



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

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Governor

Carol S. Comer
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 Permit Modification No.: 097-36989-00042

The Indiana Department of Environmental Management (IDEM) has received an application from Ingredion Incorporated Indianapolis Plant, located at 1515 South Dröver Street, Indianapolis, IN, 46221, for a significant modification of its Part 70 Operating Permit issued on September 22, 2015. If approved by IDEM's Office of Air Quality (OAQ), this proposed modification would allow Ingredion Incorporated to make certain changes at its existing source. Ingredion Incorporated has applied to include practically enforceable limits in the permit to limit HAPs below major source thresholds.

This draft Part 70 Significant Permit Modification does not contain any new equipment that would emit air pollutants; however, some conditions from previously issued permits/approvals have been corrected, changed, or removed. These corrections, changes, and removals may include Title I changes (e.g., changes that add or modify synthetic minor emission limits). This notice fulfills the public notice procedures to which those conditions are subject. IDEM has reviewed this application and has developed preliminary findings, consisting of a draft permit and several supporting documents, which would allow for these changes.

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

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/>.

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 SPM097-36989-00042 in all correspondence.

Comments should be sent to:

Tamara Havics
IDEM, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
(800) 451-6027, ask for extension 2-8219
Or dial directly: (317) 232-8219
Fax: (317) 232-6749 attn: Tamara Havics
E-mail: THavics@idem.IN.gov

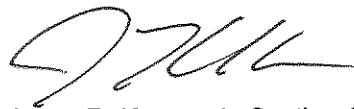
All comments will be considered by IDEM when we make a decision to issue or deny the permit. Comments that are most likely to affect final permit decisions are those based on the rules and laws governing this permitting process (326 IAC 2), air quality issues, and technical issues. IDEM does not have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

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

What will happen after IDEM makes a decision?

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

If you have any questions, please contact Tamara Havics or my staff at the above address.



Jason R. Krawczyk, Section Chief
Permits Branch
Office of Air Quality



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

Re: 097-36989-00042
Significant Permit Modification to
Part 70 Renewal No.: T097-34650-00042

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 March 23, 2016. Pursuant to the provisions of 326 IAC 2-7-12, a Significant Permit Modification to this permit is hereby approved as described in the attached Technical Support Document.

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

- Attachment A: 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/>.

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

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

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

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If you have any questions on this matter, please contact Tamara Havics, of my staff, OAQ, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana, 46204-2251 at 317-232-8219 or 1-800-451-6027, and ask for extension 2-8219.

Sincerely,

Jason R. Krawczyk, 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.: T097-34650-00042 | |
| Issued by: / <i>Original Signed by:</i> Jason R. Krawczyk, Section Chief Permits Branch Office of Air Quality | Issuance Date: September 22, 2015 Expiration Date: September 22, 2020 |

Administrative Amendment No.: 097-37105-00042 issued June 8, 2016.

| | |
|---|---|
| Significant Modification No.: 097-36989-00042 | |
| Issued by: Jason R. Krawczyk, Section Chief Permits Branch Office of Air Quality | Issuance Date: Expiration Date: September 22, 2020 |

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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

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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 SO ₂ 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.

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- (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.
- (l) 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.

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- (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, 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.
- (ll) 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

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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 stack 11.
- (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,

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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.
 - (3) 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 stack 152-4.
 - (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.

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- (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 to 1968, 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.

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- (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.
- (25) 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.
- (26) 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.
- (27) 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) 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.
- (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.

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- (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.
- (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.
- (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.
- (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.
- (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.
- (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.
- (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.
- (45) One (1) DSW Hopper #7, identified as unit 71-5G, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 65.
- (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.
- (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.
- (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.
- (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.
- (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.
- (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.

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- (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.
- (54) 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.
- (55) 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.
- (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 exhausting to stack 90.
 - (a) One (1) Drum A Product Receiver, identified as DC700, with a maximum flow rate of 1750 dscfm, constructed in 1978 and modified on April 13, 2016, using a baghouse for control, and exhausting to stack 578-4.
 - (b) One (1) Drum B Product Receiver, identified as DC701, with a maximum flow rate of 1750 dscfm, constructed in 1978 and modified on April 13, 2016, using a baghouse 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.

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- (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 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.

*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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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:
 - (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.

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- (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.
- (l) 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.

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:

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- (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]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

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

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

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

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

- (A) A description of the emergency;
- (B) Any steps taken to mitigate the emissions; and
- (C) Corrective actions taken.

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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.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(8) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

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

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

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- (c) No permit shield shall apply to any permit term or condition that is determined after issuance of this permit to have been based on erroneous information supplied in the permit application. Erroneous information means information that the Permittee knew to be false, or in the exercise of reasonable care should have been known to be false, at the time the information was submitted.
- (d) Nothing in 326 IAC 2-7-15 or in this permit shall alter or affect the following:
 - (1) The provisions of Section 303 of the Clean Air Act (emergency orders), including the authority of the U.S. EPA under Section 303 of the Clean Air Act;
 - (2) The liability of the Permittee for any violation of applicable requirements prior to or at the time of this permit's issuance;
 - (3) The applicable requirements of the acid rain program, consistent with Section 408(a) of the Clean Air Act; and
 - (4) The ability of U.S. EPA to obtain information from the Permittee under Section 114 of the Clean Air Act.
- (e) This permit shield is not applicable to any change made under 326 IAC 2-7-20(b)(2) (Sections 502(b)(10) of the Clean Air Act changes) and 326 IAC 2-7-20(c)(2) (trading based on State Implementation Plan (SIP) provisions).
- (f) This permit shield is not applicable to modifications eligible for group processing until after IDEM, OAQ, has issued the modifications. [326 IAC 2-7-12(c)(7)]
- (g) This permit shield is not applicable to minor Part 70 permit modifications until after IDEM, OAQ, has issued the modification. [326 IAC 2-7-12(b)(8)]

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

- (a) All terms and conditions of permits established prior to 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:

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- (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:

Indiana Department of Environmental Management

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(35).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.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).

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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]

- (l) 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.
- (e) The Permittee shall record the reasonable response steps taken.

(II)

- (a) *CAM Response to excursions or exceedances.*
 - (1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions. The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
 - (2) Determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include but is not limited to, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

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- (b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.
- (c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.
- (d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).
- (e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.
- (f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:
 - (1) Failed to address the cause of the control device performance problems; or
 - (2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.
- (h) *CAM recordkeeping requirements.*
 - (1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(a)(2) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

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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 applicable recordkeeping requirements

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

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

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

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

C.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:

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

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

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

These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

- (b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.
- (c) If there is a reasonable possibility (as defined in 326 IAC 2-2-8 (b)(6)(A), 326 IAC 2-2-8 (b)(6)(B), 326 IAC 2-3-2 (l)(6)(A), and/or 326 IAC 2-3-2 (l)(6)(B)) that a "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(dd) and/or 326 IAC 2-3-1(y)) may result in significant emissions increase and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(pp) and/or 326 IAC 2-3-1(kk)), the Permittee shall comply with following:
 - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(oo) and/or 326 IAC 2-3-1(jj)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(pp)(2)(A)(iii) and/or 326 IAC 2-3-1 (kk)(2)(A)(iii); and

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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(o) and/or 326 IAC 2-3-1(j)) 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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Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

Stratospheric Ozone Protection

C.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.

- (l) 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:

| Unit (Stack) | PM Limits | | | PM10 Limits | | |
|---------------|-----------|---------|----------|-------------|---------|----------|
| | (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 | | |
|----------------------|-----------|---------|----------|-------------|---------|----------|
| | (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:

| Unit (Stack) | PM Limits | | | PM10 Limits | | |
|---------------------|-----------|---------|----------|-------------|---------|----------|
| | (gr/dscf) | (lb/hr) | (ton/yr) | (gr/dscf) | (lb/hr) | (ton/yr) |
| 5502-1A (5502-7) | 0.0114 | 4.533 | 19.855 | 0.0114 | 4.533 | 19.855 |
| 5502-1B (5502-7) | | | | | | |
| 5502-1C (5502-7) | | | | | | |
| 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) NO_x
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) NO_x 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, D1.3, and D.1.5, the RTO, 5502-1D, or an equivalent thermal oxidation unit, shall be in operation and control particulate, HAPs, 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.

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- (c) In order to assure compliance with Conditions D.1.1, D1.3 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.1.8 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.1.5, the 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.1.5, 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.
- (c) In order to demonstrate compliance with Conditions D.1.2, the Permittee shall perform 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)]

D.1.9 Visible Emission Notations [40 CFR 64]

- (a) Visible emission notations of exhaust from stacks 40-2, 40-3, 40-4, 575-1, 575-2, 575-3, 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.
- (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. A notation of abnormal emissions is not a deviation from the permit. Failure to take response steps

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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.

- (a) pH
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.

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| 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 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:

- (a) For a scrubber or water wash system controlling emissions from a process operated 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).
- (b) For a scrubber or waterwash system 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).

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D.1.13 RTO Temperature [40 CFR 64]

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the 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), D1.2, and D.1.5.
- (c) On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour average temperature as observed during the latest compliant stack test.
- (d) If the 3-hour average temperature falls below the above mentioned 3-hour average temperature, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. 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

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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 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.
 - (ll) 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.

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- (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.

*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 | | |
|-------------------|-----------|---------|----------|-------------|---------|----------|
| | (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:

| Unit (Stack) | PM Limits | | | PM10 Limits | | |
|-----------------|-----------|---------|----------|-------------|---------|----------|
| | (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 | | |
|-------------------|-----------|---------|----------|-------------|---------|----------|
| | (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:

| Unit (Stack) | PM Limits | | | PM10 Limits | | |
|-----------------|-----------|---------|----------|-------------|---------|----------|
| | (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 |
| 5503-1 (5503-1) | 0.01 | 1.593 | 6.977 | 0.01 | 1.593 | 6.977 |

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- (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 | | |
|-----------------|-----------|---------|----------|-------------|---------|----------|
| | (gr/dscf) | (lb/hr) | (ton/yr) | (gr/dscf) | (lb/hr) | (ton/yr) |
| 5502-3 (5502-3) | 0.01 | 1.003 | 4.393 | 0.01 | 1.003 | 4.393 |
| 5502-4 (5502-3) | | | | | | |
| 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 | | |
|-----------------|-----------|---------|----------|-------------|---------|----------|
| | (gr/dscf) | (lb/hr) | (ton/yr) | (gr/dscf) | (lb/hr) | (ton/yr) |
| 5503-2 (5503-2) | 0.01 | 0.74 | 3.24 | 0.01 | 0.74 | 3.24 |
| 5503-3 (5503-2) | | | | | | |
| 5503-4 (5503-2) | | | | | | |
| 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:

| Unit (Stack) | PM Limits | | | PM10 Limits | | |
|-----------------|-----------|---------|----------|-------------|---------|----------|
| | (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:

| Unit (Stack) | PM Limits | | | PM10 Limits | | |
|-------------------|-----------|---------|----------|-------------|---------|----------|
| | (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 | | |
|-------------------|-----------|---------|----------|-------------|---------|----------|
| | (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)]

D.2.6 Visible Emissions Notations [40 CFR 64]

- (a) 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 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

- (a) 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 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.2.8 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 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) |
|---------|----------|--|
| 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 | 5502-3 | 1.0 - 8.0 |
| 5502-4 | | |
| 5503-6 | | |
| 5503-2 | 5503-2 | 0.5 - 7.0 |
| 5503-3 | | |
| 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.

