



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

To: Interested Parties

Date: June 12, 2014

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

Source Name: Fagerdala Packaging Inc., (Indiana)

Permit Level: New Source Construction and
Federally Enforceable State Operating Permit (FESOP)

Permit Number: 063-34203-00071

Source Location: 2532 Airwest Boulevard, Plainfield, Indiana

Type of Action Taken: Initial Permit

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the matter referenced above.

The final decision is available on the IDEM website at: <http://www.in.gov/apps/idem/caats/>
To view the document, select Search option 3, then enter permit 34203.

If you would like to request a paper copy of the permit document, please contact IDEM's central file room:

Indiana Government Center North, Room 1201
100 North Senate Avenue, MC 50-07
Indianapolis, IN 46204
Phone: 1-800-451-6027 (ext. 4-0965)
Fax (317) 232-8659

Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

(continues on next page)

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

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

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

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

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



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

New Source Construction and Federally Enforceable State Operating Permit OFFICE OF AIR QUALITY

**Fagerdala Packaging Inc. (Indiana)
2532 Airwest Boulevard
Plainfield, Indiana 46168**

(herein known as the Permittee) is hereby authorized to construct and 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. 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 2-8 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. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-8-11.1, applicable to those conditions

Indiana statutes from IC 13 and rules from 326 IAC, quoted 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 FESOP under 326 IAC 2-8.

Operation Permit No.: F063-34203-00071	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: June 12, 2014 Expiration Date: June 12, 2019

TABLE OF CONTENTS

A. SOURCE SUMMARY	4
A.1 General Information [326 IAC 2-8-3(b)]	
A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]	
A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(l)]	
A.4 FESOP Applicability [326 IAC 2-8-2]	
B. GENERAL CONDITIONS	6
B.1 Definitions [326 IAC 2-8-1]	
B.2 Revocation of Permits [326 IAC 2-1.1-9(5)]	
B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4] [326 IAC 2-8]	
B.4 Permit Term [326 IAC 2-8-4(2)] [326 IAC 2-1.1-9.5] [IC 13-15-3-6(a)]	
B.5 Term of Conditions [326 IAC 2-1.1-9.5]	
B.6 Enforceability [326 IAC 2-8-6] [IC 13-17-12]	
B.7 Severability [326 IAC 2-8-4(4)]	
B.8 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]	
B.9 Duty to Provide Information [326 IAC 2-8-4(5)(E)]	
B.10 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]	
B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]	
B.12 Compliance Order Issuance [326 IAC 2-8-5(b)]	
B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)]	
B.14 Emergency Provisions [326 IAC 2-8-12]	
B.15 Prior Permits Superseded [326 IAC 2-1.1-9.5]	
B.16 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]	
B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]	
B.18 Permit Renewal [326 IAC 2-8-3(h)]	
B.19 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]	
B.20 Operational Flexibility [326 IAC 2-8-15] [326 IAC 2-8-11.1]	
B.21 Source Modification Requirement [326 IAC 2-8-11.1]	
B.22 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2] [IC 13-17-3-2] [IC 13-30-3-1]	
B.23 Transfer of Ownership or Operational Control [326 IAC 2-8-10]	
B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16] [326 IAC 2-1.1-7]	
B.25 Credible Evidence [326 IAC 2-8-4(3)] [326 IAC 2-8-5] [62 FR 8314] [326 IAC 1-1-6]	
C. SOURCE OPERATION CONDITIONS	16
Emission Limitations and Standards [326 IAC 2-8-4(1)]	
C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]	
C.2 Overall Source Limit [326 IAC 2-8]	
C.3 Opacity [326 IAC 5-1]	
C.4 Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.6 Fugitive Dust Emissions [326 IAC 6-4]	
C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	
Testing Requirements [326 IAC 2-8-4(3)]	
C.8 Performance Testing [326 IAC 3-6]	
Compliance Requirements [326 IAC 2-1.1-11]	
C.9 Compliance Requirements [326 IAC 2-1.1-11]	
Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]	
C.10 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]	

C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(1)]

Corrective Actions and Response Steps [326 IAC 2-8-4][326 IAC 2-8-5(a)(1)]

- C.12 Risk Management Plan [326 IAC 2-8-4] [40 CFR 68]
- C.13 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]
- C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

- C.15 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]
- C.16 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

Stratospheric Ozone Protection

- C.17 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1. EMISSIONS UNIT OPERATION CONDITIONS..... 23

Emission Limitations and Standards [326 IAC 2-8-4(1)]

