions from testing conducted February 23, 2016 on inlet and outlet of RTO Unit 5502-1D.

Appendix A: Emissions Calculations HAPs Emissions - Limited

Source: Ingredion Incorporated Indianapolis Plant Address: 1515 South Drover Street, Indianapolis, IN 46221 Significant Source Modification No.: 097-40296-00042 Significant Permit Modification No.: 097-40627-00042 Permit Reviewer: Deena P. Levering

Part	I	J											PTE (to	n/yr)]	
10			Equipment Description	Stack	Acetaldehyde	Acrolein	Benzene	1,3-Butadiene	Dichlorobenzene	Formaldehyde	Hexane	Methanol			Toluene	Xylene	Lead	Cadmium	Chromium	Manganese	Nickel	HCI	Total HAPs	Single	HAP
March Marc	(a)	40-4	MMBtu/hr) `	40-4			2.71E-04		1.55E-04	9.66E-03	2.32E-01			1.47E-06	4.38E-04		6.44E-05	1.42E-04	1.80E-04	4.90E-05	2.71E-04		0.24	0.23	Hexane
Model Mode	(b)	40-3	MMBtu/hr) `	40-3			3.25E-04		1.86E-04	1.16E-02	2.78E-01			1.76E-06	5.26E-04		7.73E-05	1.70E-04	2.16E-04	5.87E-05	3.25E-04		0.29	0.28	Hexane
19 19 19 19 19 19 19 19	(c)	40-2		40-2			3.25E-04		1.86E-04	1.16E-02	2.78E-01			1.76E-06	5.26E-04		7.73E-05	1.70E-04	2.16E-04	5.87E-05	3.25E-04		0.29	0.28	Hexane
Figure F	(d)	575-1	MMBtu/hr) `	575-1			3.88E-04		2.22E-04	1.38E-02	3.32E-01	-		2.10E-06	6.28E-04		9.23E-05	2.03E-04	2.59E-04	7.02E-05	3.88E-04		0.35	0.33	Hexane
19 19 19 19 19 19 19 19	(e)	575-2		575-2			3.43E-04		1.96E-04	1.22E-02	2.94E-01		-	1.86E-06	5.55E-04		8.16E-05	1.79E-04	2.28E-04	6.20E-05	3.43E-04		0.31	0.29	Hexane
General Service Mulbishuth Several Control of Service Control	(f)	575-3	MMBtu/hr) `	575-3			3.61E-04		2.06E-04	1.29E-02	3.09E-01		-	1.96E-06	5.84E-04		8.59E-05	1.89E-04	2.40E-04	6.53E-05	3.61E-04		0.32	0.31	Hexane
10 5592-14 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04 1805-04	(g)	5549-1	MMBtu/hr)	5549-1			2.25E-04		1.29E-04	8.05E-03	1.93E-01			1.22E-06	3.65E-04		5.37E-05	1.18E-04	1.50E-04	4.08E-05	2.25E-04		0.20	0.19	Hexane
1.05E-04	(h)		MMBtu/hr)							8.05E-03													0.20	0.19	Hexane
Second S	(i)	5502-1A	Feed Dryer (77 MMBtu/hr)	5502-7			6.94E-04		3.97E-04		5.95E-01			3.77E-06	1.12E-03		1.65E-04	3.64E-04	4.63E-04	1.26E-04	6.94E-04				
MSSU2-TO MMSBu/hn S002-7 MMSBu/hn S002-7 1.05E-04 1.05	(j)	5502-1B	,, ,, ,, ,,	5502-7	9.8*	**	1.80E-04		1.03E-04		1.55E-01	**		9.79E-07	2.92E-04		4.29E-05	9.45E-05	1.20E-04	3.26E-05	1.80E-04		12.79	9.80	Acetaldehyde
(m) 5549-28 Spray Anglomerator #3 5549-28 225E-04 1.29E-04 8.05E-03 1,93E-01 1.29E-04 8.05E-03 1,93E-01 1.29E-04 8.05E-03 1,93E-01 1.29E-04 8.05E-03 1,93E-01 8.99E-08 2.66E-05 3.92E-06 8.62E-06 1.10E-05 2.98E-06 1.64E-05 1.48E-02 0.00E+00 Hexane hexane lengths and l	. , ,		MMBtu/hr)																						, , , , , , , , , , , , , , , , , , , ,
Figure System S	1.7									0.055.00							0.00-	0.00- 00					0.005.04	0.005.00	
Significant Activities Semigracy Fire Pump Caster of the Pump Ca	` '		Agglomerator (includes																						
Second Column FP1 Emergency Fire Pump Engine 2.82E-04 3.40E-05 3.43E-04 1.44E-05 4.34E-04 6.17E-05 1.50E-04 1.42E-03 3.43E-04 Formaldehyde person Formaldehyde perso	Insignificat	nt Activities	1.024 WIWIDIU/III DUITIEI)												l .		l .		l .		l .				
(a)(3) FP3 Engine					2.82E-04	3.40E-05	3.43E-04	1.44E-05		4.34E-04				6.17E-05	1.50E-04	1.05E-04							1.42E-03	4.34E-04	Formaldehyde
(a)(3) PP3 Engine	(a)(2)	FP2			4.03E-04	4.86E-05	4.90E-04	2.05E-05		6.20E-04	-			8.82E-05	2.15E-04	1.50E-04			-			-	2.03E-03	6.20E-04	Formaldehyde
(b)(3) F319264 FBR2 Burner 16-158 271E-05 1.55E-05 9.66E-04 2.32E-02 1.47E-07 3.38E-05 6.44E-06 1.42E-05 1.80E-05 4.90E-06 2.71E-05 2.43E-02 2.32E-02 Hexane 1.91E-05 1.91E	(a)(3)	FP3			4.03E-04	4.86E-05	4.90E-04	2.05E-05		6.20E-04				8.82E-05	2.15E-04	1.50E-04						-	2.03E-03	6.20E-04	Formaldehyde
Di(3) EF31926A Air Heater 1 17-158 3.61E-06 2.06E-06 1.29E-04 3.09E-03 1.96E-08 5.84E-06 8.59E-07 1.89E-06 2.40E-06 6.53E-07 3.61E-06 3.24E-03 3.09E-03 Hexane 1.9158 3.61E-06 2.06E-06 1.29E-04 3.09E-03 1.96E-08 5.84E-06 8.59E-07 1.89E-06 2.40E-06 6.53E-07 3.61E-06 3.24E-03 3.09E-03 Hexane 1.90E-08	(b)(1)		Process Heater	158-6												-			3.07E-05						Hexane
Di(3) EF31927A Air Heater 2 18-158 3.61E-06 2.06E-06 1.29E-04 3.09E-03 1.96E-08 5.84E-06 8.59E-07 1.89E-06 2.40E-06 6.53E-07 3.61E-06 3.24E-03 3.09E-03 Hexane																		00							
(c) D1/D2/D3 3 Degreasing Operations																									
(c) D1/D2/D3 3 Degreasing Operations	(-/(-/	EF31927A		18-158																					
(f) Gasoline fuel transfer dispensing operation (k) T1 3 Acetic Acid Storage Tanks (l) T2 4 Hydrochloric Acid Storage Tanks (m) 10 Stor	(-/(/	D4/D0/D0									0												3.65E-02		
(k) T1 3 Acetic Acid Storage Tanks	(c)	1/02/03				-						-					- -			-			U	N/A	N/A
(K) 11 Tanks	(f)		dispensing operation				5.45E-03				5.00E-03				5.89E-03	1.62E-03						-	1.80E-02	5.89E-03	Toluene
(I) 12 Storage Tanks	(k)		Tanks																	-			0		
	()	T2	Storage Tanks																						
	(m)		TO SITIALI BATCH REACTORS	Total:	1.09E-03	1.31E-04	1.09E-02	5.54E-05	2.37E-03	0.10	3.56	0	9.04		1.32E-02	2.02F-03			2.77E-03	7.51E-04	4.15E-03	0.10	9.04 24.50	9.04	Acetaldehyde

"Acetaldehyde shall be limited to less than 9.8 tons per year.
"*Combined HAPS (acetaldehyde, acrolein, methanol, formaldehyde) shall be limited to less than 11.6 tons per year.

Appendix A: Emission Calculations Modification Summary

	Unco	ntrolled Po	tential to Emit (tons/year)	of the Modific	cation				
Emission Unit/Process	PM	PM10	PM2.5	SO2	Nox	co	voc	Total HAPs	Worst Si	ngle HAP
TF34031 DSW Product Silo	21.32	21.32	21.32							N/A
TF34032 DSW Product Silo	21.32	21.32	21.32							N/A
TF34033 DSW Product Silo	21.32	21.32	21.32							N/A
TF34034 DSW Product Silo	21.32	21.32	21.32							N/A
Total for New DSW Product Silos	85.27	85.27	85.27					-	-	N/A

Appendix A: Emissions Calculations Minor Source Modification No. 097-40296-00042 ATPA Analysis

Source: Ingredion Incorporated Indianapolis Plant

Address: 1515 South Drover Street, Indianapolis, IN 46221
Significant Source Modification No.: 097-40296-00042
Significant Permit Modification No.: 097-40627-00042
Permit Reviewer: Deena P. Levering

1. New Emissions Units

		New I	Emissions U	Inits (ton/yr)				
Process/Emission Unit	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _X	voc	СО	(Pb, Be, Hg, etc.)
TF34031 DSW Product Silo	2.25	2.25	2.25	0	0	0	0	0
TF34032 DSW Product Silo	2.25	2.25	2.25	0	0	0	0	0
TF34033 DSW Product Silo	2.25	2.25	2.25	0	0	0	0	0
TF34034 DSW Product Silo	2.25	2.25	2.25	0	0	0	0	0

2. Project Emissions

		Pro	oject Emissi	ons (tpy)				
Process/Emission Unit	РМ	PM ₁₀	PM _{2.5}	SO ₂	NO _X	voc	СО	(Pb, Be, Hg, etc.)
Sum of ATP Increases	9.00	9.00	9.00	0	0	0	0	0
Project Emissions	9.00	9.00	9.00	0.00	0.00	0.00	0.00	0.00
Significant Levels	25	15	10	40	40	40	100	??