D.2.9 Broken or Failed Bag Detection

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

- (a) 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.

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- (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 stack 11.
 - (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.
- (3) 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 stack 152-4.
- (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

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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 to 1968, 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.

- (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.
- (25) 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.
- (26) 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.
- (27) 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

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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) 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.
- (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.
- (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.
- (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.
- (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.
- (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.
- (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.
- (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.
- (45) One (1) DSW Hopper #7, identified as unit 71-5G, with a maximum throughput of 2.5 tons/hr, using a baghouse* for particulate control, constructed prior to 1968, and exhausting to stack 65.
- (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.
- (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.
- (48) One (1) DSW Hopper #10, identified as unit 71-5J, 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 8.

- (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.
- (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.
- (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.
- (54) 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.
- (55) 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.
- (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 exhausting to stack 90.
 - (a) One (1) Drum A Product Receiver, identified as DC700, with a maximum flow rate of 1750 dscfm, constructed in 1978 and modified on April 13, 2016, using a baghouse for control, and exhausting to stack 578-4.
 - (b) One (1) Drum B Product Receiver, identified as DC701, with a maximum flow rate of 1750 dscfm, constructed in 1978 and modified on April 13, 2016, using a baghouse for control, and exhausting to stack 578-5.

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- (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 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.

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- (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.

*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 PM₁₀, 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 |
| 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 |

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| Unit Number | Stack ID | PM Emission Limit (lb/hr) | PM10 Emission Limit (lb/hr) | PM2.5 Emission Limit (lb/hr) |
|-------------|----------------|---------------------------|-----------------------------|------------------------------|
| 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.

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,

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TF31993, TF31992, TR31912, TR31913, TF31991, T-1, TF41818, TF41820, TF31980, TF31981, TF31982, TR31922, TR31923, TF31990, and TS32001 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 |
| 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 |
| 71-5I | 0.026 | 0.3 |
| 71-5J | 0.026 | 0.3 |
| 71-5K | 0.026 | 0.3 |
| 71-5L | 0.026 | 0.3 |

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

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)]

D.3.5 Particulate Control

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.

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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), and 71-10 (unit TS32001) shall be performed once per week during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take a reasonable response. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

D.3.7 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 every 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).

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- (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.

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), and 71-10 (unit TS32001). 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.
 - (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) Drovers 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.

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- (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.
- (l) 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

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- (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:

- (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.

(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]

- (a) Pursuant to 40 CFR 63.11130, 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 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)
- (3) 40 CFR 63.11112(a), (d)
- (4) 40 CFR 63.11113(b), (c)
- (5) 40 CFR 63.11115
- (6) 40 CFR 63.11116
- (7) 40 CFR 63.11130
- (8) 40 CFR 63.11131
- (9) 40 CFR 63.11132
- (10) Table 3 to Subpart CCCCCC of Part 63

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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

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

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

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

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

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| |
|---|
| Date/Time Emergency started: |
| Date/Time Emergency was corrected: |
| Was the facility being properly operated at the time of the emergency? Y N |
| Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other: |
| Estimated amount of pollutant(s) emitted during emergency: |
| Describe the steps taken to mitigate the problem: |
| Describe the corrective actions/response steps taken: |
| Describe the measures taken to minimize emissions: |
| If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value: |

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

DRAFT

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

Part 70 Quarterly Report

Source Name: Ingredion Incorporated Indianapolis Plant
Source Address: 1515 South Drover Street, Indianapolis, Indiana 46221
Part 70 Permit No.: T097-34650-00042
Facilities: 5549-1 and 5549-2
Parameter: Combined input of starch
Limit: 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: _____

| Month | Starch (tons) | Starch (tons) | Starch (tons) |
|-------|---------------|--------------------|----------------|
| | This Month | Previous 11 Months | 12 Month Total |
| | | | |
| | | | |
| | | | |

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on:

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

DRAFT

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

Part 70 Quarterly Report

Source Name: Ingredion Incorporated Indianapolis Plant
Source Address: 1515 South Drover Street, Indianapolis, Indiana 46221
Part 70 Permit No.: T097-34650-00042
Facilities: 5502-1A, 5502-1B, 5502-1C, and 5502-1D
Parameter: Total natural gas usage
Limit: 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: _____

| Month | Natural Gas (MMscf) | Natural Gas (MMscf) | Natural Gas (MMscf) |
|-------|---------------------|---------------------|---------------------|
| | This Month | Previous 11 Months | 12 Month Total |
| | | | |
| | | | |
| | | | |

☐ No deviation occurred in this quarter.

☐ Deviation/s occurred in this quarter.

Deviation has been reported on:

Submitted by: _____

Title / Position: _____

Signature: _____

Date: _____

Phone: _____

DRAFT

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

Part 70 Quarterly Report

Source Name: Ingredion Incorporated Indianapolis Plant
Source Address: 1515 South Drover Street, Indianapolis, Indiana 46221
Part 70 Permit No.: T097-34650-00042
Facilities: 5549-13
Parameter: Input of starch
Limit: 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: _____

| Month | Starch (tons) | Starch (tons) | Starch (tons) |
|-------|---------------|--------------------|----------------|
| | This Month | Previous 11 Months | 12 Month Total |
| | | | |
| | | | |
| | | | |

☐ No deviation occurred in this quarter.

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

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

DRAFT

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

Part 70 Quarterly Report

Source Name: Ingredion Incorporated Indianapolis Plant
Source Address: 1515 South Drover Street, Indianapolis, Indiana 46221
Part 70 Permit No.: T097-34650-00042
Facility: 40-3
Parameter: Amount of starch produced
Limit: 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.

QUARTER: _____ YEAR: _____

| Month | Starch produced (tons) | Starch produced (tons) | Starch produced (tons) |
|-------|------------------------|------------------------|------------------------|
| | This Month | Previous 11 Months | 12 Month Total |
| | | | |
| | | | |
| | | | |

☐ No deviation occurred in this quarter.

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

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

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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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Page 2 of 2

| | |
|--|-------------------------------|
| Permit Requirement (specify permit condition #) | |
| Date of Deviation: | Duration of Deviation: |
| Number of Deviations: | |
| Probable Cause of Deviation: | |
| Response Steps Taken: | |
| Permit Requirement (specify permit condition #) | |
| Date of Deviation: | Duration of Deviation: |
| Number of Deviations: | |
| Probable Cause of Deviation: | |
| Response Steps Taken: | |
| Permit Requirement (specify permit condition #) | |
| Date of Deviation: | Duration of Deviation: |
| Number of Deviations: | |
| Probable Cause of Deviation: | |
| Response Steps Taken: | |

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

**Technical Support Document (TSD) for a Part 70 Significant Permit
Modification**

Source Description and Location

| | |
|---|--|
| Source Name: | 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.: | T097-34650-00042 |
| Operation Permit Issuance Date: | September 22, 2015 |
| Significant Permit Modification No.: | 097-36989-00042 |
| Permit Reviewer: | Tamara Havics |

Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. T097-34650-00042 on September 22, 2015. The source has since received the following approvals:

- (a) Administrative Amendment No.: 097-37105-00042, issued on June 8, 2016.

County Attainment Status

The source is located in Marion County (Center Township).

| Pollutant | Designation |
|--|--|
| SO ₂ | 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. |
| CO | 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. |
| O ₃ | Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard. ¹ |
| PM _{2.5} | Attainment effective July 11, 2013, for the annual PM _{2.5} standard. |
| PM _{2.5} | Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM _{2.5} standard. |
| PM ₁₀ | Unclassifiable effective November 15, 1990. |
| NO ₂ | Cannot be classified or better than national standards. |
| Pb | Unclassifiable or attainment effective December 31, 2011. |
| ¹ Attainment effective October 18, 2000, for the 1-hour ozone standard for the 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 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) **PM_{2.5}**
 Marion County has been classified as attainment for PM_{2.5}. Therefore, direct PM_{2.5}, SO₂, and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) **SO₂**
 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.
- (d) **Other Criteria Pollutants**
 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, 326 IAC 2-3, or 326 IAC 2-7, 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:

| Process / Emission Unit | Source-Wide Emissions Before Modification (ton/year) | | | | | | | | |
|---|--|------------------|-------------------|-----------------|-----------------|------|-------|-------------|---------------|
| | PM | PM ₁₀ | PM _{2.5} | SO ₂ | NO _x | VOC | CO | Single HAP* | Combined HAPs |
| Total for Source | 623.6 | 729.5 | 774.5 | 36.5 | 179.9 | 44.5 | 167.4 | 9.04 | 12.90 |
| PSD Major Source Thresholds | 250 | 250 | 250 | 250 | 250 | 250 | 250 | -- | -- |
| Emission Offset Major Source Thresholds | -- | -- | -- | 100 | -- | -- | -- | -- | -- |

*Single highest source-wide HAP.

- (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, is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) This existing source is not a major stationary source under Emission Offset (326 IAC 2-3) because no nonattainment regulated pollutant is emitted at a rate of 100 tons per year or more.
- (c) 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 Technical Support Document for Part 70 Operating Permit Administrative Amendment No. 097-37105-00042, issued on June 8, 2016.

| |
|---|
| Description of Proposed Modification |
|---|

The Office of Air Quality (OAQ) has reviewed an application, submitted by Ingredion Incorporated Indianapolis Plant on March 23, 2016, relating to the addition of practically enforceable limits to the permit in order to render the source an area source of HAPs.

HAPs emission testing from the RTO, identified as Unit 5502-1D was required in Condition D1.7(c) of Part 70 Permit Renewal T097-34650-00042, issued on September 22, 2015, as follows:

In order to demonstrate that the source is an area source of HAPs, not later than 180 days after the issuance of T097-34650-00042, the Permittee shall perform acetaldehyde and total HAP (which includes acetaldehyde, acrolein, formaldehyde, and methanol) testing at the inlet and outlet of the RTO (5502-1D) utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.

Testing was conducted February 23, 2016 for acetaldehyde and total HAP. Emissions at the outlet of Unit 5502-1D to atmosphere demonstrated that the source is an area source of HAPs. Inlet concentrations, however, were seen to be above major source thresholds. Therefore, to control HAP emissions to area source levels, Unit 5502-1D shall be in operation and control HAP emissions from Units 5502-1A, 5502-1B, and 5502-1C at all times when any of those units are in operation.

The following is a list of the affected emission units and pollution control device(s):

- (a) 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.
- (b) 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.
- (c) 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.

- (d) 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.

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 2-7-12(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.

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 makes a significant change to existing monitoring conditions.