- D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]
- D.1.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

Compliance Determination Requirements

- D.1.3 Volatile Organic Compounds (VOC)
- D.1.4 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

Compliance Monitoring Requirements [326 IAC 2-8-4] [326 IAC 2-8-5(a)(1)]

- D.1.5 Regenerative Thermal Oxidizer Temperature
- D.1.6 Regenerative Thermal Oxidizer Duct Pressure and Fan Amperage

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

- D.1.7 Record Keeping Requirement
- D.1.8 Reporting Requirements

Certification Form 26

Emergency Occurrence Form..... 27

Quarterly Report Form..... 29

Quarterly Deviation and Compliance Monitoring Report Form..... 30

Affidavit of Construction 32

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 2-8-3(b)]

The Permittee owns and operates a stationary polyethylene extruded foam manufacturing plant.

Source Address:	2532 Airwest Boulevard, Plainfield, Indiana 46168
General Source Phone Number:	(317) 782-3626
SIC Code:	3086 (Plastics Foam Products)
County Location:	Hendricks
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD and Emission Offset 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 2-8-3(c)(3)]

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

- (a) One (1) polyethylene sheet foam extruder line in a permanent total enclosure, identified as SFE-01, approved in 2014 for construction, with a maximum capacity of 684 pounds per hour of resin and 55.1 pounds per hour of isobutane as a blowing agent, using a regenerative thermal oxidizer for VOC control, and exhausting to stack SFE-01.

Note: The blowing agent is the only source of VOC for this unit. The permanent total enclosure also includes temporary storage space to store rolls of extruded sheets for 12 hours. All blowing agent used is assumed to be emitted during extrusion and temporary storage within the permanent total enclosure and controlled by the regenerative thermal oxidizer.

- (b) One (1) natural gas-fired regenerative thermal oxidizer, identified as RTO, approved in 2014 for construction, used to control VOC emissions from the extruder line and temporary storage area, with a maximum heat input capacity of 5.00 million Btu per hour, and exhausting to SFE-01.

A.3 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

This stationary source also includes the following insignificant activities:

- (a) One (1) resin storage area with a maximum capacity of 150,000 pounds of resin pellets;
- (b) One (1) pressurized isobutane storage tank with a maximum capacity of 6565 gallons of isobutane gas;
- (c) One (1) bonding area using heat to laminate foam sheets into planks;
- (d) One (1) die-cutting area for cutting foam planks into different shapes;
- (e) One (1) foam welding area using heat to weld foam planks together;

(f) One (1) packaging area;

Note: These insignificant are assumed to have no emissions.

(g) One (1) reprocessor for grinding scrap foam back into recycled resin.

A.4 FESOP Applicability [326 IAC 2-8-2]

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) for a Federally Enforceable State Operating Permit (FESOP).

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-8-1]

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 Revocation of Permits [326 IAC 2-1.1-9(5)]

Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4] [326 IAC 2-8]

This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 and 326 IAC 2-8 when prior to the start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.
- (c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

B.4 Permit Term [326 IAC 2-8-4(2)] [326 IAC 2-1.1-9.5] [IC 13-15-3-6(a)]

- (a) This permit, F063-34203-00071, 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, until the renewal permit has been issued or denied.

B.5 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.6 Enforceability [326 IAC 2-8-6] [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.7 Severability [326 IAC 2-8-4(4)]

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.8 Property Rights or Exclusive Privilege [326 IAC 2-8-4(5)(D)]

This permit does not convey any property rights of any sort or any exclusive privilege.

B.9 Duty to Provide Information [326 IAC 2-8-4(5)(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.10 Certification [326 IAC 2-8-3(d)] [326 IAC 2-8-4(3)(C)(i)] [326 IAC 2-8-5(1)]

- (a) A certification required by this permit meets the requirements of 326 IAC 2-8-5(a)(1) if:
 - (1) it contains a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1), 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) An "authorized individual" is defined at 326 IAC 2-1.1-1(1).

B.11 Annual Compliance Certification [326 IAC 2-8-5(a)(1)]

- (a) The Permittee shall annually submit a compliance certification report which addresses the status of the source's compliance with the terms and conditions contained in this permit, including emission limitations, standards, or work practices. The initial certification shall cover the time period from the date of final permit issuance through December 31 of the same year. All subsequent certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than July 1 of each year to:

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

- (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 2-8-4(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

B.12 Compliance Order Issuance [326 IAC 2-8-5(b)]

IDEM, OAQ may issue a compliance order to this Permittee upon discovery that this permit is in nonconformance with an applicable requirement. The order may require immediate compliance or contain a schedule for expeditious compliance with the applicable requirement.