Permit	Unit Number	Equipment Description	Stack	Control	Gas or Air flow rate	Integral/	Control Efficiency of	Outlet Grain Loading Limit	326 IAC 6.5	326 IAC 6.5	Other Limits	PTE Aft	er Controls (ton/yr)	PTE Bef	ore Controls	(ton/yr)		olled PTE f rposes (tor			ted PTE for	
List No.	Number			Equipment	(dscfm)	Inherent	Control Equipment	(gr/dscf)		Limit		PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5
(n)	5552-1	Product Storage Hopper	5552-1	BH: Particulate	2450	*	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.21 lb/hr, 0.92 tpy	0.92	0.92	0.92	91.98	91.98	91.98	0.92	0.92	0.92	0.92	0.92	0.92
(0)	5552-2	Product Transfer Hopper	5552-2	BH: Particulate	350	*	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.03 lb/hr, 0.13 tpy	0.13	0.13	0.13	13.14	13.14	13.14	0.13	0.13	0.13	0.13	0.13	0.13
(p)	5503-6	Truck Loadout	5502-3	BH: Particulate	w/5502-3	no	w/5502-3	w/5502-3	6.5-1-2	0.03 gr/dscf	w/5502-3 PSD Minor Limit:	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502+3	w/5502-3	w/5502-3
(q)	5503-2	Germ Bin	5503-2	DCS (5503-5): Particulate	8,640	no	99%	0.01	6.5-1-2	0.03 gr/dscf	PM/PM10: 0.01 gr/dscf, 0.74 lb/hr, 3.24 tpy	3.24	3.24	3.24	324.37	324.37	324.37	324.37	324.37	324.37	3.24	3.24	3.24
(p)	5503-3	Pellet Bin #1	5503-2	DCS (5503-5): Particulate	w/5503-2	no	w/5503-2	w/5503-2	6.5-1-2	0.03 gr/dscf	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2
(q)	5503-4	Pellet Bin #2	5503-2	DCS (5503-5): Particulate	w/5503-2	no	w/5503-2	w/5503-2	6.5-1-2	0.03 gr/dscf	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2	w/5503-2
(r)	71-7	DSW Packing Fugitive Dust Collector	71-7	BH: Particulate	9,000	no	99%	0.030	6.5-1-2	0.03 gr/dscf	None	10.14	10.14	10.14	1013.66	1013.66	1013.66	1013.66	1013.66	1013.66	10.14	10.14	10.14
(s)	577-2	RSP North Packing Line	577-2	BH: Particulate	9,600	*	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor Limit: PM/PM10: 0.01 gr/dscf, 0.82 lb/hr, 3.59 tpy	3.60	3.60	3.60	360.41	360.41	360.41	3.60	3.60	3.60	3.59	3.59	3.60
(t)	5503-1	Gluten Receiver	5503-1	BH: Particulate	18,580		99.5%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor Limit: PM/PM10: 0.01 gr/dscf, 1.593 lb/hr, 6.977 tpy.	6.98	6.98	6.98	1395.09	1395.09	1395.09	6.98	6.98	6.98	6.977	6.977	6.98
(u)	5502-5	Pellet Cooler	5502-5	CY: Particulate	13,790	no	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor Limit: PM/PM10: 0.01 gr/dscf, 1.182 lb/hr, 5.177 tpy.	5.18	5.18	5.18	517.72	517.72	517.72	517.72	517.72	517.72	5.177	5.177	5.18
(u)	5502-6	Germ Cooler	5502-6	CY: Particulate	12,080	no	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor Limit: PM/PM10: 0.01 gr/dscf, 1.035 lb/hr, 4.533 tpy.	4.54	4.54	4.54	453.52	453.52	453.52	453.52	453.52	453.52	4.533	4.533	4.54
(v)	5502-4	2 Loose Feed Bins	5502-3	BH: Particulate	w/5502-3	no	w/5502-3	w/5502-3	6.5-1-2	0.03 gr/dscf	w/5502-3 PSD Minor Limit:	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3	w/5502-3
(w)	5502-3	Hammer Mill	5502-3	BH: Particulate	11,700	no	99.5%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor Limit: PM/PM10: 0.01 gr/dscf, 1.003 lb/hr, 4.393 tpy.	4.39	4.39	4.39	878.50	878.50	878.50	878.50	878.50	878.50	4.393	4.393	4.39
(x)	42-10	DSE Bag Slitter	42-10	BH: Particulate	5,000	no	99%	0.030	6.5-6-25	0.030 gr/dscf, 2.4 tpy	None	5.63	5.63	5.63	563.14	563.14	563.14	563.14	563.14	563.14	2.40	5.63	5.63
(z)	577-5	RSP Hopper #4	577-5	BH: Particulate	4,500	*	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.386 lb/hr, 1.69 tpy	1.69	1.69	1.69	168.94	168.94	168.94	1.69	1.69	1.69	1.69	1.69	1.69
(aa)	577-6	RSP Hopper #6	577-6	BH: Particulate	4,500	*	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.386 lb/hr, 1.69 tpy	1.69	1.69	1.69	168.94	168.94	168.94	1.69	1.69	1.69	1.69	1.69	1.69
(bb)	577-7	RSP Hopper #5	577-7	BH: Particulate	4,500	*	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.386 lb/hr, 1.69 tpy	1.69	1.69	1.69	168.94	168.94	168.94	1.69	1.69	1.69	1.69	1.69	1.69
(cc)	577-8	RSP Hopper #1	577-8	BH: Particulate	4,500		99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.386 lb/hr, 1.69 tpy	1.69	1.69	1.69	168.94	168.94	168.94	1.69	1.69	1.69	1.69	1.69	1.69
(dd)	577-9	RSP Hopper #2	577-9	BH: Particulate	4,500		99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.386 lb/hr, 1.69 tpy PSD Minor:	1.69	1.69	1.69	168.94	168.94	168.94	1.69	1.69	1.69	1.69	1.69	1.69
(ee)	577-10	RSP Hopper #3	577-10	BH: Particulate	4,500		99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.386 lb/hr, 1.69 tpy	1.69	1.69	1.69	168.94	168.94	168.94	1.69	1.69	1.69	1.69	1.69	1.69
(ff)	71-1	Industrial Packer	71-1	BH: Particulate	5,300	no	90.0%	0.030	6.5-6-25	0.030 gr/dscf, 0.9 tpy	None	5.97	5.97	5.97	59.69	59.69	59.69	59.69	59.69	59.69	0.90	5.97	5.97
(gg)	5549-3	Spray Dryer Products Receiver	5549-3	BH: Particulate	1,700	*	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.146 lb/hr, 0.64 tpy	0.64	0.64	0.64	63.82	63.82	63.82	0.64	0.64	0.64	0.64	0.64	0.64
(99)	5549-4	Spray Dryer Products Receiver	5549-4	BH: Particulate	1,700	*	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.146 lb/hr, 0.64 tpy	0.64	0.64	0.64	63.82	63.82	63.82	0.64	0.64	0.64	0.64	0.64	0.64
(hh)	5549-7	Spray Dryer Storage Hopper #1	5549-7	BH: Particulate	450	*	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.039 lb/hr, 0.17 tpy	0.17	0.17	0.17	16.89	16.89	16.89	0.17	0.17	0.17	0.17	0.17	0.17
(ii)	5549-8	Spray Dryer Storage Hopper #2	5549-8	BH: Particulate	450	*	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.039 lb/hr, 0.17 tpy	0.17	0.17	0.17	16.89	16.89	16.89	0.17	0.17	0.17	0.17	0.17	0.17
(jj)	5549-9	Spray Dryer Storage Hopper #3	5549-9	BH: Particulate	450	*	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.039 lb/hr, 0.17 tpy	0.17	0.17	0.17	16.89	16.89	16.89	0.17	0.17	0.17	0.17	0.17	0.17

Permit	Unit	Equipment Description	Stack	Control	Gas or Air flow rate	Integral/	Control Efficiency of	Outlet Grain Loading Limit	326 IAC 6.5	326 IAC 6.5	Other Limits	PTE Aft	er Controls	(ton/yr)	PTE Bef	fore Controls	(ton/yr)		olled PTE for			ted PTE fo	
List No.	Number			Equipment	(dscfm)	Inherent	Control Equipment	(gr/dscf)		Limit		PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5
(kk)	5549-10	Spray Dryer Storage Hopper #4	5549-10	BH: Particulate	450	*	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.039 lb/hr, 0.17 tpy	0.17	0.17	0.17	16.89	16.89	16.89	0.17	0.17	0.17	0.17	0.17	0.17
(II)	5549-12	Agglomerator Feed storage bin	5549-12	BH: Particulate	1,530	*	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.13 lb/hr, 0.57 tpy	0.57	0.57	0.57	57.44	57.44	57.44	0.57	0.57	0.57	0.57	0.57	0.57
(mm)	5549-13	Agglomerator (includes 1.824 MMBtu/hr burner)	5549-13	BH: Particulate	12,500	no	98.0%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: Input of starch to 5549-13 shall not exceed 14,010 ton/yr. Emission rate shall not exceed 0.61 lb PM/PM10/ton starch.	4.69	4.69	4.69	234.64	234.64	234.64	234.64	234.64	234.64	4.27	4.27	4.69
(nn)	5549-14	Agglomerator Equipment Aspiration	5549-14	BH: Particulate	2,840	**	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.244 lb/hr, 1.07 tpy	1.07	1.07	1.07	106.62	106.62	106.62	106.62	106.62	106.62	1.07	1.07	1.07
(00)(1)	5549-17	Bulk Bag Packer Filter Receiver	5549-17	BH: Particulate	450	*	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.04 lb/hr, 0.18 tpy	0.17	0.17	0.17	16.89	16.89	16.89	0.17	0.17	0.17	0.18	0.18	0.17
(00)(2)	5549-18	Line 1 Middle Packer	5549-18	BH: Particulate	4,600	*	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.28 lb/hr, 1.23 tpy	1.73	1.73	1.73	172.70	172.70	172.70	1.73	1.73	1.73	1.23	1.23	1.73
(00)(3)	5549-19	Line 1 North Packer	5549-19	BH: Particulate	5,400		99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.24 lb/hr, 1.05 tpy	2.03	2.03	2.03	202.73	202.73	202.73	2.03	2.03	2.03	1.05	1.05	2.03
(00)(4)	5549-20	#2 Fugitive Dust Collector	5549-20	BH: Particulate	14,000	no	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.93 lb/hr, 4.07 tpy	5.26	5.26	5.26	525.60	525.60	525.60	525.60	525.60	525.60	4.07	4.07	5.26
(00)(5)	5549-21	Line 1 Fugitive Dust Collector	5549-21	BH: Particulate	14,000	no	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 1.2 lb/hr, 5.27 tpy	5.26	5.26	5.26	525.60	525.60	525.60	525.60	525.60	525.60	5.26	5.26	5.26
(00)(6)	5549-26	Line 2 Packer	5549-26	BH: Particulate	5,400	*	99%	0.010	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.01 gr/dscf, 0.26 lb/hr, 1.16 tpy	2.03	2.03	2.03	202.73	202.73	202.73	2.03	2.03	2.03	1.14	1.14	2.03
(pp)	56-1	Corn Dump Truck	56-1	BH: Particulate	35,000	no	99%	0.020	6.5-6-25	0.020 gr/dscf, 7.02 tpy	None	26.28	26.28	26.28	2628.00	2628.00	2628.00	2628.00	2628.00	2628.00	7.02	26.28	26.28
(qq)(1)	42-3A	DSE Hopper #9	6	BH: Particulate	3,600	*	99.0%	0.032	6.5-6-25	0.032 gr/dscf, 1.8 tpy	None	4.32	4.32	4.32	432.49	432.49	432.49	4.32	4.32	4.32	1.80	4.32	4.32
(qq)(2)	42-3B	DSE Hopper #10	7	BH: Particulate	3,600		99.0%	0.032	6.5-6-25	0.032 gr/dscf, 1.8 tpy	None	4.32	4.32	4.32	432.49	432.49	432.49	4.32	4.32	4.32	1.80	4.32	4.32
(qq)(3)	42-3C	DSE Hopper #11	43-3C	BH: Particulate	3,600	*	99.0%	0.032	6.5-6-25	0.032 gr/dscf, 1.8 tpy	None	4.32	4.32	4.32	432.49	432.49	432.49	4.32	4.32	4.32	1.80	4.32	4.32
(qq)(4)	42-3D	DSE Hopper #12	9	BH: Particulate	3,600		99.0%	0.032	6.5-6-25	0.032 gr/dscf, 1.8 tpy	None	4.32	4.32	4.32	432.49	432.49	432.49	4.32	4.32	4.32	1.80	4.32	4.32
(qq)(5)	42-3E	DSE Hopper #13	10	BH: Particulate	3,600		99.0%	0.032	6.5-6-25	0.032 gr/dscf, 1.8 tpy	None	4.32	4.32	4.32	432.49	432.49	432.49	4.32	4.32	4.32	1.80	4.32	4.32
(qq)(6)	42-3F	DSE Hopper #14	11	BH: Particulate	3,600	*	99.0%	0.032	6.5-6-25	0.032 gr/dscf, 1.8 tpy	None	4.32	4.32	4.32	432.49	432.49	432.49	4.32	4.32	4.32	1.80	4.32	4.32
(qq)(7)	42-7A	DSE Hopper #2	14	BH: Particulate	2,600	*	99.0%	0.032	6.5-6-25	0.032 gr/dscf, 1.7 tpy	None	3.12	3.12	3.12	312.36	312.36	312.36	3.12	3.12	3.12	1.70	3.12	3.12
(qq)(8)	42-7B	DSE Hopper #4	14	BH: Particulate	2,600	*	99.0%	0.032	6.5-6-25	0.032 gr/dscf, 1.7 tpy	None	3.12	3.12	3.12	312.36	312.36	312.36	3.12	3.12	3.12	1.70	3.12	3.12
(qq)(9)	42-7C	DSE Hopper #6	16	BH: Particulate	2,600	*	99.0%	0.032	6.5-6-25	0.032 gr/dscf, 1.7 tpy	None	3.12	3.12	3.12	312.36	312.36	312.36	3.12	3.12	3.12	1.70	3.12	3.12
(qq)(10) (qq)(11)	42-8A 42-8B	DSE Hopper #1 DSE Hopper #3	17A 17B	BH: Particulate BH: Particulate	2,000 2,000	**	99.0% 99.0%	0.03	6 5-6-25	0.030 gr/dscf,	None None	2.25	2.25	2.25	225.26 225.26	225.26 225.26	225.26 225.26	225.26 225.26	225.26 225.26	225.26 225.26		2.25	2.25