Permit Level Determination – PSD and Emission Offset

The table below summarizes the potential to emit of the modification, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of the Part 70 permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

| Process / Emission Unit | Project Emissions (ton/year) | | | | | | | |
|---|------------------------------|------------------|---------------------|-----------------|-----------------|----------|----------|----------|
| | PM | PM ₁₀ | PM _{2.5} * | SO ₂ | NO _x | VOC | CO | Pb |
| Total for Modification | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| Emission Offset Major Source Thresholds | -- | -- | --- | 100 | -- | -- | -- | -- |
| Significant Levels | 25 | 15 | 10 | 40 | 40 | 40 | 100 | 25 |

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

- (a) This modification to an existing major PSD stationary source is not major because the emissions increase of each PSD regulated pollutant is less than the PSD significant level. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.
- (b) This modification to an existing minor Emission Offset stationary source is not major because the emissions increase of SO₂ is less than the Emission Offset major source threshold. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

There is no physical change or change in the method of operation occurring at the source as a result of this modification and there are no increases of regulated NSR pollutants.

The table below summarizes the source-wide potential to emit after issuance of the modification, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of the Part 70 permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

| Process / Emission Unit | Source-Wide Emissions after Issuance (ton/year) | | | | | | | |
|---|---|------------------|---------------------|-----------------|-----------------|------|-------|-------|
| | PM | PM ₁₀ | PM _{2.5} * | SO ₂ | NO _x | VOC | CO | Pb |
| Total for Source | 623.6 | 729.5 | 774.5 | 36.5 | 179.9 | 44.5 | 167.4 | negl. |
| PSD Major Source Thresholds | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 25 |
| Emission Offset Major Source Thresholds | --- | -- | -- | 100 | -- | -- | -- | -- |

- (a) This existing major PSD stationary source will continue to be major under 326 IAC 2-2 because at least one pollutant (PM, PM₁₀, and PM_{2.5}), has emissions equal to or greater than the PSD major source threshold. Therefore, pursuant to 326 IAC 2-2, the PSD requirements apply.
- (b) This existing minor Emission Offset stationary source will continue to be minor under 326 IAC 2-3 because the emissions of the nonattainment pollutant SO₂ will continue to be less than the Emission Offset major source thresholds. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

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) There are no New Source Performance Standards (40 CFR Part 60) and 326 IAC 12 included in the permit for this proposed modification .

National Emission Standards for Hazardous Air Pollutants (NESHAP):

- (a) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (40 CFR 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 pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.
- (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 NO_x 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) |
|--|----------------|--------------------------------|------------------------------|----------------------------|----------------------|------------------|
| Dryers 5502-1A, 5502-1B, 5502-1C / Total HAPs | RTO | 326 IAC2-4.1 | 121.56 | 5.69 | Y | N |
| Dryers 5502-1A, 5502-1B, 5502-1C / Single HAP (acetaldehyde) | RTO | 326 IAC2-4.1 | 111.43 | 4.60 | Y | 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 | | | | | | |
| Controls: RTO = Regenerative or Recuperative Thermal Oxidizer | | | | | | |
| 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 applicable to Dryers 5502-1A, 5502-1B, and 5502-1C, which are each considered as an "other unit," for Total HAPs and acetaldehyde upon issuance of the Part 70 Permit Renewal. A CAM plan must be submitted as part of the Part 70 Operating Permit Renewal application.

State Rule Applicability Determination

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

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

The operation of Dryer Units 5502-1A, 5502-1B, and 5502-1C 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.

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.

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

| Summary of Testing Requirements | | | | | |
|---------------------------------|------------------|---|--------------------------------|------------------------------------|---------------|
| Emission Unit | Control Device | Timeframe for Testing (or Date of Last Valid Demonstration) | Pollutant | Frequency of Testing | Authority |
| 5502-1A: Feed Dryer | RTO Unit 5502-1D | February 23, 2016 | Acetaldehyde and Combined HAPs | At least once every five (5) years | 326 IAC 2-4.1 |
| 5502-1B: Germ Dryer | | | | | |
| 5502-1C: Gluten Dryer | | | | | |

*Testing was conducted February 23, 2016 for acetaldehyde and combined HAPs (acetaldehyde, acrolein, methanol formaldehyde).

In order to render the requirements 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants) not applicable, RTO Unit 5502-1D, or an equivalent thermal oxidation unit, shall be in operation and control HAP emissions from Dryer Units 5502-1A, 5502-1B, and 5502-1C at all times when any of those units are in operation.

(b) The Compliance Monitoring Requirements applicable to this proposed modification are as follows:

| Emission Unit/Control | Operating Parameters | Frequency |
|-----------------------------------|-----------------------------|-------------------------------------|
| 5502-1A: Feed Dryer/RTO 5502-1D | Temperature Fan Amperage | Once per 15 minutes Once per day |
| 5502-1B: Germ Dryer/RTO 5502-1D | | |
| 5502-1C: Gluten Dryer/RTO 5502-1D | | |

RTO 5502-1D, has applicable compliance monitoring conditions as specified below:

- (1) A continuous monitoring system shall be calibrated, maintained, and operated on the RTO Unit 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.
- (2) The Permittee shall determine the 3-hour average temperature from the latest valid stack test.
- (3) On and after the date the stack test results are available, the Permittee shall operate the thermal oxidizer at or above the 3-hour average temperature as observed during the latest compliant stack test.
- (4) If the 3-hour average temperature falls below the above mentioned 3-hour average temperature, the Permittee shall take a reasonable response. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the response steps required by this condition. 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.
- (5) The Permittee shall monitor and record the fan amperage for the RTO Unit 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.

These monitoring conditions are necessary because the RTO Unit 5502-1D for the Dryer Units 5502-1A, 5502-1B, and 5502-1C must operate properly 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.

| |
|-------------------------|
| Proposed Changes |
|-------------------------|

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

- (1) Emission unit descriptions of Dryers 5502-1A, 5502-1B, 5502-1C, and RTO 5502-1 in Sections A and D.1 were revised to include control of HAPs.
- (2) Limits for combined HAPs (acetaldehyde, acrolein, formaldehyde, and methanol) and single HAPs (acetaldehyde) were included in new Condition D.1.2. Subsequent conditions were renumbered.
- (3) RTO testing requirements were added to renumbered Condition D.1.8.
- (4) Addition typographical corrections and model updates were made as outlined below:

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

-
- (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.
 - (l) 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 ~~and VOC~~, with a maximum air throughput of 45,148 dscfm, constructed in 1997, and exhausting to stack 5502-7.

....

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

-
- (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 inlet of unit 5502-1D.
 - (l) 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 and VOC, constructed in 1997, and exhausting to stack 5502-7.
-

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

....

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.1.32 Particulate Matter [326 IAC 6.5-1-2]

....

D.1.34 Particulate Matter [326 IAC 6.5-6-25]

....

D.1.54 Volatile Organic Compounds [326 IAC 8-1-6]

....

D.1.65 Preventive Maintenance Plan [326 IAC 2-7-5(12)]

....

D.1.76 Particulate, Sulfur Dioxide, **HAPs**, and VOC Control

- (a) In order to ~~ensure~~ **assure** compliance with Conditions D.1.1(a)(4), D.1.1(d), D.1.2, **D1.3**, and D.1.45, the RTO, 5502-1D, or an equivalent thermal oxidation unit, shall be in operation and control particulate, **HAPs**, 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 ~~ensure~~ **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 ~~ensure~~ **assure** compliance with Conditions D.1.1, ~~D.1.2~~, **D1.3** and D.1.43, 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.1.87 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.1.54, the 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.1.54, 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.
- (c) **In order to demonstrate compliance with Conditions D.1.2, the Permittee shall perform 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.**
- ~~(c) In order to demonstrate that the source is an area source of HAPs, not later than 180 days after the issuance of T097-34650-00042, the Permittee shall perform acetaldehyde and total HAP (which includes acetaldehyde, acrolein, formaldehyde, and methanol) testing at the inlet and outlet of the RTO (5502-1D) utilizing methods approved by the Commissioner. Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.~~

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

D.1.98 Visible Emission Notations [40 CFR 64]

....

~~D.1.109~~ Parametric Monitoring for First Effect Water Wash System

....
~~D.1.110~~ Parametric Monitoring for Scrubbers [40 CFR 64]

....
~~D.1.124~~ Scrubber or Water Wash System Failure Detection

....
~~D.1.132~~ RTO Temperature [40 CFR 64]

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the 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), **D1.2**, and D.1.45.

.....
~~D.1.143~~ Parametric Monitoring - RTO Fan Amperage [40 CFR 64]

....
~~D.1.154~~ Record Keeping Requirements

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- (d) To document the compliance status with Condition D.1.98, 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.1.109, 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.1.110(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.1.110(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.1.132, the Permittee shall maintain continuous temperature records for the RTO (unit 5502-1D), or an equivalent thermal 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.1.143, the Permittee shall maintain records of the daily duct pressure or fan amperage 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.1.165 Reporting Requirements

....

SECTION E.1 ~~FACILITY OPERATION CONDITIONS~~ NSPS

....

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:

....

SECTION E.2 ~~FACILITY OPERATION CONDITIONS~~ NESHAP

....

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:

....

SECTION E.3 ~~FACILITY OPERATION CONDITIONS~~ NESHAP

....

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:

....

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on March 23, 2016. Additional information was received on July 25, 2016.

The operation of this proposed modification shall be subject to the conditions of the attached Significant Permit Modification.

The staff recommends to the Commissioner that the Part 70 Significant Permit Modification be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Tamara Havics at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 232-8219 or toll free at 1-800-451-6027, extension 2-8219.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

Appendix A: Emissions Calculations
Summary of Particulate Emissions

Source: Ingredion Incorporated Indianapolis Plant
Address: 1515 South Drover Street, Indianapolis, IN 46221
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

| Permit List No. | Unit Number | Equipment Description | Stack | Control Equipment | Integral/ Inherent | PTE After Controls (ton/yr) | | | PTE Before Controls (ton/yr) | | | Uncontrolled PTE for Part 70 (ton/yr) | | | Limited PTE for PSD Purposes (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 | | | 29.28 |
| (i) | 5502-1A | Feed Dryer (77 MMBtu/hr) | 5502-7 | First Effect Wash Water System: SO ₂ ; 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 |
| (j) | 5502-1B | Germ Dryer (20 MMBtu/hr) | 5502-7 | RTO: Particulate and VOC | no | | | | | | | | | | | | |
| (k) | 5502-1C | Gluten Dryer (32 MMBtu/hr) | 5502-7 | RTO: Particulate and VOC | no | | | | | | | | | | | | |
| (l) | 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 |
| (o) | 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 | 5503-3 | 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 |
| (q) | 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 |
| (ll) | 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 |
| (oo)(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 |
| (oo)(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 |
| (oo)(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 |
| (oo)(4) | 5549-20 | #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 |
| (oo)(5) | 5549-21 | 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 |