B.13 Preventive Maintenance Plan [326 IAC 1-6-3] [326 IAC 2-8-4(9)]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

The Permittee shall implement the PMPs.

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.14 Emergency Provisions [326 IAC 2-8-12]

(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 except as provided in 326 IAC 2-8-12.

(b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a health-based or 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 2-8-4(3)(C)(ii) and must contain the following:

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

The notification which shall be submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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 2-8-3(c)(6) 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 2-8 and any other applicable rules.
- (g) Operations may continue during an emergency only if the following conditions are met:
 - (1) 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.
 - (2) If an emergency situation causes a deviation from a health-based limit, the Permittee may not continue to operate the affected emissions facilities unless:
 - (A) The Permittee immediately takes all reasonable steps to correct the emergency situation and to minimize emissions; and
 - (B) Continued operation of the facilities is necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw material of substantial economic value.

Any operations shall continue no longer than the minimum time required to prevent the situations identified in (g)(2)(B) of this condition.

B.15 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to F063-34203-00071 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

B.16 Termination of Right to Operate [326 IAC 2-8-9] [326 IAC 2-8-3(h)]

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 2-8-3(h) and 326 IAC 2-8-9.

B.17 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-8-4(5)(C)] [326 IAC 2-8-7(a)] [326 IAC 2-8-8]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Federally Enforceable State 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 2-8-4(5)(C)] The notification by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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 2-8-8(a)]
- (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 2-8-8(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-8-8(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 2-8-8(c)]

B.18 Permit Renewal [326 IAC 2-8-3(h)]

- (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 2-8-3. 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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 2-8 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-8-3(g), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.19 Permit Amendment or Revision [326 IAC 2-8-10] [326 IAC 2-8-11.1]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-8-10 or 326 IAC 2-8-11.1 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.20 Operational Flexibility [326 IAC 2-8-15] [326 IAC 2-8-11.1]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-8-15(b) and (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 approval required by 326 IAC 2-8-11.1 has been obtained;
- (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Regulation Development Branch - Indiana (AR-18J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

in advance of the change by written notification at least ten (10) days in advance of the proposed change. The Permittee shall attach every such notice to the Permittee's copy of this permit; and

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-8-15(b)(1) and (c). 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 2-8-15(b)(1) and (c).

- (b) Emission Trades [326 IAC 2-8-15(b)]
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 2-8-15(b).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(c)]
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 2-8-4(7). No prior notification of IDEM, OAQ or U.S. EPA is required.
- (d) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.22 Inspection and Entry [326 IAC 2-8-5(a)(2)] [IC 13-14-2-2] [IC 13-17-3-2] [IC 13-30-3-1]

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 FESOP 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, at reasonable times, 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, at reasonable times, 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, at reasonable times, 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.23 Transfer of Ownership or Operational Control [326 IAC 2-8-10]

- (a) The Permittee must comply with the requirements of 326 IAC 2-8-10 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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-8-10(b)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-8-4(6)] [326 IAC 2-8-16] [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees to IDEM, OAQ no later than 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) 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.25 Credible Evidence [326 IAC 2-8-4(3)] [326 IAC 2-8-5] [62 FR 8314] [326 IAC 1-1-6]

For the purpose of submitting compliance certifications or establishing whether or not the Permittee has violated or is in violation of any condition of this permit, nothing in this permit shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether the Permittee would have been in compliance with the condition of this permit if the appropriate performance or compliance test or procedure had been performed.

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-8-4(1)]

C.1 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.

C.2 Overall Source Limit [326 IAC 2-8]

The purpose of this permit is to limit this source's potential to emit to less than major source levels for the purpose of Section 502(a) of the Clean Air Act.

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM) and greenhouse gases (GHGs), from the entire source shall be limited to less than one hundred (100) tons per twelve (12) consecutive month period.
- (2) The potential to emit any individual hazardous air pollutant (HAP) from the entire source shall be limited to less than ten (10) tons per twelve (12) consecutive month period; and
- (3) The potential to emit any combination of HAPs from the entire source shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period.
- (4) The potential to emit greenhouse gases (GHGs) from the entire source shall be limited to less than one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per twelve (12) consecutive month period.

(b) Pursuant to 326 IAC 2-2 (PSD), potential to emit particulate matter (PM) from the entire source shall be limited to less than two hundred fifty (250) tons per twelve (12) consecutive month period.