Permit	Unit	Equipment Description	Stack	Control	Gas or Air flow rate	Integral/	Control Efficiency of	Outlet Grain Loading Limit	326 IAC 6.5	326 IAC 6.5	Other Limits	PTE Aft	ter Controls	(ton/yr)	PTE Bef	fore Controls	(ton/yr)		olled PTE for			ited PTE for	
List No.	Number	Equipment Description	Stack	Equipment	(dscfm)	Inherent	Control Equipment	(gr/dscf)	320 IAC 6.3	Limit	Other Limits	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5
(qq)(12)	42-8C	DSE Hopper #5	17C	BH: Particulate	2,000	**	99.0%	0.03		4.2 tpy	None	2.25	2.25	2.25	225.26	225.26	225.26	225.26	225.26	225.26	1.20	2.25	2.25
(qq)(13)	42-8D	DSE Hopper #7	17D	BH: Particulate	2,000	**	99.0%	0.03			None	2.25	2.25	2.25	225.26	225.26	225.26	225.26	225.26	225.26		2.25	2.25
(qq)(14) (qq)(15)	63-1A 63-1B	CWS #8 CWS South East	46A 46B	BH: Particulate BH: Particulate	2,400 2.400	- :	99.0%	0.03	6.5-1-2 6.5-1-2	0.03 gr/dscf 0.03 gr/dscf	None None	2.70	2.70	2.70	270.31 270.31	270.31 270.31	270.31 270.31	2.70	2.70	2.70	2.70	2.70 2.70	2.70
(qq)(15) (qq)(16)	63-15	CWS South Mill	53	BH: Particulate	3,500	**	99.0%	0.03	6.5-1-2	0.03 gr/dscf	None	3.94	3.94	3.94	394.20	394.20	394.20	394.20	394.20	394.20	3.94	3.94	3.94
(rr)	56-2	Grain Elevator	24	BH: Particulate	30,000	**	99.0%	0.01	6.5-6-25	0.010 gr/dscf, 11.3 tpy	None	11.26	11.26	11.26	1126.29	1126.29	1126.29	1126.29	1126.29	1126.29	11.30	11.26	11.26
(ss)(1) (ss)(2)	152-1 152-2	Starch Mixer 1 Filter Receiver Mixer 1 Baghouse	152-1 152-2	BH: Particulate BH: Particulate	500 1,000	*	99.0% 99.0%	0.03	6.5-1-2 6.5-1-2	0.03 gr/dscf 0.03 gr/dscf	None None	0.56	0.56	0.56	56.31 112.63	56.31 112.63	56.31 112.63	0.56	0.56	0.56	0.56	0.56 1.13	0.56
(ss)(3)	152-2	Starch Mixer 2 Filter/Receiver	152-4	BH: Particulate	600		99.0%	0.03	6.5-1-2	0.03 gr/dscf	None	0.68	0.68	0.68	67.58	67.58	67.58	0.68	0.68	0.68	0.68	0.68	0.68
(ss)(4)	152-5	(Bld 852A) Starch Mixer 2 (Bld 852A)	152-5	BH: Particulate	1,000	*	99.0%	0.03	6.5-1-2	0.03 gr/dscf	None	1.13	1.13	1.13	112.63	112.63	112.63	1.13	1.13	1.13	1.13	1.13	1.13
(ss)(5)	152-6	Starch Storage Hopper	152-6	BH: Particulate	850	**	99.0%	0.03	6.5-1-2	0.03 gr/dscf	None	0.96	0.96	0.96	95.73	95.73	95.73	95.73	95.73	95.73	0.96	0.96	0.96
(ss)(6)	152-7	Starch Filter/Receiver 2 Bld 852	152-7	BH: Particulate	500	**	99.0%	0.03	6.5-1-2	0.03 gr/dscf	PSD Minor: PM: 0.43 lb/hr; PM10: 0.30 lb/hr; PM2.5: 0.17 lb/hr	0.56	0.56	0.56	56.31	56.31	56.31	56.31	56.31	56.31	0.563	1.314	0.745
(ss)(7)	152-8	Starch Mixer 4 Bld 852A Filter Receiver	152-8	BH: Particulate	600	**	99.0%	0.03	6.5-1-2	0.03 gr/dscf	PSD Minor: PM: 0.52 lb/hr; PM10: 0.36 lb/hr; PM2.5: 0.21 lb/hr	0.68	0.68	0.68	67.58	67.58	67.58	67.58	67.58	67.58	0.676	1.577	0.920
(ss)(8)	152-9	Starch Mixer 4 Bld 852A	152-9	BH: Particulate	20	**	99.0%	0.03	6.5-1-2	0.03 gr/dscf	PSD Minor: PM: 0.10 lb/hr; PM10: 0.05 lb/hr; PM2.5: 0.05 lb/hr	0.02	0.02	0.02	2.25	2.25	2.25	2.25	2.25	2.25	0.023	0.219	0.219
(ss)(9)	152-10	Starch Mixer 3 Bld 852A Filter Receiver	152-10	BH: Particulate	600	**	99.0%	0.03	6.5-1-2	0.03 gr/dscf	PSD Minor: PM: 0.52 lb/hr; PM10: 0.36 lb/hr; PM2.5: 0.21 lb/hr	0.68	0.68	0.68	67.58	67.58	67.58	67.58	67.58	67.58	0.676	1.577	0.920
(ss)(10)	152-11	Starch Mixer 3 Bld 852A	152-11	BH: Particulate	1,000		99.0%	0.03	6.5-1-2	0.03 gr/dscf	PSD Minor: PM: 0.86 lb/hr; PM10: 0.60 lb/hr; PM2.5: 0.34 lb/hr	1.13	1.13	1.13	112.63	112.63	112.63	1.13	1.13	1.13	1.126	2.628	1.489
(ss)(11)	152-12	Bulk Bag Receiver	152-12	BH: Particulate	800	*	99.0%	0.03	6.5-1-2	0.03 gr/dscf	PSD Minor: PM: 0.69 lb/hr; PM10: 0.48 lb/hr; PM2.5: 0.28 lb/hr	0.90	0.90	0.90	90.10	90.10	90.10	0.90	0.90	0.90	0.901	2.102	1.226
(ss)(12)	TF41820 (formerly 61-21)	Starch Storage Silo #2 Receiver	152-3	BH: Particulate	589	*	99.0%	0.03	6.5-1-2	0.03 gr/dscf	PSD Minor: PM: 0.55 lb/hr; PM10: 0.33 lb/hr; PM2.5: 0.22 lb/hr	0.66	0.66	0.66	66.34	66.34	66.34	0.66	0.66	0.66	0.66	1.45	0.96
(ss)(13)	TF41818 (formerly 581-2)	Starch Cooling and Conveying System	TF41818	BH: Particulate	14,000	*	99.0%	0.03	6.5-1-2	0.03 gr/dscf	PSD Minor: PM: 3.97 lb/hr; PM10: 2.38 lb/hr; PM2.5: 1.59 lb/hr	15.77	15.77	15.77	1576.80	1576.80	1576.80	15.77	15.77	15.77	15.77	10.42	6.96
(ss)(14)	152-15 (formerly TF41819)	Blending Bin	DC41819	BH: Particulate	4,000	*	99.0%	0.03	6.5-1-2	0.03 gr/dscf	PSD Minor: PM: 1.12 lb/hr; PM10: 0.67 lb/hr; PM2.5: 0.45 lb/hr	4.51	4.51	4.51	450.51	450.51	450.51	4.51	4.51	4.51	4.51	2.93	1.97
(ss)(15)	128-3	Starch Hopper D/C DSW Chemical Blender Bag	128-3	BH: Particulate	1,100		99.0%	0.03	6.5-1-2	0.03 gr/dscf	None	1.24	1.24	1.24	123.89	123.89	123.89	1.24	1.24	1.24	1.24	1.24	1.24
(ss)(16)	61-15	Slitter	35	BH: Particulate	5,000	**	99.0%	0.03	6.5-1-2	0.03 gr/dscf	None	5.63	5.63	5.63	563.14	563.14	563.14	563.14	563.14	563.14	5.63	5.63	5.63
(ss)(17)	40-1A	Sodium Sulfate Conveying System Silo	40-1A	BH: Particulate	1,400	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10/PM2.5: 0.13 lb/hr PSD Minor:	1.58	1.58	1.58	157.68	157.68	157.68	1.58	1.58	1.58	0.569	0.569	0.569
(ss)(17)	40-1B	Sodium Sulfate Conveying System Receiver	40-1B	BH: Particulate	1,250	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	PM/PM10/PM2.5: 0.13 lb/hr	1.41	1.41	1.41	140.79	140.79	140.79	1.41	1.41	1.41	0.569	0.569	0.569
(ss)(18)	42-1	DSE North Packer	5	BH: Particulate	10,320	*	99.0%	0.030	6.5-6-25	0.030 gr/dscf, 0.9 tpy	None	11.62	11.62	11.62	1162.33	1162.33	1162.33	11.62	11.62	11.62	0.90	11.62	11.62
(ss)(19)	42-4	DSE Hopper #8	17E	BH: Particulate	4,200	*	99.0%	0.029	6.5-6-25	0.029 gr/dscf, 2.3 tpy	None	4.57	4.57	4.57	457.27	457.27	457.27	4.57	4.57	4.57	2.30	4.57	4.57
(ss)(20)	42-6	DSE Negative Receiver	13	BH: Particulate	2,400	*	99.0%	0.030	6.5-6-25	0.030 gr/dscf, 2.5 tpy	None	2.70	2.70	2.70	270.31	270.31	270.31	2.70	2.70	2.70	2.50	2.70	2.70
(ss)(21)	42-9	DSE South Packer	18	BH: Particulate	10,320	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	11.62	11.62	11.62	1162.33	1162.33	1162.33	11.62	11.62	11.62	11.62	11.62	11.62
(ss)(22)	42-11	DSE Railcar Loading - East Track	20	BH: Particulate	2,500	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	2.82	2.82	2.82	281.57	281.57	281.57	2.82	2.82	2.82	2.82	2.82	2.82
(ss)(23)	42-12	DSE Railcar Loading - West Track	21	BH: Particulate	2,500	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	2.82	2.82	2.82	281.57	281.57	281.57	2.82	2.82	2.82	2.82	2.82	2.82
(ss)(24)	42-13	DSE Bulk Bag System	106	BH: Particulate	4500	*	99.0%	0.0300	6.5-1-2	0.03 gr/dscf	PSD Minor: PM: 0.50 lb/hr; PM10: 0.10 lb/hr; PM2.5: 0.10 lb/hr	5.07	5.07	5.07	506.83	506.83	506.83	5.07	5.07	5.07	2.190	0.438	0.438
(ss)(25)	61-14	Dextrin Blend	61-14	BH: Particulate	1,290	**	99.0%	0.028	6.5-6-25	0.028 gr/dscf, 1.2 tpy	None	1.36	1.36	1.36	135.60	135.60	135.60	135.60	135.60	135.60	1.20	1.36	1.36
(ss)(26)	61-14A	DSW Chemical Blender Tank	34	BH: Particulate	1,290	*	99.0%	0.029	6.5-6-25	0.029 gr/dscf, 0.6 tpy	None	1.40	1.40	1.40	140.45	140.45	140.45	1.40	1.40	1.40	0.60	1.40	1.40
(ss)(27)	63-3	CWS #7 Dryer Receiver	47	BH: Particulate	2,000	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	2.25	2.25	2.25	225.26	225.26	225.26	2.25	2.25	2.25	2.25	2.25	2.25
(ss)(28)	63-4	CWS North Mill	48	BH: Particulate	6,500	*	99.0%	0.030	6.5-1-2 6.5-1-2	0.03 gr/dscf	None	7.32	7.32	7.32	732.09	732.09	732.09	7.32	7.32 7.88	7.32	7.32	7.32	7.32
(ss)(29) (ss)(30)	63-5 63-9	CWS North Product CWS Packer	49 50	BH: Particulate BH: Particulate	7,000 1.094	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf 0.03 gr/dscf	None None	7.88 1.23	7.88 1.23	7.88 1.23	788.40 123.22	788.40 123.22	788.40 123.22	7.88 1.23	7.88 1.23	7.88 1.23	7.88 1.23	7.88 1.23	7.88 1.23
(SS)(3U) (SS)(31)	63-12	Liquid Glue Bag Dump	51	BH: Particulate	1,094	**	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	1.69	1.69	1.69	168.94	168.94	168.94	168.94	168.94	1.23	1.69	1.69	1.69
		CWS #9 and #10 Dryers	52			*																	
(ss)(32)	63-15	Receiver		BH: Particulate	3,600	1	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	4.05	4.05	4.05	405.46	405.46	405.46	4.05	4.05	4.05	4.05	4.05	4.05
(ss)(33)	63-16A	CWS #11 Dryer	54A	BH: Particulate	3,300		99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	3.72	3.72	3.72	371.67	371.67	371.67	3.72	3.72	3.72	3.72	3.72	3.72

Source: Ingredion Incorporated Indianapolis Plant
Address: 151 South Drover Street, Indianapolis, IN 46221
Significant Source Modification No: 097-40286-00042
Significant Permit Modification No: 097-40287-00042
Permit Rev