Appendix A: Emissions Calculations
Summary of Particulate Emissions

Source: Ingredion Incorporated Indianapolis Plant
Address: 1515 South Drover Street, Indianapolis, IN 46221
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

| Permit List No. | Unit Number | Equipment Description | Stack | Control Equipment | Integral/ Inherent | PTE After Controls (ton/yr) | | | PTE Before Controls (ton/yr) | | | Uncontrolled PTE for Part 70 (ton/yr) | | | Limited PTE for PSD Purposes (ton/yr) | | |
|-----------------|---------------------------|---|---------|-------------------|--------------------|-----------------------------|-------|-------|------------------------------|---------|---------|---------------------------------------|---------|---------|---------------------------------------|-------|-------|
| | | | | | | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 |
| (oo)(6) | 5549-26 | 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) | 56-1 | 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) | 42-3A | 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) | 42-3B | 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) | 42-3C | 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) | 42-3D | 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) | 42-3E | 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) | 42-3F | 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) | 42-7A | 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) | 42-7B | 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) | 42-7C | 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) | 42-8A | DSE Hopper #1 | 17A | BH: Particulate | ** | 2.25 | 2.25 | 2.25 | 225.26 | 225.26 | 225.26 | 225.26 | 225.26 | 225.26 | 4.20 | 2.25 | 2.25 |
| (qq)(11) | 42-8B | DSE Hopper #3 | 17B | BH: Particulate | ** | 2.25 | 2.25 | 2.25 | 225.26 | 225.26 | 225.26 | 225.26 | 225.26 | 225.26 | | 2.25 | 2.25 |
| (qq)(12) | 42-8C | DSE Hopper #5 | 17C | BH: Particulate | ** | 2.25 | 2.25 | 2.25 | 225.26 | 225.26 | 225.26 | 225.26 | 225.26 | 225.26 | | 2.25 | 2.25 |
| (qq)(13) | 42-8D | 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) | 63-1A | 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) | 63-1B | 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) | 63-17 | 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 | 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) | 152-1 | 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) | 152-2 | 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) | 152-4 | 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) | 152-5 | 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) | 152-6 | 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) | 152-7 | 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) | 152-8 | 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) | 152-9 | 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) | 152-10 | 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) | 152-11 | 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) | 152-12 | 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 |
| (ss)(12) | TF41820 (formerly 61-21) | 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 |
| (ss)(13) | TF41818 (formerly 581-2) | Starch Cooling and Conveying 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)(14) | 152-15 (formerly TF41819) | Blending 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 |
| (ss)(15) | 128-3 | 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) | 61-15 | DSW Chemical Blender Bag Splitter | 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) | 40-1A | 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) | 40-1B | Sodium 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) | 42-1 | 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 | 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 |

Appendix A: Emissions Calculations
Summary of Particulate Emissions

Source: Ingredion Incorporated Indianapolis Plant
Address: 1515 South Drover Street, Indianapolis, IN 46221
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

| Permit List No. | Unit Number | Equipment Description | Stack | Control Equipment | Integral/ Inherent | PTE After Controls (ton/yr) | | | PTE Before Controls (ton/yr) | | | Uncontrolled PTE for Part 70 (ton/yr) | | | Limited PTE for PSD Purposes (ton/yr) | | |
|-----------------|----------------------------|--|----------|-------------------|--------------------|-----------------------------|-------|-------|------------------------------|---------|---------|---------------------------------------|--------|--------|---------------------------------------|-------|-------|
| | | | | | | 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)(36) | 71-2A | DSW Hopper #17 | 58A | BH: Particulate | * | 3.38 | 3.38 | 3.38 | 337.89 | 337.89 | 337.89 | 3.38 | 3.38 | 3.38 | 2.60 | 3.38 | 3.38 |
| (ss)(36) | 71-2B | DSW Hopper #18 | 58B | BH: Particulate | * | 3.38 | 3.38 | 3.38 | 337.89 | 337.89 | 337.89 | 3.38 | 3.38 | 3.38 | | 3.38 | 3.38 |
| (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)(38) | 71-4A | DSW Hopper #13 | 67 | BH: Particulate | ** | 1.37 | 1.37 | 1.37 | 136.66 | 136.66 | 136.66 | 136.66 | 136.66 | 136.66 | 0.30 | 1.37 | 1.37 |
| (ss)(39) | 71-5A | DSW Hopper #1 | 59 | BH: Particulate | * | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(40) | 71-5B | DSW Hopper #2 | 60 | BH: Particulate | * | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(41) | 71-5C | DSW Hopper #3 | 61 | BH: Particulate | * | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(42) | 71-5D | DSW Hopper #4 | 62 | BH: Particulate | * | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(43) | 71-5E | DSW Hopper #5 | 63 | BH: Particulate | * | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(44) | 71-5F | DSW Hopper #6 | 64 | BH: Particulate | * | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(45) | 71-5G | DSW Hopper #7 | 65 | BH: Particulate | * | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(46) | 71-5H | DSW Hopper #8 | 66 | BH: Particulate | * | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(47) | 71-5I | DSW Hopper #9 | 71-5I | BH: Particulate | * | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(48) | 71-5J | DSW Hopper #10 | 8 | BH: Particulate | * | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(49) | 71-5K | DSW Hopper #11 | 69 | BH: Particulate | * | 1.17 | 1.17 | 1.17 | 117.13 | 117.13 | 117.13 | 1.17 | 1.17 | 1.17 | 0.30 | 1.17 | 1.17 |
| (ss)(50) | 71-5L | DSW Hopper #12 | 70 | BH: Particulate | * | 1.17 | 1.17 | 1.17 | 117.13 | 117.13 | 117.13 | 1.17 | 1.17 | 1.17 | 0.30 | 1.17 | 1.17 |
| (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 | ** | 1.13 | 1.13 | 1.13 | 112.63 | 112.63 | 112.63 | 112.63 | 112.63 | 112.63 | 1.13 | 1.13 | 1.13 |
| (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 | 90 | BH: Particulate | * | 6.76 | 6.76 | 6.76 | 675.77 | 675.77 | 675.77 | 6.76 | 6.76 | 6.76 | 6.76 | 6.76 | 6.76 |
| (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 |

Appendix A: Emissions Calculations
Summary of Particulate Emissions

Source: Ingestion Incorporated Indianapolis Plant
Address: 1515 South Drover Street, Indianapolis, IN 46221
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

| Permit List No. | Unit Number | Equipment Description | Stack | Control Equipment | Integral/ Inherent | PTE After Controls (ton/yr) | | | PTE Before Controls (ton/yr) | | | Uncontrolled PTE for Part 70 (ton/yr) | | | Limited PTE for PSD Purposes (ton/yr) | | |
|--------------------------|-------------|---|---------|-------------------------|--------------------|-----------------------------|-------|-------|------------------------------|---------|---------|---------------------------------------|---------|---------|---------------------------------------|-------|-------|
| | | | | | | 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 |
| Insignificant 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 | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| (l) | T2 | 4 Hydrochloric Acid Storage Tanks | | None | N/A | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| (m) | | 10 Small Batch Reactors | | None | N/A | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| Total: | | | | | | 804.1 | 804.5 | 804.5 | 91651.9 | 91652.2 | 91652.2 | 57700.5 | 57700.8 | 57700.8 | 623.6 | 729.5 | 774.5 |

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.

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

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

Source: Ingreddon Incorporated Indianapolis Plant
Address: 1515 South Drover Street, Indianapolis, IN 46221
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

| Permit List No. | Unit Number | Equipment Description | Stack | Control Equipment | Uncontrolled PTE (ton/yr) | | | | Controlled PTE (ton/yr) | | | | Limited PTE (ton/yr) | | | |
|--------------------------|-------------|---|---------|--|---------------------------|-----------------|--------------|--------------|-------------------------|-----------------|-------------|--------------|----------------------|-----------------|-------------|--------------|
| | | | | | SO ₂ | NO _x | VOC | CO | SO ₂ | NO _x | VOC | CO | SO ₂ | NO _x | 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: SO ₂ ; RTO: Particulate and VOC | 60.66 | 33.06 | 469.76 | 27.77 | 24.27 | 33.06 | 18.79 | 27.77 | 35.26 | 39.15 | 21.42 | 27.77 |
| (j) | 5502-1B | Germ Dryer (20 MMBtu/hr) | 5502-7 | RTO: Particulate and VOC | | 8.59 | | 7.21 | | | | | | | | |
| (k) | 5502-1C | Gluten Dryer (32 MMBtu/hr) | 5502-7 | RTO: Particulate and VOC | | 13.74 | | 11.54 | | | | | | | | |
| (l) | 5502-1D | RTO (18 MMBtu/hr) | 5502-7 | N/A | | 7.73 | | 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 | 1.63 | 0.13 | 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 | 2.33 | 0.19 | 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 | 2.19 | 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 | 0.17 | 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 | 0.11 | 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 | -- |
| (l) | T2 | 4 Hydrochloric Acid Storage Tanks | | None | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- |
| (m) | | 10 Small Batch Reactors | | None | -- | -- | 9.04 | -- | -- | -- | 9.04 | -- | -- | -- | 9.04 | -- |
| Total: | | | | | 61.9 | 203.9 | 492.9 | 167.4 | 25.5 | 203.9 | 41.9 | 167.4 | 36.5 | 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
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

| Permit List No. | Unit Number | Equipment Description | Stack | PTE (ton/yr) | | | | | | | | | | | | | | | | | | Total HAPs | Worst Single HAP | HAP |
|--------------------------|-------------|---|---------|--------------|----------|----------|---------------|-----------------|--------------|----------|----------|-----------------|----------------|----------|----------|----------|----------|----------|-----------|----------|------|------------|------------------|-----------------|
| | | | | Acetaldehyde | Acrolein | Benzene | 1,3-Butadiene | Dichlorobenzene | Formaldehyde | Hexane | Methanol | Propylene Oxide | Total PAH HAPs | Toluene | Xylene | Lead | Cadmium | Chromium | Manganese | Nickel | HCl | | | |
| (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 | -- | -- | 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 | -- | -- | 1.86E-06 | 5.55E-04 | -- | 8.16E-05 | 1.79E-04 | 2.28E-04 | 6.20E-05 | 3.43E-04 | -- | 0.31 | 0.29 | Hexane |
| (f) | 575-3 | #6 Starch Flash Dryer (40 MMBtu/hr) | 575-3 | -- | -- | 3.61E-04 | -- | 2.06E-04 | 1.29E-02 | 0.31 | -- | -- | 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 |
| (g) | 5549-1 | #1 Spray Dryer (25 MMBtu/hr) | 5549-1 | -- | -- | 2.25E-04 | -- | 1.29E-04 | 8.05E-03 | 0.19 | -- | -- | 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 | 1.18E-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 | 111.43 | 0.55 | 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 | -- | 121.56 | 111.43 | Acetaldehyde |
| (j)* | 5502-1B | Germ Dryer (20 MMBtu/hr) | 5502-7 | | | 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 | -- | | | |
| (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 | 1.51E-04 | 1.92E-04 | 5.22E-05 | 2.89E-04 | -- | | | |
| (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 | 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 |
| Insignificant 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 | 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 | 1.42E-05 | 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 | 1.89E-06 | 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 | -- | -- | 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 |
| (b)(4) | | 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 | 2.13E-05 | 2.71E-05 | 7.34E-06 | 4.06E-05 | -- | 3.65E-02 | 3.48E-02 | Hexane |
| (c) | D1/D2/D3 | 3 Degreasing Operations | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0 | N/A | N/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 |
| (l) | T2 | 4 Hydrochloric Acid Storage Tanks | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.10 | 0.10 | 0.10 | HCl |
| (m) | | 10 Small Batch Reactors | | -- | -- | -- | -- | -- | -- | -- | -- | 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 | 6.217382 | 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
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