Permit List No.	Unit Number	Equipment Description	Stack	Control Equipment	Gas or Air flow rate (dscfm)	Integral/	Control Efficiency of Control Equipment	Outlet Grain Loading Limit	326 IAC 6.5	326 IAC 6.5 Limit	Other Limits	PTE Afte	er Controls	(ton/yr)	PTE Bef	fore Controls	(ton/yr)		olled PTE t rposes (to	or Part 70 n/yr)		ited PTE fo rposes (tor	
LIST NO.	Number			Equipment	(dsciii)	imerent	Control Equipment	(gr/dscf)		Lillit		PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5
(ss)(33)	63-16B	CWS #12 and #13 Dryers	54B	BH: Particulate	3,300	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	3.72	3.72	3.72	371.67	371.67	371.67	3.72	3.72	3.72	3.72	3.72	3.72
(ss)(34)	63-18	CWS South Raw Material Dump	55	BH: Particulate	1,500	**	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	1.69	1.69	1.69	168.94	168.94	168.94	168.94	168.94	168.94	1.69	1.69	1.69
(ss)(35)	63-20	DSW Negative Receiver	56	BH: Particulate	1,100		99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	1.24	1.24	1.24	123.89	123.89	123.89	1.24	1.24	1.24	1.24	1.24	1.24
(ss)(37)	71-3	Negative Receiver	71-3	BH: Particulate	7,500	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	8.45	8.45	8.45	844.71	844.71	844.71	8.45	8.45	8.45	8.45	8.45	8.45
(ss)(51)	71-8	DSW Bulk Car Loading	72	BH: Particulate	2,000	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	2.25	2.25	2.25	225.26	225.26	225.26	2.25	2.25	2.25	2.25	2.25	2.25
(ss)(52)	577-1	RSP South Bulk Bag Packing	77	BH: Particulate	3,800	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	4.28	4.28	4.28	427.99	427.99	427.99	4.28	4.28	4.28	4.28	4.28	4.28
(ss)(53)	FA-60582	FG Bulk Bag Bin Vent Bld 800	FA-60582	BH: Particulate	3,800	**	99.0%	0.030	6.5-1-2	0.03 gr/dscf	PSD Minor: PM: 1.63 lb/hr; PM10: 0.80 lb/hr; PM2.5: 0.65 lb/hr	4.28	4.28	4.28	427.99	427.99	427.99	427.99	427.99	427.99	4.280	3.504	2.847
(ss)(54)	577-3	RSP South Packing Line	79	BH: Particulate	10,000	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	11.26	11.26	11.26	1126.29	1126.29	1126.29	11.26	11.26	11.26	11.26	11.26	11.26
(ss)(55)	577-4	RSP Bulk Loading System A	80	BH: Particulate	1,750	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	1.97	1.97	1.97	197.10	197.10	197.10	1.97	1.97	1.97	1.97	1.97	1.97
(ss)(56)	577-4A	RSP Bulk Loading Fugitive Dust Collector	81	BH: Particulate	1,200.0	**	99%	0.002	6.5-1-2	0.03 gr/dscf	None	0.08	0.08	0.08	8.11	8.11	8.11	8.11	8.11	8.11	0.08	0.08	0.08
(ss)(57)	578-1	CWS Conveying Cyclone Operation ⁴	578-1	BH: Particulate	4,000	**	99.00%	0.030	6.5-1-2	0.03 gr/dscf	None	4.51	4.51	4.51	450.51	450.51	450.51	450.51	450.51	450.51	4.51	4.51	4.51
(ss)(58)	578-2	CWS Packing Hopper	89	BH: Particulate	1,750	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	1.97	1.97	1.97	197.10	197.10	197.10	1.97	1.97	1.97	1.97	1.97	1.97
(ss)(59)	578-3	CWS Milling System	578-3	BH: Particulate	6,150	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	6.93	6.93	6.93	692.67	692.67	692.67	6.93	6.93	6.93	6.93	6.93	6.93
(ss)(59a)	DC700	Product Receiver Drum A	578-4	N/A	1750		0.0%	0.010	6.5-1-2	0.03 gr/dscf	none	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
(ss)(59b)	DC701	Product Receiver Drum B	578-5	N/A	1750		0.0%	0.010	6.5-1-2	0.03 gr/dscf	none	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66	0.66
(ss)(60)	(formerly TF31901)	Product Bin 93	1-158	BH: Particulate	3,000	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	3.38	3.38	3.38	337.89	337.89	337.89	3.38	3.38	3.38	3.38	3.38	3.38
(ss)(61)	(formerly TF31902)	Product Bin 92	2-158	BH: Particulate	2,000	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	2.25	2.25	2.25	225.26	225.26	225.26	2.25	2.25	2.25	2.25	2.25	2.25
(ss)(62)	TF31991	Product Bin 91	3-158	BH: Particulate	2,000	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	2.25	2.25	2.25	225.26	225.26	225.26	2.25	2.25	2.25	2.25	2.25	2.25
(ss)(63)	SH31913	Surge Tank Bin 158-3	7-158	BH: Particulate	200	**	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	0.23	0.23	0.23	22.53	22.53	22.53	22.53	22.53	22.53	0.23	0.23	0.23
(ss)(64)	DC-31900	Bulk Bag Unload Bin 158-4	8-158	DCS: Particulate	600	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	0.68	0.68	0.68	67.58	67.58	67.58	0.68	0.68	0.68	0.68	0.68	0.68
(ss)(65)	TR31912	FBR1 Exhaust	5-158	MF: Particulate	8,800	**	99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	9.91	9.91	9.91	991.13	991.13	991.13	991.13	991.13	991.13	9.91	9.91	9.91
(ss)(66)	TR31913	FBR1 Cooling System	9-158	CY and BH: Particulate	20000	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10/PM2.5: 1.71 lb/hr	22.53	22.53	22.53	2252.57	2252.57	2252.57	22.53	22.53	22.53	7.49	7.49	7.49
(ss)(67)	T-1	Starch Dryer	T-1	CY and DCS: Particulate	500		99.0%	0.030	6.5-1-2	0.03 gr/dscf	None	0.56	0.56	0.56	56.31	56.31	56.31	0.56	0.56	0.56	0.56	0.56	0.56
(ss)(68)	5549-22	Line 1 South Packing Hopper	5549-22	BH: Particulate	4.800	*	99.9%	0.030	6.5-1-2	0.03 gr/dscf	None	5.41	5.41	5.41	5406.17	5406.17	5406.17	5.41	5.41	5.41	5.41	5.41	5.41
(ss)(69)	TF31980	Base Bin 80	10-158	BH: Particulate	1,275	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10/PM2.5: 0.055 lb/hr	1.44	1.44	1.44	143.60	143.60	143.60	1.44	1.44	1.44	0.241	0.241	0.241
(ss)(69)	TF31981	Base Bin 81	11-158	BH: Particulate	1,275	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10/PM2.5: 0.055 lb/hr	1.44	1.44	1.44	143.60	143.60	143.60	1.44	1.44	1.44	0.241	0.241	0.241
(ss)(69)	TF31982	Base Bin 82	12-158	BH: Particulate	1,275	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10/PM2.5: 0.055 lb/hr	1.44	1.44	1.44	143.60	143.60	143.60	1.44	1.44	1.44	0.241	0.241	0.241
(ss)(70)	TR31922	FBR2 Exhaust	14-158	MF: Particulate	6,000	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10/PM2.5: 0.514 lb/hr	6.76	6.76	6.76	675.77	675.77	675.77	6.76	6.76	6.76	2.251	2.251	2.251
(ss)(71)	TR31923	FBR2 Cooling Reactor	15-158	MF: Particulate	4,300	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10/PM2.5: 0.369 lb/hr	4.84	4.84	4.84	484.30	484.30	484.30	4.84	4.84	4.84	1.616	1.616	1.616
(ss)(72)	TF31990	Product Bin 90	13-158	MF: Particulate	2200	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10/PM2.5: 0.094 lb/hr	2.48	2.48	2.48	247.78	247.78	247.78	2.48	2.48	2.48	0.412	0.412	0.412
(ss)(73)	TS32001	Packing Receiver	71-10	BH: Particulate	3300	*	99.0%	0.030	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10/PM2.5: 0.283 lb/hr	3.72	3.72	3.72	371.67	371.67	371.67	3.72	3.72	3.72	1.240	1.240	1.240
(ss)(74)	TF41822	Base Bin	152-13	BH: Particulate	2060	*	99.0%	0.020	6.5-1-2	0.03 gr/dscf	None	1.55	1.55	1.55	154.68	154.68	154.68	1.55	1.55	1.55	1.55	1.55	1.55

Controls: BH = Baghouse, CY = Cyclone, DCS = Dust Collection System, MF = Metal Filter, RTO = Regenerative Thermal Oxidizer, WS = Wet Scrubber

Methodology

PTE After Controls (ton/yr) = Gas or Air Flow Rate (dscfm) x Outlet Grain Loading Limit (gr/dscf) x (60 min/hr) x (8760 hr/yr) x (1 lb/7000 gr) x (1 ton/2000 lb)

PTE Before Controls (ton/yr) = PTE After Controls / (1 - Control Efficiency)

Uncontrolled PTE for Part 70 Purposes (ton/yr):

For units with integra to the process controls, Uncontrolled PTE for Part 70 Purposes = PTE After Controls

For units without integral to the process controls, Uncontrolled PTE for Part 70 Purposes = PTE Before Controls

Limited PTE is based on PSD Minor Limits, if applicable or based on 326 IAC 6.5 limits.

The unit has a specific limit for this pollutant.

The unit has a specific limit for this pollutant.

The unit does not have a specific limit for this pollutant. However, a control device is required to meet a limit for PM and/or PM10, so the PTE is being shown after control.

^{*}Control has been determined to be both integral and inherent to the process.

**Control has been determined to be inherent to the process.

Source: Ingredion Incorporated Indianapolis Plant
Address: 151 South Drover Street, Indianapolis, IN 46221
Significant Source Modification No: 097-40286-00042
Significant Permit Modification No: 097-40287-00042
Permit Rev

Permi	Unit . Number	Equipment Description	Stack	Control	Gas or Air flow rate	Integral/	Control Efficiency of Control Equipment	Outlet Grain Loading Limit	326 IAC 6.5	326 IAC 6.5 Limit	Other Limits	PTE Aft	er Controls	(ton/yr)	PTE Bei	fore Controls	(ton/yr)	Uncontro Pur	lled PTE for poses (tor			ed PTE for poses (ton			
List No	. Number			Equipment	(dscfm)	Inherent	Control Equipment	(gr/dscf)		Limit		PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5		
Permi List No	Unit . Number	Equipment Description	Stack	Control Equipment	Gas or Air flow rate (dscfm)	Integral/	Control Efficiency of Control Equipment	Outlet Grain Loading Limit (gr/dscf)	326 IAC 6.5	Limit	Other Limits	Emission Factor (lb/ton)	Max Produc- tion Rate		After Controls	s (ton/yr)	PTE Befor	e Controls	(ton/yr)		lled PTE fo poses (ton		Limited P	TE for PSD (ton/yr)	Purposes
								(9174501)				(15/1011)	(ton/hr)	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5	PM	PM10	PM2.5
(y)	54-1	P-6 Rework Station	54-1	Baghouse: particulate	5,000	no	99.00%	0.03	6.5-1-2	0.03 gr/dscf	None	0.87	7.50	0.29	0.29	0.29	28.58	28.58	28.58	28.58	28.58	28.58	5.63	5.63	5.63

Methodology

Emission Factor from AP-42, Section 9.9.7, Corn Wet Milling, Table 9.9.7-1 for Grain Handling

PTE Before Controls (ton/yr) = Emission Factor ((b/ton)) x Maximum Production Rate (ton/yr) x (8760 hr/yr) x (1 ton/2000 lb)

PTE After Controls (ton/yr) = PTE Before Controls x (1 - Control Efficiency)

Uncontrolled PTE for Part 70 Purposes (ton/yr) = PTE Before Controls (ton/yr)

Limited PTE PM for PSD Purposes (ton/yr) = Gas or Air Flow Rate (dsclm) x Outlet Grain Loading Limit (gr/dscf) x (60 min/hr) x (8760 hr/yr) x (1 lb/7000 gr) x (1 ton/2000 lb)

Limited PTE PM 10 and PM2.5 set equal to Limited PTE PM. While the unit doesn't have specific PM10 and PM2.5 limits, a control device is required to meet the limit for PM, so the PTE is being shown the same as for PM.

Permit List No		Equipment Description	Stack	Control Equipment	Uncontrolled Emission Factor (lb/ton) ¹	Maximum Product Throughput (ton/hr)*	Uncontrolled Potential to Emit PM/PM10/PM2.5 (lb/hr)				Controlled Potential to Emit PM/PM10/PM2.5 (ton/yr)
(ss)(75) TF34031	DSW Product Silo	S34031	BH: Particulate	3.14	1.55	4.87	21.32	99.99%	4.87E-04	2.13E-03
(ss)(76) TF34032	DSW Product Silo	S34032	BH: Particulate	3.14	1.55	4.87	21.32	99.99%	4.87E-04	2.13E-03
(ss)(77) TF34033	DSW Product Silo	S34033	BH: Particulate	3.14	1.55	4.87	21.32	99.99%	4.87E-04	2.13E-03
(ss)(78) TF34034	DSW Product Silo	S34034	BH: Particulate	3.14	1.55	4.87	21.32	99.99%	4.87E-04	2.13E-03

* There is a process bottleneck of 3100 pounds per hour (1.55 ton/hr), although the silos are capable of processing 1.75 tons per hour, each.

Methodology

1 Emission factor from AP 42 Chapter 11.12 Table 11.12-2 Concrete Batching

Uncontrolled Potential to Emit PM/PM10/PM2.5 (fib/hr) = Uncontrolled Emission Factor (fib/ton) * Maximum Product Throughput (ton/hr)

Uncontrolled Potential to Emit PM/PM10/PM2.5 (fib/hr) = Uncontrolled Potential to Emit PM/PM10/PM2.5 (fib/hr) * 8760 hours/1 year * 1ton/2000 lbs

Controlled Potential to Emit PM/PM10/PM2.5 (fib/hr) = Uncontrolled Potential to Emit PM/PM10/PM2.5 (fib/hr) * (1-Control Efficiency (%))

Controlled Potential to Emit PM/PM10/PM2.5 (ton/yr) = Uncontrolled Potential to Emit PM/PM10/PM2.5 (ton/yr) * (1-Control Efficiency (%))

Appendix A: Emissions Calculations Dryers - Particulate

Source: Ingredion Incorporated Indianapolis Plant Address: 1515 South Drover Street, Indianapolis, IN 46221 Significant Source Modification No.: 097-40296-00042

Significant Permit Modification No.: 097-40627-00042 Permit Reviewer: Deena P. Levering

Particulate Emissions

Particulate	Emission	ns .		1			1	,		1	1												
Permit List No.	Unit Number	Equipment Description	Stack	Control Equipment	Gas or Air flow rate (dscfm)	Integral/ Inherent	Control Efficiency of Control	Outlet Grain Loading Limit	326 IAC 6.5	326 IAC 6.5 Limit	Other Limits	PT	E After C (ton/y		PTE Bef	ore Control	s (ton/yr)	Uncontro	olled PTE fo (ton/yr)	or Part 70		ed PTE fo poses (to	
							Equipment	(gr/dscf)				РМ	PM10	PM2.5	PM	PM10	PM2.5	РМ	PM10	PM2.5	PM	PM10	PM2.5
(a)	40-4	#1 Starch Flash Dryer (30 MMBtu/hr)	40-4	WS: Particulate	42,200	no	88.5%	0.02	6.5-6-25	0.020 gr/dscf, 44.1 tpy	None	31.69	31.69	31.69	275.29	275.29	275.29	275.29	275.29	275.29	44.10	44.10	44.10
(b)	40-3	#2 Starch Flash Dryer (36 MMBtu/hr)	40-3	WS: Particulate	73,000	no	94.2%	0.0200	6.5-6-25	0.020 gr/dscf, 42.3 tpy	PSD minor: Starch produced from 40-3 shall not exceed 127,000 tons per year and 0.566 lb PM/PM10 per ton of starch produced	54.81	54.81	54.81	943.42	943.42	943.42	943.42	943.42	943.42	35.94	35.94	54.81
(c)	40-2	#3 Starch Flash Dryer (36 MMBtu/hr)	40-2	WS: Particulate	60,000	no	94.8%	0.0200	6.5-6-25	0.02 gr/dscf, 31.9 tpy	None	45.05	45.05	45.05	863.05	863.05	863.05	863.05	863.05	863.05	31.90	45.05	45.05
(d)	575-1	#4 Starch Flash Dryer (43 MMBtu/hr)	575-1	WS: Particulate	84,100	no	99.5%	0.0180	6.5-6-25	0.018 gr/dscf, 32.4 tpy	None	56.83	56.83	56.83	11366.48	11366.48	11366.48	11366.48	11366.48	11366.48	32.40	56.83	56.83
(e)	575-2	#5 Starch Flash Dryer (38 MMBtu/hr)	575-2	WS: Particulate	84,200	no	99.5%	0.011	6.5-6-25	0.011 gr/dscf, 32.4 tpy	None	34.77	34.77	34.77	6954.44	6954.44	6954.44	6954.44	6954.44	6954.44	32.40	34.77	34.77
(f)	575-3	#6 Starch Flash Dryer (40 MMBtu/hr)	575-3	WS: Particulate	84,100	no	99.50%	0.012	6.5-1-2	0.03 gr/dscf	PSD Minor: PM: 0.012 gr/dscf, 7.82 lb/hr, 34.25 tpy; PM10: 0.012 gr/dscf, 6.253 lb/hr, 27.39 tpy		37.89	37.89	7577.65	7577.65	7577.65	7577.65	7577.65	7577.65	34.25	27.39	37.89
(g)	5549-1	#1 Spray Dryer (25 MMBtu/hr)	5549-1	WS: Particulate	26,000	no	99.5%	0.030	6.5-1-2	0.03 gr/dscf	PSD Minor Limit: Combined input of start for 5549-1 and 5549-2 shall not exceed 30.000	29.28	29.28	29.28	5856.69	5856.69	5856.69	5856.69	5856.69	5856.69			29.28
(h)	5549-2	#2 Spray Dryer (25 MMBtu/hr)	5549-2	WS: Particulate	26,000	no	99.5%	0.030	6.5-1-2	0.03 gr/dscf	ton/yr. Emission rate shall not exceed 2.50 lb/ PM and 2.50 lb PM10 per ton of starch.	29.28	29.28	29.28	5856.69	5856.69	5856.69	5856.69	5856.69	5856.69	37.50	37.50	29.28
(i)	5502-1A	Feed Dryer (77 MMBtu/hr)	5502-7	First Effect Wash Water System: SO2; RTO: Particulate and VOC		no			6.5-1-2	0.03 gr/dscf	PSD Minor Limit:												
(j)	5502-1B	Germ Dryer (20 MMBtu/hr)	5502-7	RTO: Particulate and VOC	45,148	no	95.08%	0.0114	6.5-1-2	0.03 gr/dscf	PM/PM10: 0.0114 gr/dscf, 4.533 lb/hr, 19.855 tpy.	19.32	19.32	19.32	392.74	392.74	392.74	392.74	392.74	392.74	19.855	19.855	19.855
(k)	5502-1C	Gluten Dryer (32 MMBtu/hr)	5502-7	RTO: Particulate and VOC		no			6.5-1-2	0.03 gr/dscf													
(l)	5502-1D	RTO (18 MMBtu/hr)	5502-7	N/A		no			6.5-1-2	0.03 gr/dscf													
(m)	5549-28	Spray Agglomerator #3	5549-28	WS: Particulate	38,000.0	no	99%	0.025	6.5-1-2	0.03 gr/dscf	PSD Minor: PM/PM10: 0.025 gr/dscf, 8.143 lb/hr, 35.67 tpy	35.67	35.67	35.67	3566.57	3566.57	3566.57	3566.57	3566.57	3566.57	35.67	35.67	35.67

Controls: RTO = Regenerative Thermal Oxidizer, WS = Wet Scrubber

Methodology

PTE After Controls (ton/yr) = Gas or Air Flow Rate (dscfrm) x Outlet Grain Loading Limit (gr/dscf) x (60 min/hr) x (8760 hr/yr) x (1 lb/7000 gr) x (1 ton/2000 lb)

PTE Before Controls (ton/yr) = PTE After Controls / (1 - Control Efficiency)
Uncontrolled PTE for Part 70 Purposes (ton/yr) = PTE Before Controls

Limited PTE for PSD Purposes (ton/yr):

Limited PTE is based on PSD Minor Limits, if applicable or based on 326 IAC 6.5 limits.

The unit has a specific limit for this pollutant.

The unit does not have a specific limit for this pollutant. However, a control device is required to meet a limit for PM and/or PM10, so the PTE is being shown after control.

Appendix A: Emissions Calculations Dryers - SO2, VOC, and HAPs

Source: Ingredion Incorporated Indianapolis Plant Address: 1515 South Drover Street, Indianapolis, IN 46221

Significant Source Modification No.: 097-40296-00042 Significant Permit Modification No.: 097-40627-00042 Permit Reviewer: Deena P. Levering

SO2 Emissions

Permit List No.	Unit ID	Unit Description	SO2 Control	SO2 Emissions After Control (lb/hr)	Control Efficiency	SO2 PTE After Controls (ton/yr)	SO2 PTE Before Controls (ton/yr)	Limited PTE SO2 (lb/hr)	Limited PTE SO2 (ton/yr)
(i)	5502-1A	Feed Dryer	First Effect Water Wash System	5.54	60%	24.27	60.66	8.05	35.26
(j)	5502-1B	Germ Dryer							
(k)	5502-1C	Gluten Dryer							

Methodology

SO2 Emissions After Control (lb/hr) are based on the highest test result from testing conducted on 11/10/2010.

SO2 PTE After Controls (ton/yr) = SO2 Emissions After Control (lb/hr) x (8760 hr/yr) x (1 ton/2000 lb)

SO2 PTE Before Controls (ton/yr) = SO2 PTE After Controls (ton/yr) / (1 - Control Efficiency)

VOC Emissions

Permit List No.	Unit ID	Unit Description	VOC Control	VOC Emissions After Control (lb/hr)	Control Efficiency	VOC PTE After Controls (ton/yr)	VOC PTE Before Controls (ton/vr)	Limited PTE VOC (lb/hr)	Limited PTE VOC (ton/yr)
(i)	5502-1A	Feed Dryer							
(j)	5502-1B	Germ Dryer	5502-1D: RTO	4.29	96.00%	18.79	469.76	4.89	21.42
(k)	5502-1C	Gluten Dryer							

Methodology

VOC Emissions After Control (lb/hr) are based on the highest test result from testing conducted on 11/1/2012.

Control Efficiency is based on the testing conducted on 11/1/2012.

VOC PTE After Controls (ton/yr) = VOC Emissions After Control (lb/hr) x (8760 hr/yr) x (1 ton/2000 lb)

VOC PTE Before Controls (ton/yr) = VOC PTE After Controls (ton/yr) / (1 - Control Efficiency)

Combined HAPs (acetaldehyde, acrolein, methanol, formaldehyde)

Permit List No.	Unit ID	Unit Description	Combined HAP Control	Combined HAP Emissions After Control (lb/hr)	Control Efficiency	Combined HAP PTE Before Controls (ton/yr)	HAP PTE After	Limited PTE Combined HAP (lb/hr)	Limited PTE Combined HAP (ton/yr)
(i)	5502-1A	Feed Dryer							
(j)	5502-1B	Germ Dryer	5502-1D: RTO	1.30	95.1%	116.20	5.69	2.65	11.60
(k)	5502-1C	Gluten Dryer							

Methodology

Combined HAP Emissions After Control (lb/hr) and Control Efficiency are based on test results from testing conducted on 2/23/2016.

Combined HAP PTE After Controls (ton/yr) = Combined HAP Emissions After Control (lb/hr) x (8760 hr/yr) x (1 ton/2000 lb)

Combined HAP PTE Before Controls (ton/yr) = Combined HAP PTE After Controls (ton/yr) / (1 - Control Efficiency)

Acetaldehyde Emissions

	Permit List No.	Unit ID	Unit Description	Acetaldehyde Control	Acetaldehyde Emissions After Control (lb/hr)	Control Efficiency	Acetaldehyde PTE Before Controls (ton/yr)	Acetaldehyde PTE After Controls (ton/vr)	Limited PTE Acetaldehyde (lb/hr)	Limited PTE Acetaldehyde (ton/yr)
	(i)	5502-1A	Feed Dryer							
	(j)	5502-1B	Germ Dryer	5502-1D: RTO	1.05	95.7%	107.53	4.60	2.24	9.80
ſ	(k)	5502-1C	Gluten Dryer							

Methodology

Acetaldehyde Emissions After Control (lb/hr) and Control Efficiency are based on test results from testing conducted on 2/23/2016.

 $Acetaldehyde \ PTE \ After \ Controls \ (ton/yr) = Acetaldehyde \ Emissions \ After \ Control \ (lb/hr) \ x \ (8760 \ hr/yr) \ x \ (1 \ ton/2000 \ lb)$

Acetaldehyde PTE Before Controls (ton/yr) = Acetaldehyde PTE After Controls (ton/yr) / (1 - Control Efficiency)

Appendix A: Emissions Calculations Natural Gas Combustion (< 100 MMBtu/hr)

Source: Ingredion Incorporated Indianapolis Plant Address: 1515 South Drover Street, Indianapolis, IN 46221

Significant Source Modification No.: 097-40296-00042 Significant Permit Modification No.: 097-40627-00042 Permit Reviewer: Deena P. Levering

						Criteria Polluta	ants		
		ľ	PM*	PM10*	PM2.5*	SO2	NOx**	VOC	CO
	Emission Fac	tor in lb/MMCF	1.9	7.6	7.6	0.6	100.0	5.5	84.0
NOx Limit for 550	2-1A through	1D in lb/MMCF		•			62.0		
Emission Unit	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)			Poter	ntial Emissions	(tons/yr)		
40-4: #1 Starch Flash Dryer	30	257.647	0.245	0.979	0.979	0.077	12.882	0.709	10.821
40-3: #2 Starch Flash Dryer	36	309.176	0.294	1.175	1.175	0.093	15.459	0.850	12.985
40-2: #3 Starch Flash Dryer	36	309.176	0.294	1.175	1.175	0.093	15.459	0.850	12.985
575-1: #4 Starch Flash Dryer	43	369.294	0.351	1.403	1.403	0.111	18.465	1.016	15.510
575-2: #5 Starch Flash Dryer	38	326.353	0.310	1.240	1.240	0.098	16.318	0.897	13.707
575-3: #6 Starch Flash Dryer	40	343.529	0.326	1.305	1.305	0.103	17.176	0.945	14.428
5549-1: #1 Spray Dryer	25	214.706	0.204	0.816	0.816	0.064	10.735	0.590	9.018
5549-2: #2 Spray Dryer	25	214.706	0.204	0.816	0.816	0.064	10.735	0.590	9.018
5502-1A: Feed Dryer	77	661.294	0.628	2.513	2.513	0.198	33.065	1.819	27.774
5502-1B: Germ Dryer	20	171.765	0.163	0.653	0.653	0.052	8.588	0.472	7.214
5502-1C: Gluten Dryer	32	274.824	0.261	1.044	1.044	0.082	13.741	0.756	11.543
5502-1D: RTO	18	154.588	0.147	0.587	0.587	0.046	7.729	0.425	6.493
5549-28: Spray Agglomerator #3	25	214.706	0.204	0.816	0.816	0.064	10.735	0.590	9.018
5549-13: Agglomerator	1.824	15.665	0.015	0.060	0.060	0.005	0.783	0.043	0.658
YX31914A: Process Heater	5.1	43.800	0.042	0.166	0.166	0.013	2.190	0.120	1.840
FH31924: FBR2 Burner	3	25.765	0.024	0.098	0.098	0.008	1.288	0.071	1.082
EF31929A: Air Heater 1	0.4	3.435	0.003	0.013	0.013	0.001	0.172	0.009	0.144
EF31927A: Air Heater 2	0.4	3.435	0.003	0.013	0.013	0.001	0.172	0.009	0.144
Drover CWS Air Heaters	4.5	38.647	0.037	0.147	0.147	0.012	1.932	0.106	1.623
Total			3.75	15.02	15.02	1.19	197.63	10.87	166.01
Fuel Limit for 5502-1A-D		1263.000					39.15		

Emission Factors are from AP-42, Tables 1.4-1 and 1.4-2.