| Permit List No. | Unit Number | Equipment Description | Stack | PTE (ton/yr) | | | | | | | | | | | | | | | | | | Total HAPs | Worst Single HAP | HAP |
|---------------------------------|-------------|---|---------|--------------|----------|----------|---------------|-----------------|--------------|----------|----------|-----------------|----------------|----------|----------|----------|----------|----------|-----------|----------|------|--------------|------------------|------------------------|
| | | | | Acetaldehyde | Acrolein | Benzene | 1,3-Butadiene | Dichlorobenzene | Formaldehyde | Hexane | Methanol | Propylene Oxide | Total PAH HAPs | Toluene | Xylene | Lead | Cadmium | Chromium | Manganese | Nickel | HCl | | | |
| (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 | -- | 1.86E-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 |
| (d) | 575-1 | #4 Starch Flash Dryer (43 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 |
| (e) | 575-2 | #5 Starch Flash Dryer (38 MMBtu/hr) | 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 |
| (f) | 575-3 | #6 Starch Flash Dryer (40 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 |
| (g) | 5549-1 | #1 Spray Dryer (25 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 |
| (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 | 4.60 | 0.18 | 6.94E-04 | -- | 3.97E-04 | 0.39 | 5.95E-01 | 0.53 | -- | 3.77E-06 | 1.12E-03 | -- | 1.65E-04 | 3.64E-04 | 4.63E-04 | 1.26E-04 | 6.94E-04 | -- | 5.69 | 4.60 | Acetaldehyde |
| (j)* | 5502-1B | Germ Dryer (20 MMBtu/hr) | 5502-7 | | | 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 | -- | | | |
| (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 | 1.51E-04 | 1.92E-04 | 5.22E-05 | 2.89E-04 | -- | | | |
| (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 | 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 | -- | 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 |
| Insignificant 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 | 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 | 1.42E-05 | 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 | 1.89E-06 | 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 | -- | -- | 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 |
| (b)(4) | | 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 | 2.13E-05 | 2.71E-05 | 7.34E-06 | 4.06E-05 | -- | 3.65E-02 | 3.48E-02 | Hexane |
| (c) | D1/D2/D3 | 3 Degreasing Operations | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0 | N/A | N/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 |
| (l) | T2 | 4 Hydrochloric Acid Storage Tanks | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.10 | 0.10 | 0.10 | HCl |
| (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: Ingreddion Incorporated Indianapolis Plant
Address: 1515 South Drover Street, Indianapolis, IN 46221
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

| Permit List No. | Unit Number | Equipment Description | Stack | PTE (ton/yr) | | | | | | | | | | | | | | | | | | | Worst Single HAP | HAP |
|--------------------------|-------------|---|---------|--------------|----------|----------|---------------|-----------------|--------------|----------|----------|-----------------|----------------|----------|----------|----------|----------|----------|-----------|----------|------|------------|------------------|-----------------|
| | | | | Acetaldehyde | Acrolein | Benzene | 1,3-Butadiene | Dichlorobenzene | Formaldehyde | Hexane | Methanol | Propylene Oxide | Total PAH HAPs | Toluene | Xylene | Lead | Cadmium | Chromium | Manganese | Nickel | HCl | Total HAPs | | |
| (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 | -- | 1.86E-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 |
| (d) | 575-1 | #4 Starch Flash Dryer (43 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 |
| (e) | 575-2 | #5 Starch Flash Dryer (38 MMBtu/hr) | 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 |
| (f) | 575-3 | #6 Starch Flash Dryer (40 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 |
| (g) | 5549-1 | #1 Spray Dryer (25 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 |
| (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 | 9.8* | ** | 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 | -- | 12.79 | 9.80 | Acetaldehyde |
| (j) | 5502-1B | Germ Dryer (20 MMBtu/hr) | 5502-7 | | | 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 | -- | | | |
| (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 | 1.51E-04 | 1.92E-04 | 5.22E-05 | 2.89E-04 | -- | | | |
| (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 | 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 | -- | 2.03E-01 | 0.00E+00 | 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 | 0.00E+00 | Hexane |
| Insignificant 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 | 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 | 1.42E-05 | 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 | 1.89E-06 | 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 | -- | -- | 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 |
| (b)(4) | | 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 | 2.13E-05 | 2.71E-05 | 7.34E-06 | 4.06E-05 | -- | 3.65E-02 | 3.48E-02 | Hexane |
| (c) | D1/D2/D3 | 3 Degreasing Operations | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0 | N/A | N/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 |
| (l) | T2 | 4 Hydrochloric Acid Storage Tanks | | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | -- | 0.10 | 0.10 | 0.10 | HCl |
| (m) | | 10 Small Batch Reactors | | -- | -- | -- | -- | -- | -- | -- | -- | 9.04 | -- | -- | -- | -- | -- | -- | -- | -- | -- | 9.04 | 9.04 | Propylene Oxide |
| Total: | | | | 1.09E-03 | 1.31E-04 | 1.09E-02 | 5.54E-05 | 2.37E-03 | 0.10 | 3.56 | 0 | 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 | 24.50 | 9.80 | 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: Emissions Calculations
Particulate Emission Units

Source: Ingreddon Incorporated Indianapolis Plant
Address: 1515 South Drovers Street, Indianapolis, IN 46221
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

| Permit List No. | Unit Number | Equipment Description | Stack | Control Equipment | Gas or Air flow rate (dscfm) | Integral/ Inherent | Control Efficiency of Control Equipment | Outlet Grain Loading Limit (gr/dscft) | 326 IAC 6.5 | 326 IAC 6.5 Limit | Other Limits | PTE After Controls (ton/yr) | | | PTE Before Controls (ton/yr) | | | Uncontrolled PTE for Part 70 Purposes (ton/yr) | | | Limited PTE for PSD Purposes (ton/yr) | | |
|-----------------|-------------|-------------------------------------|--------|---------------------------|------------------------------|--------------------|---|---------------------------------------|-------------|-------------------------|---|-----------------------------|----------|----------|------------------------------|----------|----------|--|----------|----------|---------------------------------------|----------|----------|
| | | | | | | | | | | | | 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/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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 |
| (o) | 5552-2 | Product Transfer Hopper | 5552-2 | BH: Particulate | 350 | * | 99% | 0.010 | 6.5-1-2 | 0.03 gr/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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/dscft | 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 |
| (q) | 5503-2 | Germ Bin | 5503-2 | DCS (5503-5): Particulate | 8,640 | no | 99% | 0.01 | 6.5-1-2 | 0.03 gr/dscft | PSD Minor Limit: PM/PM10: 0.01 gr/dscft, 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 |
| (q) | 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/dscft | 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/dscft | 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/dscft | 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/dscft | PSD Minor Limit: PM/PM10: 0.01 gr/dscft, 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/dscft | PSD Minor Limit: PM/PM10: 0.01 gr/dscft, 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/dscft | PSD Minor Limit: PM/PM10: 0.01 gr/dscft, 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/dscft | PSD Minor Limit: PM/PM10: 0.01 gr/dscft, 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/dscft | 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 |
| (w) | 5502-3 | Hammer Mill | 5502-3 | BH: Particulate | 11,700 | no | 99.5% | 0.010 | 6.5-1-2 | 0.03 gr/dscft | PSD Minor Limit: PM/PM10: 0.01 gr/dscft, 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 Slinger | 42-10 | BH: Particulate | 5,000 | no | 99% | 0.030 | 6.5-6-25 | 0.030 gr/dscft, 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/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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 |
| (ee) | 577-10 | RSP Hopper #3 | 577-10 | BH: Particulate | 4,500 | * | 99% | 0.010 | 6.5-1-2 | 0.03 gr/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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/dscft, 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/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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 |

Appendix A: Emissions Calculations
Particulate Emission Units

Source: Ingreddon Incorporated Indianapolis Plant
Address: 1515 South Drovers Street, Indianapolis, IN 46221
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

| Permit List No. | Unit Number | Equipment Description | Stack | Control Equipment | Gas or Air flow rate (dscfm) | Integral/ Inherent | Control Efficiency of Control Equipment | Outlet Grain Loading Limit (gr/dscft) | 326 IAC 6.5 | 326 IAC 6.5 Limit | Other Limits | PTE After Controls (ton/yr) | | | PTE Before Controls (ton/yr) | | | Uncontrolled PTE for Part 70 Purposes (ton/yr) | | | Limited PTE for PSD Purposes (ton/yr) | | |
|-----------------|-------------|---|---------|-------------------|------------------------------|--------------------|---|---------------------------------------|-------------|--------------------------|---|-----------------------------|-------|-------|------------------------------|---------|---------|--|---------|---------|---------------------------------------|-------|-------|
| | | | | | | | | | | | | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 |
| (gg) | 5549-4 | Spray Dryer Products Receiver | 5549-4 | BH: Particulate | 1,700 | * | 99% | 0.010 | 6.5-1-2 | 0.03 gr/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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 |
| (kk) | 5549-10 | Spray Dryer Storage Hopper #4 | 5549-10 | BH: Particulate | 450 | * | 99% | 0.010 | 6.5-1-2 | 0.03 gr/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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 |
| (ll) | 5549-12 | Agglomerator Feed storage bin | 5549-12 | BH: Particulate | 1,530 | * | 99% | 0.010 | 6.5-1-2 | 0.03 gr/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 0.244 lb/hr, 1.07 tpy Increased input of starch to 5549-13 shall not exceed 14,010 ton/yr. Emission rate shall not exceed 0.61 lb PM/PM10/ton | 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/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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 |
| (oo)(1) | 5549-17 | Bulk Bag Packer Filter Receiver | 5549-17 | BH: Particulate | 450 | * | 99% | 0.010 | 6.5-1-2 | 0.03 gr/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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 |
| (oo)(2) | 5549-18 | Line 1 Middle Packer | 5549-18 | BH: Particulate | 4,600 | * | 99% | 0.010 | 6.5-1-2 | 0.03 gr/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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 |
| (oo)(3) | 5549-19 | Line 1 North Packer | 5549-19 | BH: Particulate | 5,400 | * | 99% | 0.010 | 6.5-1-2 | 0.03 gr/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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 |
| (oo)(4) | 5549-20 | #2 Fugitive Dust Collector | 5549-20 | BH: Particulate | 14,000 | no | 99% | 0.010 | 6.5-1-2 | 0.03 gr/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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 |
| (oo)(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/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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 |
| (oo)(6) | 5549-26 | Line 2 Packer | 5549-26 | BH: Particulate | 5,400 | * | 99% | 0.010 | 6.5-1-2 | 0.03 gr/dscft | PSD Minor: PM/PM10: 0.01 gr/dscft, 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 | Com Dump Truck | 56-1 | BH: Particulate | 35,000 | no | 99% | 0.020 | 6.5-6-25 | 0.020 gr/dscft, 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/dscft, 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/dscft, 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/dscft, 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/dscft, 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/dscft, 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 |

Appendix A: Emissions Calculations
Particulate Emission Units

Source: Ingreion Incorporated Indianapolis Plant
Address: 1515 South Drovers Street, Indianapolis, IN 46221
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

| Permit List No. | Unit Number | Equipment Description | Stack | Control Equipment | Gas or Air flow rate (dscfm) | Integral/ Inherent | Control Efficiency of Control Equipment | Outlet Grain Loading Limit (gr/dscft) | 326 IAC 6.5 | 326 IAC 6.5 Limit | Other Limits | PTE After Controls (ton/yr) | | | PTE Before Controls (ton/yr) | | | Uncontrolled PTE for Part 70 Purposes (ton/yr) | | | Limited PTE for PSD Purposes (ton/yr) | | |
|-----------------|---------------------------|---|---------|-------------------|------------------------------|--------------------|---|---------------------------------------|-------------|--------------------------|--|-----------------------------|-------|-------|------------------------------|---------|---------|--|--------|--------|---------------------------------------|-------|-------|
| | | | | | | | | | | | | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 |
| (qq)(6) | 42-3F | DSE Hopper #14 | 11 | BH: Particulate | 3,600 | * | 99.0% | 0.032 | 6.5-6-25 | 0.032 gr/dscft, 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/dscft, 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/dscft, 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/dscft, 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) | 42-8A | DSE Hopper #1 | 17A | BH: Particulate | 2,000 | ** | 99.0% | 0.03 | 6.5-6-25 | 0.030 gr/dscft, 4.2 tpy | None | 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)(11) | 42-8B | DSE Hopper #3 | 17B | 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)(12) | 42-8C | DSE Hopper #5 | 17C | 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)(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) | 63-1A | CWS #8 | 46A | BH: Particulate | 2,400 | * | 99.0% | 0.03 | 6.5-1-2 | 0.03 gr/dscft | None | 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) | 63-1B | CWS South East | 46B | BH: Particulate | 2,400 | * | 99.0% | 0.03 | 6.5-1-2 | 0.03 gr/dscft | None | 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) | 63-17 | CWS South Mill | 53 | BH: Particulate | 3,500 | ** | 99.0% | 0.03 | 6.5-1-2 | 0.03 gr/dscft | None | 3.94 | 3.94 | 3.94 | 394.20 | 394.20 | 394.20 | 3.94 | 3.94 | 3.94 | 3.94 | 3.94 | 3.94 |
| (r) | 56-2 | Grain Elevator | 24 | BH: Particulate | 30,000 | ** | 99.0% | 0.01 | 6.5-6-25 | 0.010 gr/dscft, 11.3 tpy | None | 11.26 | 11.26 | 11.26 | 1126.29 | 1126.29 | 1126.29 | 11.30 | 11.26 | 11.26 | 11.30 | 11.26 | 11.26 |
| (ss)(1) | 152-1 | Starch Mixer 1 Filter Receiver | 152-1 | BH: Particulate | 500 | * | 99.0% | 0.03 | 6.5-1-2 | 0.03 gr/dscft | 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)(2) | 152-2 | Mixer 1 Baghouse | 152-2 | BH: Particulate | 1,000 | * | 99.0% | 0.03 | 6.5-1-2 | 0.03 gr/dscft | 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)(3) | 152-4 | Starch Mixer 2 Filter/Receiver (Bld 852A) | 152-4 | BH: Particulate | 600 | * | 99.0% | 0.03 | 6.5-1-2 | 0.03 gr/dscft | 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 | Starch Mixer 2 (Bld 852A) | 152-5 | BH: Particulate | 1,000 | * | 99.0% | 0.03 | 6.5-1-2 | 0.03 gr/dscft | 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/dscft | None | 0.96 | 0.96 | 0.96 | 95.73 | 95.73 | 95.73 | 0.96 | 0.96 | 0.96 | 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/dscft | 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/dscft | 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/dscft | 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/dscft | 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/dscft | PSD Minor: PM: 0.69 lb/hr; PM10: 0.48 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/dscft | 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/dscft | 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/dscft | 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/dscft | 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 |

Appendix A: Emissions Calculations
Particulate Emission Units

Source: Ingreion Incorporated Indianapolis Plant
Address: 1515 South Drovers Street, Indianapolis, IN 46221
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

| Permit List No. | Unit Number | Equipment Description | Stack | Control Equipment | Gas or Air flow rate (dscfm) | Integral/Inherent | Control Efficiency of Control Equipment | Outlet Grain Loading Limit (gr/dscft) | 326 IAC 6.5 | 326 IAC 6.5 Limit | Other Limits | PTE After Controls (ton/yr) | | | PTE Before Controls (ton/yr) | | | Uncontrolled PTE for Part 70 Purposes (ton/yr) | | | Limited PTE for PSD Purposes (ton/yr) | | |
|-----------------|-------------|--|-------|-------------------|------------------------------|-------------------|---|---------------------------------------|-------------|-------------------------|--|-----------------------------|-------|-------|------------------------------|---------|---------|--|--------|--------|---------------------------------------|-------|-------|
| | | | | | | | | | | | | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 |
| (ss)(15) | 128-3 | Starch Hopper D/C | 128-3 | BH: Particulate | 1,100 | * | 99.0% | 0.03 | 6.5-1-2 | 0.03 gr/dscft | 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 | DSW Chemical Blender bag | 35 | BH: Particulate | 5,000 | ** | 99.0% | 0.03 | 6.5-1-2 | 0.03 gr/dscft | 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/dscft | PSD Minor: PM/PM10/PM2.5: 0.13 lb/hr | 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/dscft | PSD Minor: 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/dscft, 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/dscft, 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/dscft, 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 | 0.030 gr/dscft | 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 Material Loading - East | 20 | BH: Particulate | 2,500 | * | 99.0% | 0.030 | 6.5-1-2 | 0.030 gr/dscft | 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 Material Loading - West | 21 | BH: Particulate | 2,500 | * | 99.0% | 0.030 | 6.5-1-2 | 0.030 gr/dscft | 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/dscft | 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/dscft, 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/dscft, 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 | 0.030 gr/dscft | 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 | 0.030 gr/dscft | None | 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 | 7,000 | * | 99.0% | 0.030 | 6.5-1-2 | 0.030 gr/dscft | None | 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 | 1,094 | * | 99.0% | 0.030 | 6.5-1-2 | 0.030 gr/dscft | None | 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 | 1,500 | ** | 99.0% | 0.030 | 6.5-1-2 | 0.030 gr/dscft | None | 1.69 | 1.69 | 1.69 | 168.94 | 168.94 | 168.94 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 | 1.69 |
| (ss)(32) | 63-15 | CWS #10 and #10 Dryers | 52 | BH: Particulate | 3,600 | * | 99.0% | 0.030 | 6.5-1-2 | 0.030 gr/dscft | 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 | 0.030 gr/dscft | 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)(33) | 63-16B | CWS #12 and #13 Dryers | 54B | BH: Particulate | 3,300 | * | 99.0% | 0.030 | 6.5-1-2 | 0.030 gr/dscft | 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 | 0.030 gr/dscft | None | 1.69 | 1.69 | 1.69 | 168.94 | 168.94 | 168.94 | 1.69 | 1.69 | 1.69 | 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 | 0.030 gr/dscft | 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)(36) | 71-2A | DSW Hopper #17 | 58A | BH: Particulate | 3,000 | * | 99.0% | 0.030 | 6.5-6-25 | 0.030 gr/dscft, 2.6 tpy | None | 3.38 | 3.38 | 3.38 | 337.89 | 337.89 | 337.89 | 3.38 | 3.38 | 3.38 | 2.60 | 3.38 | 3.38 |
| (ss)(36) | 71-2B | DSW Hopper #18 | 58B | BH: Particulate | 3,000 | * | 99.0% | 0.030 | 6.5-1-2 | 0.030 gr/dscft | 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)(37) | 71-3 | Negative Receiver | 71-3 | BH: Particulate | 7,500 | * | 99.0% | 0.030 | 6.5-1-2 | 0.030 gr/dscft | 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)(38) | 71-4A | DSW Hopper #13 | 67 | BH: Particulate | 1,400 | ** | 99.0% | 0.026 | 6.5-6-25 | 0.026 gr/dscft, 0.3 tpy | None | 1.37 | 1.37 | 1.37 | 136.66 | 136.66 | 136.66 | 136.66 | 136.66 | 136.66 | 0.30 | 1.37 | 1.37 |
| (ss)(39) | 71-5A | DSW Hopper #1 | 59 | BH: Particulate | 600 | * | 99.0% | 0.026 | 6.5-6-25 | 0.026 gr/dscft, 0.3 tpy | None | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(40) | 71-5B | DSW Hopper #2 | 60 | BH: Particulate | 600 | * | 99.0% | 0.026 | 6.5-6-25 | 0.026 gr/dscft, 0.3 tpy | None | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(41) | 71-5C | DSW Hopper #3 | 61 | BH: Particulate | 600 | * | 99.0% | 0.026 | 6.5-6-25 | 0.026 gr/dscft, 0.3 tpy | None | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(42) | 71-5D | DSW Hopper #4 | 62 | BH: Particulate | 600 | * | 99.0% | 0.026 | 6.5-6-25 | 0.026 gr/dscft, 0.3 tpy | None | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |

Appendix A: Emissions Calculations
Particulate Emission Units

Source: Ingreion Incorporated Indianapolis Plant
Address: 1515 South Drovers Street, Indianapolis, IN 46221
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

| Permit List No. | Unit Number | Equipment Description | Stack | Control Equipment | Gas or Air flow rate (dscfm) | Integral/ Inherent | Control Efficiency of Control Equipment | Outlet Grain Loading Limit (gr/dscft) | 326 IAC 6.5 | 326 IAC 6.5 Limit | Other Limits | PTE After Controls (ton/yr) | | | PTE Before Controls (ton/yr) | | | Uncontrolled PTE for Part 70 Purposes (ton/yr) | | | Limited PTE for PSD Purposes (ton/yr) | | |
|-----------------|----------------------------|--|----------|-------------------------|------------------------------|--------------------|---|---------------------------------------|-------------|-------------------------|--|-----------------------------|-------|-------|------------------------------|---------|---------|--|--------|--------|---------------------------------------|-------|-------|
| | | | | | | | | | | | | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 |
| (ss)(43) | 71-5E | DSW Hopper #5 | 63 | BH: Particulate | 600 | * | 99.0% | 0.026 | 6.5-6-25 | 0.026 gr/dscft, 0.3 tpy | None | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(44) | 71-5F | DSW Hopper #6 | 64 | BH: Particulate | 600 | * | 99.0% | 0.026 | 6.5-6-25 | 0.026 gr/dscft, 0.3 tpy | None | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(45) | 71-5G | DSW Hopper #7 | 65 | BH: Particulate | 600 | * | 99.0% | 0.026 | 6.5-6-25 | 0.026 gr/dscft, 0.3 tpy | None | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(46) | 71-5H | DSW Hopper #8 | 66 | BH: Particulate | 600 | * | 99.0% | 0.026 | 6.5-6-25 | 0.026 gr/dscft, 0.3 tpy | None | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(47) | 71-5I | DSW Hopper #9 | 71-5I | BH: Particulate | 600 | * | 99.0% | 0.026 | 6.5-6-25 | 0.026 gr/dscft, 0.3 tpy | None | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(48) | 71-5J | DSW Hopper #10 | 8 | BH: Particulate | 600 | * | 99.0% | 0.026 | 6.5-6-25 | 0.026 gr/dscft, 0.3 tpy | None | 0.59 | 0.59 | 0.59 | 58.57 | 58.57 | 58.57 | 0.59 | 0.59 | 0.59 | 0.30 | 0.59 | 0.59 |
| (ss)(49) | 71-5K | DSW Hopper #11 | 69 | BH: Particulate | 1,200 | * | 99.0% | 0.026 | 6.5-6-25 | 0.026 gr/dscft, 0.3 tpy | None | 1.17 | 1.17 | 1.17 | 117.13 | 117.13 | 117.13 | 1.17 | 1.17 | 1.17 | 0.30 | 1.17 | 1.17 |
| (ss)(50) | 71-5L | DSW Hopper #12 | 70 | BH: Particulate | 1,200 | * | 99.0% | 0.026 | 6.5-6-25 | 0.026 gr/dscft, 0.3 tpy | None | 1.17 | 1.17 | 1.17 | 117.13 | 117.13 | 117.13 | 1.17 | 1.17 | 1.17 | 0.30 | 1.17 | 1.17 |
| (ss)(51) | 71-8 | DSW Bulk Car Loading | 72 | BH: Particulate | 2,000 | * | 99.0% | 0.030 | 6.5-1-2 | 0.030 | 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 | 0.030 | 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/dscft, 0.3 tpy | 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 | 0.030 | 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 | 0.030 | 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 | 1,000.0 | ** | 99% | 0.030 | 6.5-1-2 | 0.03 gr/dscft | None | 1.13 | 1.13 | 1.13 | 112.63 | 112.63 | 112.63 | 112.63 | 112.63 | 112.63 | 1.13 | 1.13 | 1.13 |
| (ss)(57) | 578-1 | CWS Conveying Cyclone Operation ¹ | 578-1 | BH: Particulate | 4,000 | ** | 99.00% | 0.030 | 6.5-1-2 | 0.03 gr/dscft | 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 | 0.030 | 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 | 90 | BH: Particulate | 6,000 | * | 99.0% | 0.030 | 6.5-1-2 | 0.030 | None | 6.76 | 6.76 | 6.76 | 676.77 | 676.77 | 676.77 | 6.76 | 6.76 | 6.76 | 6.76 | 6.76 | 6.76 |
| (ss)(59a) | DC700 | Product Receiver Drum A | 578-4 | N/A | 1750 | | 0.0% | 0.010 | 6.5-1-2 | 0.010 | 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 | 0.010 | 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) | TF31993 (formerly TF31901) | Product Bin 93 | 1-158 | BH: Particulate | 3,000 | * | 99.0% | 0.030 | 6.5-1-2 | 0.03 gr/dscft | 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) | TF31992 (formerly TF31902) | Product Bin 92 | 2-158 | BH: Particulate | 2,000 | * | 99.0% | 0.030 | 6.5-1-2 | 0.03 gr/dscft | 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 | 0.030 | 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 | 0.030 | 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 | 0.030 | 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 | 0.030 | 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/dscft | 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 | 7.490 | 7.490 | 7.490 |
| (ss)(67) | T-1 | Starch Dryer | T-1 | CY and DCS: Particulate | 500 | * | 99.0% | 0.030 | 6.5-1-2 | 0.03 gr/dscft | 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 |

Appendix A: Emissions Calculations
Particulate Emission Units

Source: Ingreion Incorporated Indianapolis Plant
Address: 1515 South Drovers Street, Indianapolis, IN 46221
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

| Permit List No. | Unit Number | Equipment Description | Stack | Control Equipment | Gas or Air flow rate (dscfm) | Integral/ Inherent | Control Efficiency of Control Equipment | Outlet Grain Loading Limit (gr/dscft) | 326 IAC 6.5 | 326 IAC 6.5 Limit | Other Limits | PTE After Controls (ton/yr) | | | PTE Before Controls (ton/yr) | | | Uncontrolled PTE for Part 70 Purposes (ton/yr) | | | Limited PTE for PSD Purposes (ton/yr) | | |
|-----------------|-------------|-----------------------------|---------|-------------------|------------------------------|--------------------|---|---------------------------------------|-------------|-------------------|---------------------------------------|-----------------------------|------|-------|------------------------------|---------|---------|--|------|-------|---------------------------------------|-------|-------|
| | | | | | | | | | | | | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 |
| (ss)(68) | 5549-22 | Line 1 South Packing Hopper | 5549-22 | BH: Particulate | 4,800 | * | 99.9% | 0.030 | 6.5-1-2 | 0.030 | 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/dscft | 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/dscft | 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/dscft | 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/dscft | 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/dscft | 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/dscft | 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/dscft | 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 |

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.

Methodology

PTE After Controls (ton/yr) = Gas or Air Flow Rate (dscfm) x Outlet Grain Loading Limit (gr/dscft) 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 integral 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 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.

| Permit List No. | Unit Number | Equipment Description | Stack | Control Equipment | Gas or Air flow rate (dscfm) | Integral/ Inherent | Control Efficiency of Control Equipment | Outlet Grain Loading Limit (gr/dscft) | 326 IAC 6.5 | Limit | Other Limits | Emission Factor (lb/ton) | Max Production Rate (ton/hr) | PTE After Controls (ton/yr) | | | PTE Before Controls (ton/yr) | | | Uncontrolled PTE for Part 70 Purposes (ton/yr) | | | Limited PTE for PSD Purposes (ton/yr) | | |
|-----------------|-------------|-----------------------|-------|-----------------------|------------------------------|--------------------|---|---------------------------------------|-------------|---------------|--------------|--------------------------|------------------------------|-----------------------------|------|-------|------------------------------|-------|-------|--|-------|-------|---------------------------------------|------|-------|
| | | | | | | | | | | | | | | 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/dscft | 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, Com Wet Milling, Table 9.9.7-1 for Grain Handling

PTE Before Controls (ton/yr) = Emission Factor (lb/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 (dscfm) x Outlet Grain Loading Limit (gr/dscft) x (60 min/hr) x (8760 hr/yr) x (1 lb/7000 gr) x (1 ton/2000 lb)

Limited PTE PM10 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.

Appendix A: Emissions Calculations
Dryers - Particulate

Source: Ingredient Incorporated Indianapolis Plant
Address: 1515 South Drover Street, Indianapolis, IN 46221
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

Particulate Emissions

| Permit List No. | Unit Number | Equipment Description | Stack | Control Equipment | Gas or Air flow rate (dscfm) | Integral/ Inherent | Control Efficiency of Control Equipment | Outlet Grain Loading Limit (gr/dscf) | 326 IAC 6.5 | 326 IAC 6.5 Limit | Other Limits | PTE After Controls (ton/yr) | | | PTE Before Controls (ton/yr) | | | Uncontrolled PTE for Part 70 (ton/yr) | | | Limited PTE for Purposes (ton/yr) | |
|-----------------|-------------|-------------------------------------|---------|--|------------------------------|--------------------|---|--------------------------------------|-------------|-------------------------|--|-----------------------------|-------|-------|------------------------------|----------|----------|---------------------------------------|----------|----------|-----------------------------------|--------|
| | | | | | | | | | | | | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 | PM | PM10 | PM2.5 | PM | PM10 |
| (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 |
| (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 |
| (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 |
| (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 |
| (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 |
| (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 | 37.89 | 7577.65 | 7577.65 | 7577.65 | 7577.65 | 7577.65 | 7577.65 | 34.25 | 27.39 |
| (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 starch for 5549-1 and 5549-2 shall not exceed 30,000 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 |
| (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 | | 29.28 | 29.28 | 29.28 | 5856.69 | 5856.69 | 5856.69 | 5856.69 | 5856.69 | 5856.69 | | |
| (i) | 5502-1A | Feed Dryer (77 MMBtu/hr) | 5502-7 | First Effect Wash Water System: SO ₂ ; RTO: Particulate and VOC | 45,148 | no | 95.08% | 0.0114 | 6.5-1-2 | 0.03 gr/dscf | PSD Minor Limit: 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 |
| (j) | 5502-1B | Germ Dryer (20 MMBtu/hr) | 5502-7 | RTO: Particulate and VOC | | no | | | 6.5-1-2 | 0.03 gr/dscf | | | | | | | | | | | | |
| (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 |

Controls: 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) = 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
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

SO₂ Emissions

| Permit List No. | Unit ID | Unit Description | SO ₂ Control | SO ₂ Emissions After Control (lb/hr) | Control Efficiency | SO ₂ PTE After Controls (ton/yr) | SO ₂ PTE Before Controls (ton/yr) | Limited PTE SO ₂ (lb/hr) | Limited PTE SO ₂ (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/yr) | Limited PTE VOC (lb/hr) | Limited PTE VOC (ton/yr) |
|-----------------|---------|------------------|--------------|-------------------------------------|--------------------|---------------------------------|----------------------------------|-------------------------|--------------------------|
| (i) | 5502-1A | Feed Dryer | 5502-1D: RTO | 4.29 | 96.00% | 18.79 | 469.76 | 4.89 | 21.42 |
| (j) | 5502-1B | Germ Dryer | | | | | | | |
| (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) | Combined HAP PTE After Controls (ton/yr) | Limited PTE Combined HAP (lb/hr) | Limited PTE Combined HAP (ton/yr) |
|-----------------|---------|------------------|----------------------|--|--------------------|---|--|----------------------------------|-----------------------------------|
| (i) | 5502-1A | Feed Dryer | 5502-1D: RTO | 1.30 | 95.1% | 116.20 | 5.69 | 2.65 | 11.60 |
| (j) | 5502-1B | Germ Dryer | | | | | | | |
| (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/yr) | Limited PTE Acetaldehyde (lb/hr) | Limited PTE Acetaldehyde (ton/yr) |
|-----------------|---------|------------------|----------------------|--|--------------------|---|--|----------------------------------|-----------------------------------|
| (i) | 5502-1A | Feed Dryer | 5502-1D: RTO | 1.05 | 95.7% | 107.53 | 4.60 | 2.24 | 9.80 |
| (j) | 5502-1B | Germ Dryer | | | | | | | |
| (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)

| |
|---------------|
| r PSD /yr) |
| PM2.5 |
| 44.10 |
| 54.81 |
| 45.05 |
| 56.83 |
| 34.77 |
| 37.89 |
| 29.28 |
| 29.28 |
| 19.855 |
| 35.67 |

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

Source: Ingredion Incorporated Indianapolis Plant
Address: 1515 South Drover Street, Indianapolis, IN 46221
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

| Emission Factor in lb/MMCF | | | Criteria Pollutants | | | | | | |
|---|--------------------------------|--------------------------------|-------------------------------|-------|--------|-------|--------|-------|--------|
| | | | PM* | PM10* | PM2.5* | SO2 | NOx** | VOC | CO |
| NOx Limit for 5502-1A through 1D in lb/MMCF | | | 1.9 | 7.6 | 7.6 | 0.6 | 100.0 | 5.5 | 84.0 |
| | | | | | | | 62.0 | | |
| Emission Unit | Heat Input Capacity (MMBtu/hr) | Potential Throughput (MMCF/yr) | Potential 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.