^{**}Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32. The NOx emission factor for units 5502-1A through 5502-1D is based on the NOx emission limit for these units. This limit is achievable based on past testing.

					HAPs -	Organics					HAPs - Me	tals		Total
			Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total PAH HAPs	Lead	Cadmium	Chromium	Manganese	Nickel	HAPs
	Emission Fac	tor in lb/MMCF	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	1.1E-05	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	1.8880
Emission Unit	Heat Input Capacity (MMBtu/hr)	Potential Throughput (MMCF/yr)						otential Emis	,	• •				
40-4: #1 Starch Flash Dryer	30	257.647	2.7E-04	1.5E-04	9.7E-03	2.3E-01	4.4E-04	1.5E-06	6.4E-05	1.4E-04	1.8E-04	4.9E-05	2.7E-04	2.4E-01
40-3: #2 Starch Flash Dryer	36	309.176	3.2E-04	1.9E-04	1.2E-02	2.8E-01	5.3E-04	1.8E-06	7.7E-05	1.7E-04	2.2E-04	5.9E-05	3.2E-04	2.9E-01
40-2: #3 Starch Flash Dryer	36	309.176	3.2E-04	1.9E-04	1.2E-02	2.8E-01	5.3E-04	1.8E-06	7.7E-05	1.7E-04	2.2E-04	5.9E-05	3.2E-04	2.9E-01
575-1: #4 Starch Flash Dryer	43	369.294	3.9E-04	2.2E-04	1.4E-02	3.3E-01	6.3E-04	2.1E-06	9.2E-05	2.0E-04	2.6E-04	7.0E-05	3.9E-04	3.5E-01
575-2: #5 Starch Flash Dryer	38	326.353	3.4E-04	2.0E-04	1.2E-02	2.9E-01	5.5E-04	1.9E-06	8.2E-05	1.8E-04	2.3E-04	6.2E-05	3.4E-04	3.1E-01
575-3: #6 Starch Flash Dryer	40	343.529	3.6E-04	2.1E-04	1.3E-02	3.1E-01	5.8E-04	2.0E-06	8.6E-05	1.9E-04	2.4E-04	6.5E-05	3.6E-04	3.2E-01
5549-1: #1 Spray Dryer	25	214.706	2.3E-04	1.3E-04	8.1E-03	1.9E-01	3.7E-04	1.2E-06	5.4E-05	1.2E-04	1.5E-04	4.1E-05	2.3E-04	2.0E-01
5549-2: #2 Spray Dryer	25	214.706	2.3E-04	1.3E-04	8.1E-03	1.9E-01	3.7E-04	1.2E-06	5.4E-05	1.2E-04	1.5E-04	4.1E-05	2.3E-04	2.0E-01
5502-1A: Feed Dryer	77	661.294	6.9E-04	4.0E-04	2.5E-02	6.0E-01	1.1E-03	3.8E-06	1.7E-04	3.6E-04	4.6E-04	1.3E-04	6.9E-04	6.2E-01
5502-1B: Germ Dryer	20	171.765	1.8E-04	1.0E-04	6.4E-03	1.5E-01	2.9E-04	9.8E-07	4.3E-05	9.4E-05	1.2E-04	3.3E-05	1.8E-04	1.6E-01
5502-1C: Gluten Dryer	32	274.824	2.9E-04	1.6E-04	1.0E-02	2.5E-01	4.7E-04	1.6E-06	6.9E-05	1.5E-04	1.9E-04	5.2E-05	2.9E-04	2.6E-01
5502-1D: RTO	18	154.588	1.6E-04	9.3E-05	5.8E-03	1.4E-01	2.6E-04	8.8E-07	3.9E-05	8.5E-05	1.1E-04	2.9E-05	1.6E-04	1.5E-01
5549-28: Spray Agglomerator #3	25	214.706	2.3E-04	1.3E-04	8.1E-03	1.9E-01	3.7E-04	1.2E-06	5.4E-05	1.2E-04	1.5E-04	4.1E-05	2.3E-04	2.0E-01
5549-13: Agglomerator	1.824	15.665	1.6E-05	9.4E-06	5.9E-04	1.4E-02	2.7E-05	8.9E-08	3.9E-06	8.6E-06	1.1E-05	3.0E-06	1.6E-05	1.5E-02
YX31914A: Process Heater	5.1	43.800	4.6E-05	2.6E-05	1.6E-03	3.9E-02	7.4E-05	2.5E-07	1.1E-05	2.4E-05	3.1E-05	8.3E-06	4.6E-05	4.1E-02
FH31924: FBR2 Burner	3	25.765	2.7E-05	1.5E-05	9.7E-04	2.3E-02	4.4E-05	1.5E-07	6.4E-06	1.4E-05	1.8E-05	4.9E-06	2.7E-05	2.4E-02
EF31929A: Air Heater 1	0.4	3.435	3.6E-06	2.1E-06	1.3E-04	3.1E-03	5.8E-06	2.0E-08	8.6E-07	1.9E-06	2.4E-06	6.5E-07	3.6E-06	3.2E-03
EF31927A: Air Heater 2	0.4	3.435	3.6E-06	2.1E-06	1.3E-04	3.1E-03	5.8E-06	2.0E-08	8.6E-07	1.9E-06	2.4E-06	6.5E-07	3.6E-06	3.2E-03
Drover CWS Air Heaters	4.5	38.647	4.1E-05	2.3E-05	1.4E-03	3.5E-02	6.6E-05	2.2E-07	9.7E-06	2.1E-05	2.7E-05	7.3E-06	4.1E-05	3.6E-02
Total			4.2E-03	2.4E-03	0.15	3.56	6.7E-03	2.3E-05	9.9E-04	2.2E-03	2.8E-03	7.5E-04	4.2E-03	3.73

Emission Factors are from AP-42, Tables 1.4-3 and 1.4-4.

The five highest organic and metal HAPs emission factors are provided above plus total PAH HAPs. The total HAPs is the sum of all HAPs listed in AP-42, Tables 1.4-3 and 1.4-4. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Methodology

Heating Value of Natural Gas is assumed to be 1020 MMBtu/MMCF

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) * 8,760 hrs/yr * 1 MMCF/1,020 MMBtu

 $Potential\ Emission\ (tons/yr) = Throughput\ (MMCF/yr)\ ^*\ Emission\ Factor\ (lb/MMCF)\ ^*\ (1\ ton/2,000\ lb)$

^{*}PM emission factor is filterable PM only. PM10 emission factor is filterable PM10 and condensable PM combined. PM2.5 emission factor is filterable PM2.5 and condensable PM combined.

Appendix A: Emission Calculations Reciprocating Internal Combustion Engines - Diesel Fuel (≤ 600 HP)

Source: Ingredion Incorporated Indianapolis Plant

Address: 1515 South Drover Street, Indianapolis, IN 46221

Significant Source Modification No.: 097-40296-00042
Significant Permit Modification No.: 097-40627-00042
Permit Reviewer: Deena P. Levering

Output Horsepower Rating (hp)
Maximum Hours Operated per Year
Potential Throughput (hp-hr/yr)

FP1	FP2	FP3
210.0	300.0	300.0
500	500	500
105,000	150,000	150,000

		Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO	
Emission Factor in lb/hp-hr	0.0022	0.0022	0.0022	0.0021	0.0310	0.0025	0.0067	
Unit Potential Emissions (ton/yr)								
FP1: Emergency Fire Pump	0.12	0.12	0.12	0.11	1.63	0.13	0.35	
FP2: Emergency Fire Pump	0.17	0.17	0.17	0.15	2.33	0.19	0.50	
FP3: Emergency Fire Pump	0.17	0.17	0.17	0.15	2.33	0.19	0.50	
Total	0.45	0.45	0.45	0.42	6.28	0.51	1.35	

^{*}PM and PM2.5 emission factors are assumed to be equivalent to PM10 emission factors. No information was given regarding which method was used to determine the factor or the fraction of PM10 which is condensable.

Hazardous Air Pollutants (HAPs)

•		Pollutant							
								Total PAH	
	Benzene	Toluene	Xylene	1,3-Butadiene	Formaldehyde	Acetaldehyde	Acrolein	HAPs***	
Emission Factor in lb/hp-hr****	6.53E-06	2.86E-06	2.00E-06	2.74E-07	8.26E-06	5.37E-06	6.48E-07	1.18E-06	
Unit	Potential Emissions (ton/yr)								
FP1: Emergency Fire Pump	3.43E-04	1.50E-04	1.05E-04	1.44E-05	4.34E-04	2.82E-04	3.40E-05	6.17E-05	
FP2: Emergency Fire Pump	4.90E-04	2.15E-04	1.50E-04	2.05E-05	6.20E-04	4.03E-04	4.86E-05	8.82E-05	
FP3: Emergency Fire Pump	4.90E-04	2.15E-04	1.50E-04	2.05E-05	6.20E-04	4.03E-04	4.86E-05	8.82E-05	
Total	1.32E-03	5.80E-04	4.04E-04	5.54E-05	1.67E-03	1.09E-03	1.31E-04	2.38E-04	

^{***}PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

Potential Emission of Total HAPs (tons/yr) 5.49E-03

Methodology

Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.4-1, 3.4-2, 3.4-3, and 3.4-4. Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] * [Maximum Hours Operated per Year]

Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] * [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]

^{****}Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

Appendix A: Emission Calculations Bulk Chemical Storage Tanks

Source: Ingredion Incorporated Indianapolis Plant

Address: 1515 South Drover Street, Indianapolis, IN 46221

Significant Source Modification No.: 097-40296-00042 Significant Permit Modification No.: 097-40627-00042 Permit Reviewer: Deena P. Levering

Bulk Chemical Storage Tanks

Unit ID	Emission Unit Description	Worst- Case Tank Volume (gal)	Annual	Worst-Case Daily Throughput (gal/day)	Antoine's	Antoine's Coefficient B	Antoine's Coefficient C	Potential VOC Emissions (lb/yr)	Potential VOC Emissions (tpy)	Potential VOC Emissions (lb/day)	Potential VOC Emissions (lb/hr)
T1	Acetic Anhydride Storage Tanks (3)	16000	566240	5400	7.15	1445	199.82	72.92	0.03646	0.91	0.86
T2	Hydrochloric Acid Storage Tanks (4)	16000	414996	5100	9.56	2315	269.72	205.11	0.102555	3.04	

Methodology

Potential Emissions Quantified using a TANKS 4.0.9.d - equivalent tool for calculating working and standing losses from storage tanks.

Worst-Case Annual Throughput (gal/yr) for each type of bulk chemical storage tank based on the highest annual throughput for all tanks of that type for 2012-2013, multiplied by a safety factor of 1.5. Antoine's Coefficients for acetic anhydride obtained from TANKS 4.0.9.d.

Antoine's Coefficients for hydrochloric acid derived from regression analysis of vapor pressure data interpolated from Perry's Chemical Engineers' Handbook, 7th Edition, Table 2-10, Partial Pressure of HCl over Aqueous Solutions of HCl (32 and 34% HCl).

Potential VOC Emissions (lb/day) are calculated during the worst-case month (July) assuming 1 shipment in 1 day, plus standing losses for 1 day.

Potential VOC emissions (lb/hr) are calculated during the worst-case month (July) assuming 1 shipment in 1 hour.

Appendix A: Emission Calculations Degreasers

Source: Ingredion Incorporated Indianapolis Plant

Address: 1515 South Drover Street, Indianapolis, IN 46221

Significant Source Modification No.: 097-40296-00042 Significant Permit Modification No.: 097-40627-00042 Permit Reviewer: Deena P. Levering

		Maximum					
		Annual	Solvent	VOC	VOC	VOC	VOC
Unit ID	Emission Unit Description	Solvent	Density	Content	Emissions	Emissions	Emissions
		Usage	(lb/gal)	(%)	(tpy)	(lb/hr)	(lb/day)
		(gal/yr)					
D1	Degreaser #1	465	6.7	100%	1.56	0.50	11.98
D2	Degreaser #2	465	6.7	100%	1.56	0.50	11.98
D3	Degreaser #3	465	6.7	100%	1.56	0.50	11.98

Methodology

Potential VOC emissions are conservatively calculated assuming 100% VOC in solvent used is emitted.