*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.

**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.

| Emission Factor in lb/MMCF | | | HAPs - Organics | | | | | | HAPs - Metals | | | | | Total HAPs |
|---|--------------------------------|--------------------------------|-------------------------------|-----------------|--------------|---------|---------|----------------|---------------|---------|----------|-----------|---------|------------|
| | | | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene | Total PAH HAPs | Lead | Cadmium | Chromium | Manganese | Nickel | |
| NOx Limit for 5502-1A through 1D 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) | Potential Emissions (tons/yr) | | | | | | | | | | | |
| 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)

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

Part 70 OP Renewal No.: T097-34650-00042

Significant Permit Mod. No: 097-36989-00042

Permit Reviewer: Tamara Havics

| Unit | FP1 | FP2 | FP3 |
|---------------------------------|---------|---------|---------|
| Output Horsepower Rating (hp) | 210.0 | 300.0 | 300.0 |
| Maximum Hours Operated per Year | 500 | 500 | 500 |
| Potential Throughput (hp-hr/yr) | 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 | | | | | | | |
|---------------------------------|------------------------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-------------------|
| | Benzene | Toluene | Xylene | 1,3-Butadiene | Formaldehyde | Acetaldehyde | Acrolein | Total PAH 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)

****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).

| | |
|---|-----------------|
| 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]

Appendix A: Emission Calculations
Bulk Chemical Storage Tanks

Source: Ingredion Incorporated Indianapolis Plant
Address: 1515 South Drovers Street, Indianapolis, IN 46221
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

Bulk Chemical Storage Tanks

| Unit ID | Emission Unit Description | Worst-Case Tank Volume (gal) | Worst-Case Annual Throughput (gal/yr) | Worst-Case Daily Throughput (gal/day) | Antoine's Coefficient A | 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
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

| Unit ID | Emission Unit Description | Maximum Annual Solvent Usage (gal/yr) | Solvent Density (lb/gal) | VOC Content (%) | VOC Emissions (tpy) | VOC Emissions (lb/hr) | VOC Emissions (lb/day) |
|---------|---------------------------|---------------------------------------|--------------------------|-----------------|---------------------|-----------------------|------------------------|
| 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
 Part 70 OP Renewal No.: T097-34650-00042
 Significant Permit Mod. No: 097-36989-00042
 Permit Reviewer: Tamara Havics

| Unit ID | Emission Unit Description | Maximum Exhaust Flow Rate (cfm) | Maximum Exhaust Particulate Concentration (gr/dscf) | Controlled PTE PM/PM10/PM2.5 | | Control Efficiency | Uncontrolled PTE PM/PM10/PM2.5 | |
|---------|---------------------------|---------------------------------|---|------------------------------|----------|--------------------|--------------------------------|----------|
| | | | | (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
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

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)

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

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)

| Volatile Organic HAP | CAS# | Hazardous Air Pollutant (HAP) Content (vapor mass fraction)** | PTE of HAP (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
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

| 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: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Source: Ingredion Incorporated Indianapolis Plant
Address: 1515 South Drover Street, Indianapolis, IN 46221
Part 70 OP Renewal No.: T097-34650-00042
Significant Permit Mod. No: 097-36989-00042
Permit Reviewer: Tamara Havics

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)

| Type | Maximum number of vehicles per day | Number of one-way trips per day per vehicle | Maximum trips per day (trip/day) | Maximum Weight Loaded (tons/trip) | Total Weight driven per day (ton/day) | Maximum one-way distance (feet/trip) | Maximum one-way distance (mi/trip) | Maximum one-way miles (miles/day) | Maximum one-way miles (miles/yr) |
|--|------------------------------------|---|----------------------------------|-----------------------------------|---------------------------------------|--------------------------------------|------------------------------------|-----------------------------------|----------------------------------|
| Corn 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 = $\frac{27.3}{0.13}$ tons/trip
Average Miles Per Trip = $\frac{0.13}{0.13}$ miles/trip

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

| | PM | PM10 | PM2.5 | |
|-----------|-------|--------|---------|--|
| where k = | 0.011 | 0.0022 | 0.00054 | lb/MT = particle size multiplier (AP-42 Table 13.2.1-1) |
| W = | 27.3 | 27.3 | 27.3 | tons = average vehicle weight (provided by source) |
| sL = | 1.1 | 1.1 | 1.1 | g/m ² = silt loading value for paved roads at corn wet milling facilities - Table 13.2.1-3) |

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E * [1 - (p/4N)]$ (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor, $E_{ext} = E_f * [1 - (p/4N)]$
where p = $\frac{125}{365}$ days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
N = $\frac{365}{365}$ days per year

| | PM | PM10 | PM2.5 | |
|--|-------|-------|--------|---------|
| Unmitigated Emission Factor, E_f = | 0.350 | 0.070 | 0.0172 | lb/mile |
| Mitigated Emission Factor, E_{ext} = | 0.320 | 0.064 | 0.0157 | lb/mile |
| Dust Control Efficiency = | 0% | 0% | 0% | |

| Process | Unmitigated PTE of PM (tons/yr) | Unmitigated PTE of PM10 (tons/yr) | Unmitigated PTE of PM2.5 (tons/yr) | Mitigated PTE of PM (tons/yr) | Mitigated PTE of PM10 (tons/yr) | Mitigated PTE of PM2.5 (tons/yr) | Controlled PTE of PM (tons/yr) | Controlled PTE of PM10 (tons/yr) | Controlled PTE of PM2.5 (tons/yr) |
|--|---------------------------------|-----------------------------------|------------------------------------|-------------------------------|---------------------------------|----------------------------------|--------------------------------|----------------------------------|-----------------------------------|
| 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 | 2.38 | 0.48 | 0.12 | 2.18 | 0.44 | 0.11 | 2.18 | 0.44 | 0.11 |

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Carol S. Comer
Commissioner

August 18, 2016

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 Permit

Modification

Permit Number: 097 - 36989 - 00042

Dear Melissa Putman:

Enclosed is a copy of your draft Title V - Significant Permit Modification, Technical Support Document, emission calculations, and the Public Notice which will be printed in your local newspaper.

The Office of Air Quality (OAQ) has prepared two versions of the Public Notice Document. The abbreviated version will be published in the newspaper, and the more detailed version will be made available on the IDEM's website and provided to interested parties. Both versions are included for your reference. The OAQ has requested that the Indianapolis Star in Indianapolis, IN publish the abbreviated version of the public notice no later than August 22, 2016. You will not be responsible for collecting any comments, nor are you responsible for having the notice published in the newspaper.

OAQ has submitted the draft permit package to the 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 Tamara Havics, Indiana Department of Environmental Management, Office of Air Quality, 100 N. Senate Avenue, Indianapolis, Indiana, 46204 or call (800) 451-6027, and ask for extension 2-8219 or dial (317) 232-8219.

Sincerely,
Len Pogost

Len Pogost
Permits Branch
Office of Air Quality

Enclosures
PN Applicant Cover letter 2/17/2016



Indiana Department of Environmental Management

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

ATTENTION: PUBLIC NOTICES, LEGAL ADVERTISING

August 18, 2016

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 August 22, 2016.

Please send a notarized form, clippings showing the date of publication, and the billing to the Indiana Department of Environmental Management, Accounting, Room N1345, 100 North Senate Avenue, Indianapolis, Indiana, 46204.

To ensure proper payment, please reference account # 100174737.

We are required by the Auditor's Office to request that you place the Federal ID Number on all claims. If you have any conflicts, questions, or problems with the publishing of this notice or if you do not receive complete public notice information for this notice, please call 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 Permit Modification
Permit Number: 097 - 36989 - 00042

Enclosure
PN Newspaper.dot 6/13/2013



Indiana Department of Environmental Management

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Michael R. Pence
Governor

Carol S. Comer
Commissioner

August 18, 2016

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

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

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

Applicant Name: Ingestion Incorporated Indianapolis Plant
Permit Number: 097 - 36989 - 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.dot 2/16/2016



Indiana Department of Environmental Management

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Carol S. Comer
Commissioner

Notice of Public Comment

August 18, 2016

Ingredion Incorporated Indianapolis Plant

097 - 36989 - 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.dot 2/17/2016

Mail Code 61-53

| | | | |
|----------------------------|---|---|--|
| IDEM Staff | LPOGOST 8/18/2016 Ingredion Incorporated Indianapolis Plant 097 - 36989 - 00042 (draft/ | | AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING |
| Name and address of Sender |  Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204 | Type of Mail: CERTIFICATE OF MAILING ONLY | |

| Line | Article Number | Name, Address, Street and Post Office Address | Postage | Handling Charges | Act. Value (If Registered) | Insured Value | Due Send if COD | R.R. Fee | S.D. Fee | S.H. Fee | Rest. Del. Fee |
|------|----------------|--|---------|------------------|----------------------------|---------------|-----------------|----------|----------|----------|----------------|
| | | | | | | | | | | | Remarks |
| 1 | | Melissa Putman Ingredion Incorporated Indianapolis Plant 1515 S Drover St Indianapolis IN 46221 (Source CAATS) | | | | | | | | | |
| 2 | | Erik Macias Plant Manager Ingredion Incorporated Indianapolis Plant 1515 S Drover St Indianapolis 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 | | Marion County Commissioners 200 E. Washington St. City County Bldg., Suite 801 Indianapolis IN 46204 (Local Official) | | | | | | | | | |
| 7 | | Matt Mosier Office of Sustainability City-County Bldg/200 E Washington St. Rm# 2460 Indianapolis IN 46204 (Local Official) | | | | | | | | | |
| 8 | | Johan & Susan Van Den Heuvel 4409 Blue Creek Drive Carmel IN 46033 (Affected Party) | | | | | | | | | |
| 9 | | Indiana Members Credit Union 5103 Madison Avenue Indianapolis IN 46227 (Affected Party) | | | | | | | | | |
| 10 | | Kim Cottrell Trinity Consultants 7330 Woodland Drive, Suite 225 Indianapolis IN 46278 (Consultant) | | | | | | | | | |
| 11 | | TGM Autumn Woods, Inc. 500 North Dearboen, Suite 400 Chicago IL 60654 (Affected Party) | | | | | | | | | |
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|---|--|--|--|