Solvent density and VOC content per manufacturer MSDS. Solvent contains no HAP.

Hourly and daily emissions are conservatively calculated assuming 5 days of operation per week, equivalent to 6,240 hr/yr and 260 day/yr.

VOC Emissions (tpy) = Maximum Annual Solvent Usage (gal/yr) x Solvent Density (lb/gal) x VOC Content (%) x (1 ton/2000 lb)

VOC Emissions (lb/hr) = VOC Emissions (tpy) x (2000 lb/1 ton) x (1 yr/6240 hr)

VOC Emissions (lb/day) = VOC Emissions (tpy) x (2000 lb/1 ton) x (1 yr/260 day)

Appendix A: Emission Calculations Sandblaster

Source: Ingredion Incorporated Indianapolis Plant

Address: 1515 South Drover Street, Indianapolis, IN 46221

Significant Source Modification No.: 097-40296-00042 Significant Permit Modification No.: 097-40627-00042 Permit Reviewer: Deena P. Levering

Unit ID	Emission Unit Description	Maximum Exhaust Flow Rate (cfm)	Maximum Exhaust Particulate Concentration		Controlled PTE PM/PM10/PM2.5		Uncontrolled PTE PM/PM10/PM2.5	
			(gr/dscf)	(lb/hr)	(ton/yr)		(lb/hr)	(ton/yr)
S1	Sandblaster	90	0.03	0.02	0.10	99%	2.31	10.14

Methodology

Maximum exhaust flowrate per manufacturer specifications.

Maximum exhaust particulate concentration conservatively assumed to be 0.03 gr/dscf.

Controlled PTE (lb/hr) = Maximum Exhaust Flow Rate (cfm) x Maximum Exhaust Particulate Concentration (gr/dscf) x (60 min/hr) x (1 lb/7000 gr) Uncontrolled PTE (lb/hr) = Controlled PTE (lb/hr) / (1 - Control Efficiency)

PTE (ton/yr) = PTE (lb/hr) x (8760 hr/yr) x (1 ton/2000 lb)

Appendix A: Emissions Summary Gasoline Fuel Transfer and Dispensing Operation

Source: Ingredion Incorporated Indianapolis Plant

Address: 1515 South Drover Street, Indianapolis, IN 46221

Significant Source Modification No.: 097-40296-00042
Significant Permit Modification No.: 097-40627-00042

Permit Reviewer: Deena P. Levering

To calculate evaporative emissions from the gasoline dispensing fuel transfer and dispensing operation emission factors from AP-42 Chapter 5.2 Transportation And Marketing Of Petroleum Liquids were used. The total potential emission of VOC is as follows:

Gasoline Throughput = 333.3 gallons/day
Gasoline Throughput = 121.65 kgal/yr

Volatile Organic Compounds (VOC)

	Total	1.472
Spillage	0.70	0.0426
Vehicle refueling (displaced losses - uncontrolled)	11.00	0.6691
Tank breathing and emptying	1.00	0.0608
Filling storage tank (splash filling)	11.50	0.6995
Emission Source	throughput)*	(tons/yr)
	(lb/kgal of	PTE of VOC
	Factor	
	Emission	

Methodology

The gasoline throughput is based on the worst case assumption of 9,999 gallons per month (less than 10,000 gallons per month).

*Emission Factors from AP-42 Chapter 5.2 Transportation And Marketing Of Petroleum Liquids (dated 6/08), Table 5.2-7. Worst case emission factors used.

Gasoline Throughput (kgal/yr) = [Gasoline Throughput (gallons/day)] * [365 days/yr] * [kgal/1000 gal] PTE of VOC (tons/yr) = [Gasoline Throughput (kgal/yr)] * [Emission Factor (lb/kgal)] * [ton/2000 lb]

Hazardous Air Pollutants (HAPs)

		Hazardous Air	
		Pollutant (HAP)	
		Content (vapor	PTE of HAP
Volatile Organic HAP	CAS#	mass fraction)**	(tons/yr)
Benzene	71-43-2	0.37%	5.4E-03
n-Hexane	110-54-3	0.34%	5.0E-03
Toluene	108-88-3	0.40%	5.9E-03
m-Xylenes	108-38-3	0.11%	1.6E-03

Total PTE of HAPs (tons/yr)

1.8E-02

PTE of Worst Single HAP (tons/yr)

5.9E-03

(Toluene)

Methodology

**Source: US EPA TANKS Version 4.09 program

PTE of Total HAPs (tons/yr) = [Total HAP Content (% by weight)] * [PTE of VOC (tons/yr)]

PTE of HAP (tons/yr) = [Hazardous Air Pollutant (HAP) Content (vapor mass fraction)] * [PTE of VOC (tons/yr)]

Appendix A: Emission Calculations Batch Reactors

Source: Ingredion Incorporated Indianapolis Plant

Address: 1515 South Drover Street, Indianapolis, IN 46221

gnificant Source Modification No.: 097-40296-00042 ignificant Permit Modification No.: 097-40627-00042 Permit Reviewer: Deena P. Levering

Unit	Number of Reactors	Potential PPO Emissions Per Unit (ton/yr)	Total PTE VOC/HAP (ton/yr)
Batch Reactors: 190, 191, 192, 193, 200, 201, 203, 211, 212, 213	10	0.904	9.04

Methodology

PPO = Propylene Oxide, which is a VOC and HAP

The Potential PPO Emissions Per Unit (ton/yr) are based on the worst case formulation and scenario for the batch reactors. Total PTE VOC/HAP (ton/yr) = Number of Reactors x Potential PPO Emissions Per Unit (ton/yr)

Appendix A: Emissions Calculations Millshouse Draft Fans

Source: Ingredion Incorporated Indianapolis Plant Address: 1515 South Drover Street, Indianapolis, IN 46221 Significant Source Modification No.: 097-40296-00042 Significant Permit Modification No.: 097-4027-00042 Permit Reviewer: Deena P. Levering

Trivial if SO2	Insignificant if SO2	SEL SO ₂	25	tpy
< 1 lb/day	< 5 lb/hr or < 25 lb/day		10	lb/hr
		SER SO ₂	40	tpy

64 lb/lbmol SO₂ $Q_{std} = Q_a(T_{std}/T_a)(P_a/P_{std})$ 385.4 ft³/lbmol Air

std = variable at standard temp & press a = actual conditions

 $T_{std} = 70^{\circ}F$ $P_{std} = 29.92$ inHg or 1 atm or 14.7psi $Q_{dscfm} = Q_{scfm}(1\text{-}\%\text{moisture})$

Current Conditions

Fiber Wash Vent Fan							
$T_a =$	92	°F					
P _a =	14.7	psi					
%M =	89.0%						
SO_2 ppm	acfm	scfm	dscfm	lb/ft3 SO2	lb/hr SO ₂	lb/day SO ₂	tpy SO ₂
30	2200	2112	232	0.000005	0.1	1.7	0.3

Fiber Box Vent Fan							
T _a =	118	°F					
P _a =	14.7	psi					
%M =	94.0%						
SO ₂ ppm	acfm	scfm	dscfm	$lb/ft^3 SO_2$	lb/hr SO ₂	lb/day SO ₂	tpy SO ₂
130	5000	4585	275	0.000022	0.4	8.6	1.6

Grind Tank Vent Fan							
T _a =	96	°F					
P _a =	14.7	psi					
%M =	93.0%						
SO ₂ ppm	acfm	scfm	dscfm	lb/ft3 SO2	lb/hr SO ₂	lb/day SO ₂	tpy SO ₂
60	4200	4004	280	0.000010	0.2	4.0	0.7

Process 7	Tanks Fan							
	$T_a =$	96	°F					
	P _a =	14.7	psi					
	%M =	73.0%						
	SO ₂ ppm	acfm	scfm	dscfm	lb/ft3 SO2	lb/hr SO ₂	lb/day SO ₂	tpy SO ₂
	15	2200	2097	566	0.000002	0.1	2.0	0.4

MST O/F Fan							
$T_a =$	95	°F					
$P_a =$	14.7	psi					
%M =	89.0%						
SO ₂ ppm	acfm	scfm	dscfm	lb/ft ³ SO ₂	lb/hr SO ₂	lb/day SO ₂	tpy SO ₂
140	1300	1241	137	0.000023	0.2	4.6	0.8

1	1st Pass Fiber Wash T	ank Vent						
	$T_a =$	118	°F					
	P _a =	14.7	psi					
	%M =	94.0%						
	SO ₂ ppm	acfm	scfm	dscfm	lb/ft ³ SO ₂	lb/hr SO ₂	lb/day SO ₂	tpy SO ₂
	130	6543	6000	360	0.000022	0.5	11.2	2.0

Total SO₂ Emissions (tpy)

Methodology: SCFM = ACFM * ((460+70)/(460+Ta %F))
DSCFM = ACFM * (1-%M)
Ib/ft3 SO2 = SO2 ppm /1,000,000 * Ib/Ibmol SO2/ft3/Ibmol Air
Ib/ft3 SO2 = dscfm * Ib/ft3SO2 * 60 min
Ib/day SO2 = Ib/fts CO2 * 24/Hr/day
tpy SO2 = Ib/hr SO2 * 8760 hours/2000lbs

Proposed Conditions

Fiber Wash Vent F	an							
T,	= 92	°F						
P	= 14.7	psi psi						
%N	= 89.0%)						
SO ₂ pp	m acfm	scfm	dscfm	lb/ft3 SO2	lb/hr SO ₂	lb/day SO ₂	tpy SO ₂	tpy Change
30	2200	2112	232	0.000005	0.1	1.7	0.3	0.0

1	Fiber Box Vent Fan								
	T _a =	118	°F						
	P _a =	14.7	psi						
	%M =	94.0%							
	SO ₂ ppm	acfm	scfm	dscfm	lb/ft3 SO2	lb/hr SO ₂	lb/day SO ₂	tpy SO ₂	tpy Change
	130	5000	4585	275	0.000022	0.4	8.6	1.6	0.0

Grind Tank Vent Fan								
T _a =	96 9	°F						
P _a =	14.7	psi						
%M =	93.0%							
SO ₂ ppm	acfm	scfm	dscfm	lb/ft3 SO2	lb/hr SO ₂	lb/day SO2	tpy SO ₂	tpy Change
60	4200	4004	200	0.000010	0.2	4.0	0.7	0.0

Proce	ess Tanks Fan								
	$T_a =$	96	°F						
	P _a =	14.7	psi						
	%M =	73.0%							
	SO ₂ ppm	acfm	scfm	dscfm	lb/ft ³ SO ₂	lb/hr SO ₂	lb/day SO ₂	tpy SO ₂	tpy Change
	15	2200	2097	566	0.000002	0.1	2.0	0.4	0.0

MST	ΓO/F Fai	n								
		T _a =	95	°F						
		P _a =	14.7	psi						
		%M =	89.0%							
	9	SO ₂ ppm	acfm	scfm	dscfm	lb/ft3 SO2	lb/hr SO ₂	lb/day SO2	tpy SO ₂	tpy Change
		140	1300	1241	137	0.000023	0.2	4.6	0.8	0.0

1st Pass Fiber Wash T	ank Vent							
T _a =	118	°F						
P _a =	14.7	psi						
%M =	94.0%							
SO ₂ ppm	acfm	scfm	dscfm	lb/ft3 SO2	lb/hr SO ₂	lb/day SO2	tpy SO ₂	tpy Change
130	6543	6000	360	0.000022	0.5	11.2	2.0	0.0

2nd Fiber Bo	x Vent Far	1							
	$T_a =$	118	°F						
	$P_a =$	14.7	psi						
	%M =	94.0%							
S	O ₂ ppm	acfm	scfm	dscfm	lb/ft ³ SO ₂	lb/hr SO ₂	lb/day SO ₂	tpy SO ₂	tpy Change
	130	6543	6000	360	0.000022	0.5	11.2	2.0	2.0

	Total SO ₂ Emissions (tpy)	7.89
Total Change in SO ₂ emissions (tpy)		2.04

Methodology:
SCFM = ACFM * ((460+70)/(460+Ta ^(F))
DSCFM = ACFM * (1-%M)
Ib/ft3 SO2 = SO2 ppm / 1.000,000 * lb/lbmol SO2/ft3/lbmol Air
Ib/ft SO2 = 45cfm * Ib/ft3SO2 * 60 min
Ib/day SO2 = Ib/hr SO2 * 24hr/day
tpy SO2 = Ib/hr SO2 * 8760 hours/2000lbs

Appendix A: Emissions Calculations Steep Tanks

Source: Ingredion Incorporated Indianapolis Plant Address: 1515 South Drover Street, Indianapolis, IN 46221

Significant Source Modification No.: 097-40296-00042 Significant Permit Modification No.: 097-40627-00042 Permit Reviewer: Deena P. Levering

Background Information

Large Corn Steeps
Highest Steep SO₂ Measurement = 190 ppm Number of steeps
Max number of steeps filled per day 19 steeps 13 steeps/day Number of hours per steep 1.85 hr/steep Capacity per tank 5400 bu/tank

			Steeping Emis	ssions	Steeping Emissions				
SO ₂ ppm ¹	lb/cuft SO₂	Fill time (hr/steep)	Bu/year	Tanks filled/yr	Tank size (cuft)	SO ₂ emission Filling Rate	lb/day/steep	Annual SO ₂ Emissions	Annual SO ₂ Emissions
	-	(,			(,	(lb/hr)	,р	(lb SO ₂ /year)	(ton/yr)
200	3.57E-05	1.85	25,550,000	4731	8892	0.17	4.11	1500	0.75

¹ Highest concentration of SO₂ from the steeps in 190 ppm, assuming 200 ppm to be conservative.

Each steep is a trivial emission unit (< 1 lb/day SO₂)

Methodology: lb/cuft SO2 = SO2 ppm / 1,000,000 / 359 * 64 Fill time (hr) = Number of hours per steep hr/steep Bu/year = 70,000 bushel/day * 365 days/1year Tanks filled/yr = Bu/year / Capacity per tank (bu/tank)

Tank size (cuft) = 5700 * 1.56

Tank size (cutt) = 5/00 * 1.56
SO2 emission Filling rate (lb/hr) = lb/cuft SO2 * Tanks Size (cuft) / Fill time (hr)
lb/day/steep = SO2 emission filling rate (lb/hr) * fill time (hr) * Max number of steeps filled per day (steeps/day)
Annual SO2 Emissions (lb SO2/year) = Tanks filled/yr * Tank size (cuft) * lb/cuft SO2
Annual SO2 Emissions (ton/yr) = Annual SO2 Emissions (lb SO2/year) / 2000 lbs

Small Corn Steeps

Highest Steep SO₂ Measurement = 190 ppm Number of steeps 2 steeps Max number of fills per steep per day 3 fills/day Number of hours per steep 1.00 hr/steep Capacity per tank 500 bu/tank

						Steeping Emissions		Steeping E	missions
SO	SO npm 1 lb/cuft		Fill time Bu/year Tanks Tank size SO ₂ emission Filling Rate			Annual SO ₂	Annual SO ₂		
SO ₂ ppm ¹	SO ₂	(hr/steep)	Buryear	filled/yr	(cuft)	<u>-</u>	lb/day/steep	Emissions	Emissions
						(lb/hr)		(lb SO₂/year)	(TPY)
200	3.57E-05	1.00	1.095.000	2190	622	0.02	0.07	49	0.02

¹ Highest concentration of SO₂ from the steeps in 190 ppm, assuming 200 ppm to be conservative.

Each steep is a trivial emission unit (< 1 lb/day SO₂)

lb/cuft SO2 = SO2 ppm / 1,000,000 / 359 * 64

Fill time (hr) = Number of hours per steep hr/steep

Eurypear = Capacity per tank (bu/tank) * Max number of fills per steep per day (fills/day) * Number of steeps * 365 days/1year Tanks filled/yr = Bu/year / Capacity per tank (bu/tank) Tank size (cuft) = 5700 * 1.56

SO2 emission Filling rate (lb/hr) = lb/cuft SO2 * Tanks Size (cuft) / Fill time (hr)

lb/day/steep = SO2 emission filling rate (lb/hr) * fill time (hr) * Max number of steeps filled per day (steeps/day)

Annual SO2 Emissions (lb SO2/year) = Tanks filled/yr * Tank size (cuft) * lb/cuft SO2

Annual SO2 Emissions (ton/yr) = Annual SO2 Emissions (lb SO2/year) / 2000 lbs

Appendix A: Emission Calculations Fugitive Dust Emissions - Paved Roads

Source: Ingredion Incorporated Indianapolis Plant Address: 1515 South Drover Street, Indianapolis, IN 46221

Significant Source Modification No.: 097-40296-00042 Significant Permit Modification No.: 097-40627-00042 Permit Reviewer: Deena P. Levering

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 Information (provided by source)

vericle information (provided by source)									
	Maximum	Number of		Maximum		Maximum			
	number of	one-way trips	Maximum trips	Weight	Total Weight	one-way	Maximum one-	Maximum one-	Maximum one-
	vehicles per	per day per	per day	Loaded	driven per day	distance	way distance	way miles	way miles
Туре	day	vehicle	(trip/day)	(tons/trip)	(ton/day)	(feet/trip)	(mi/trip)	(miles/day)	(miles/yr)
Corn Truck (entering plant) (one-way trip)	70.0	1.0	70.0	40.0	2800.0	1260	0.239	16.7	6097.2
Corn Truck (leaving plant) (one-way trip)	70.0	1.0	70.0	15.0	1050.0	35	0.007	0.5	169.4
Feed/Germ Truck (entering plant) (one-way trip)	20.0	1.0	20.0	15.0	300.0	980	0.186	3.7	1354.9
Feed/Germ (leaving plant) (one-way trip)	20.0	1.0	20.0	40.0	800.0	980	0.186	3.7	1354.9
Chemical Truck Rte 1 (entering plant) (one-way trip)	2.0	1.0	2.0	21.0	42.0	1435	0.272	0.5	198.4
Chemical Truck Rte 1 (leaving plant) (one-way trip)	2.0	1.0	2.0	18.0	36.0	315	0.060	0.1	43.6
Chemical Truck Rte 2 (entering plant) (one-way trip)	1.0	1.0	1.0	21.0	21.0	2600	0.492	0.5	179.7
Chemical Truck Rte 2 (leaving plant) (one-way trip)	1.0	1.0	1.0	18.0	18.0	2600	0.492	0.5	179.7
Starch Truck Rte 1 (entering plant) (one-way trip)	20.0	1.0	20.0	17.5	350.0	140	0.027	0.5	193.6
Starch Truck Rte 1 (leaving plant) (one-way trip)	20.0	1.0	20.0	38.7	774.0	140	0.027	0.5	193.6
Starch Truck Rte 2 (entering plant) (one-way trip)	17.0	1.0	17.0	17.5	297.5	420	0.080	1.4	493.6
Starch Truck Rte 2 (leaving plant) (one-way trip)	17.0	1.0	17.0	38.7	657.9	420	0.080	1.4	493.6
Starch Truck Rte 3 (entering plant) (one-way trip)	5.0	1.0	5.0	17.5	87.5	1410	0.267	1.3	487.4
Starch Truck Rte 3 (leaving plant) (one-way trip)	5.0	1.0	5.0	38.7	193.5	1410	0.267	1.3	487.4
Liquid Starch Truck (entering plant) (one-way trip)	3.0	1.0	3.0	35.0	105.0	1155	0.219	0.7	239.5
Liquid Starch Truck (leaving plant) (one-way trip)	3.0	1.0	3.0	15.0	45.0	1400	0.265	0.8	290.3
Waste (entering plant) (one-way trip)	2.0	1.0	2.0	15.0	30.0	4100	0.777	1.6	566.9
Waste (leaving plant) (one-way trip)	2.0	1.0	2.0	23.0	46.0	4100	0.777	1.6	566.9
		Totals	280.0		7653.4			37.2	13590.4

Average Vehicle Weight Per Trip =
Average Miles Per Trip = tons/trip

Unmitigated Emission Factor, Ef = [k * (sL)^0.91 * (W)^1.02] (Equation 1 from AP-42 13.2.1)

PM10 PM PM2.5 lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1) where k = 0.011 0.0022 0.00054 tons = average vehicle weight (provided by source)

g/m^2 = silt loading value for paved roads at corn wet milling facilities - Table 13.2.1-3) 27.3 sL =

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = E * [1 - (p/4N)] (Equation 2 from AP-42 13.2.1) itigation due to precipitation into consideration, images = 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)

	PM	PM10	PM2.5	J
Unmitigated Emission Factor, Ef =	0.350	0.070	0.0172	lb/mile
Mitigated Emission Factor, Eext =	0.320	0.064	0.0157	lb/mile
Dust Control Efficiency =	0%	0%	0%	

	Unmitigated	Unmitigated	Unmitigated	Mitigated	Mitigated PTE	Mitigated PTE of	Controlled	Controlled PTE	Controlled PTE
	PTE of PM	PTE of PM10	PTE of PM2.5	PTE of PM	of PM10	PM2.5	PTE of PM	of PM10	of PM2.5
Process	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)	(tons/yr)
Vehicles (entering plant) (one-way trip)	1.72	0.34	0.08	1.57	0.31	0.08	1.57	0.31	0.08
Vehicles (leaving plant) (one-way trip)	0.66	0.13	0.03	0.61	0.12	0.03	0.61	0.12	0.03
Totals	2 20	0.49	0.12	2 10	0.44	0.11	2 1 0	0.44	0.11

Methodology

Total Weight driven per day (ton/day) Maximum one-way distance (mi/trip) Maximum one-way miles (miles/day) Average Vehicle Weight Per Trip (ton/trip) Average Miles Per Trip (miles/trip) Unmitigated PTE (tons/yr) Mitigated PTE (tons/yr) Controlled PTE (tons/yr)

- = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)] = [Maximum one-way distance (feet/trip) / [5280 ft/mile]

- = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)] = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)] = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
- = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs) = [Mitigated PTE (tons/yr)] * [1 Dust Control Efficiency]



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Eric J. Holcomb

Governor

Bruno L. Pigott

Commissioner

October 26, 2018

Melissa Putman Ingredion Incorporated Indianapolis Plant 1515 S Drover St Indianapolis, IN 46221

Re: Public Notice

Ingredion Incorporated Indianapolis Plant

Permit Level: Title V Significant Source Mod. (Minor PSD/EO) (120) & Title V Significant Permit

Modification

Permit Number: 097-40296-00042 & 097-40627-00042

Dear Melissa Putman:

Enclosed is a copy of your draft Title V Significant Source Mod. (Minor PSD/EO) (120) & 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 Indianapolis Star in Indianapolis, IN publish the abbreviated version of the public notice no later than October 31, 2018. 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 West Indianapolis Library Branch, 1216 South Kappes St. in Indianapolis IN. 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 Deena P. Levering, 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 4-5400 or dial (317) 234-5400.

Sincerely,
Len Pogost

Len Pogost Permits Branch Office of Air Quality

Enclosures
PN Applicant Cover Letter 1/9/2017







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Eric J. Holcomb

Governor

Bruno Pigott Commissioner

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

October 26, 2018

Indianapolis Star Attn: Classifieds 130 S. Meridian St. Indianapolis, Indiana 46225

Enclosed, please find one Indiana Department of Environmental Management Notice of Public Comment for Ingredion Incorporated Indianapolis Plant, Marion 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 October 31, 2018.

Please send the invoice, notarized form, clippings showing the date of publication to Bo Liu, at the Indiana Department of Environmental Management, Accounting, Room N1340, 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 Len Pogost at 800-451-6027 and ask for extension 3-2803 or dial 317-233-2803.

Sincerely,

Len Pogost Len Pogost

Permit Branch
Office of Air Quality

Permit Level: Title V Significant Source Mod. (Minor PSD/EO) (120) & Title V Significant Permit

Modification

Permit Number: 097-40296-00042 & 097-40627-00042

Enclosure

PN Newspaper.dot 1/9/2017







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Eric J. Holcomb

Governor

Bruno L. Pigott

Commissioner

October 26, 2018

To: West Indianapolis Library Branch 1216 South Kappes St. Indianapolis IN

From: Jenny Acker, Branch Chief

Permits Branch Office of Air Quality

Subject: Important Information to Display Regarding a Public Notice for an Air

Permit

Applicant Name: Ingredion Incorporated Indianapolis Plant

Permit Number: 097-40296-00042 & 097-40627-00042

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 1/9/2017







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Eric J. Holcomb

Governor

Bruno L. Pigott

Commissioner

Notice of Public Comment

October 26, 2018 Ingredion Incorporated Indianapolis Plant 097-40296-00042 & 097-40627-00042

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 Letter 1/9/2017





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2		Steve Mundell Plant Manager Ingredion Incorporated Indianapolis Plant 1515 S Drove	r St Indianap	oolis IN 46221	(RO CAATS)						
3		Marion County Health Department 3838 N, Rural St Indianapolis IN 46205-2930 (Health Department)									
4		West Indianapolis Library Branch 1216 South Kappes St. Indianapolis IN 46221 (Library)									
5		Indianapolis City Council and Mayors office 200 East Washington Street, Room E Indianapolis IN 46204 (Local Official)									
6	Carmel City Council and Mayors Office 1 Civic Square Carmel IN 46032 (Local Official)										
7		Marion County Commissioners 200 E. Washington St. City County Bldg., Suite 801 Indianapolis IN 46204 (Local Official)									
8		Matt Mosier Office of Sustainability City-County Bldg/200 E Washington St. Rm# 2460 Indianapolis IN 46204 (Local Official)									
9		Johan & Susan Van Den Heuvel 4409 Blue Creek Drive Carmel IN 46033 (Affected Party)									
10		Indiana Members Credit Union 5103 Madison Avenue Indianapolis IN 46227 (Affected Party)									
11		Kim Cottrell Trinity Consultants 8910 Purdue Road, Suite 670 Indianapolis IN 46268 (Consultant)									
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