(c) This condition shall include all emission points at this source including those that are insignificant as defined in 326 IAC 2-7-1(21). The source shall be allowed to add insignificant activities not already listed in this permit, provided that the source's potential to emit does not exceed the above specified limits.

(d) Section D of this permit contains independently enforceable provisions to satisfy this requirement.

C.3 Opacity [326 IAC 5-1]

Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.4 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.5 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.6 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).

C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
 - (2) If there is a change in the following:
 - (A) Asbestos removal or demolition start date;
 - (B) Removal or demolition contractor; or
 - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (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.

Testing Requirements [326 IAC 2-8-4(3)]

C.8 Performance Testing [326 IAC 3-6]

- (a) For performance testing required by this permit, a test protocol, except as provided elsewhere in this permit, shall be submitted to:

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (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.9 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 2-8-4] [326 IAC 2-8-5(a)(1)]

C.10 Compliance Monitoring [326 IAC 2-8-4(3)] [326 IAC 2-8-5(a)(1)]

- (a) For new units:
Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units shall be implemented on and after the date of initial start-up.
- (b) For existing units:
Unless otherwise specified in this permit, for all monitoring requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance to begin such monitoring. If, due to circumstances beyond the Permittee's control, any monitoring equipment required by this permit cannot be installed and operated no later than ninety (90) days after permit issuance, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

in writing, prior to the end of the initial ninety (90) day compliance schedule, with full justification of the reasons for the inability to meet this date.

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-8-4(3)] [326 IAC 2-8-5(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 2-8-4][326 IAC 2-8-5(a)(1)]

C.12 Risk Management Plan [326 IAC 2-8-4] [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 [326 IAC 2-8-4] [326 IAC 2-8-5]

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

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

C.14 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-8-4] [326 IAC 2-8-5]

- (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 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Record Keeping and Reporting Requirements [326 IAC 2-8-4(3)]

C.15 General Record Keeping Requirements [326 IAC 2-8-4(3)] [326 IAC 2-8-5]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. Support information includes the following, where applicable:

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

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.16 General Reporting Requirements [326 IAC 2-8-4(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

- (b) The address for report submittal is:

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

- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or

before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

- (d) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit, "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.

Stratospheric Ozone Protection

C.17 Compliance with 40 CFR 82 and 326 IAC 22-1

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

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) polyethylene sheet foam extruder line in a permanent total enclosure, identified as SFE-01, approved in 2014 for construction, with a maximum capacity of 684 pounds per hour of resin and 55.1 pounds per hour of isobutane as a blowing agent, using a regenerative thermal oxidizer for VOC control, and exhausting to stack SFE-01.

Note: The blowing agent is the only source of VOC for this unit. The permanent total enclosure also includes temporary storage space to store rolls of extruded sheets for 12 hours. All blowing agent used is assumed to be emitted during extrusion and temporary storage within the permanent total enclosure and controlled by the regenerative thermal oxidizer.

- (b) One (1) natural gas-fired regenerative thermal oxidizer, identified as RTO, approved in 2014 for construction, used to control VOC emissions from the extruder line and temporary storage area, with a maximum heat input capacity of 5.00 million Btu per hour, and exhausting to SFE-01.

(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 2-8-4(1)]

D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6][326 IAC 2-8]

Pursuant to 326 IAC 8-1-6 (BACT), the Permittee shall control the VOC emissions from the polyethylene sheet foam extruder and temporary storage area (SFE-01) using Best Available Control Technology (BACT). The BACT for SFE-01 has been determined to be the following:

- (a) The input of blowing agent (isobutane) to the polyethylene sheet foam extruder and temporary storage area (SFE-01) shall not exceed 241.4 tons per twelve (12) consecutive month period, which is equivalent to 4.83 tons per year of VOC emissions after control.
- (b) The polyethylene sheet foam extruder and temporary storage area (SFE-01) shall use a combination of a permanent total enclosure and a regenerative thermal oxidizer to control VOC emissions with an overall control efficiency (including capture efficiency and destruction efficiency) equal to or greater than 98%.
- (c) The permanent total enclosure and regenerative thermal oxidizer shall operate at all times when the polyethylene sheet foam extruder (SFE-01) is in operation.

Compliance with these limits, combined with the potential to emit VOC from all other emission units at this source, shall limit the source-wide total potential to emit of VOC to less than 100 tons per 12 consecutive month period, each, and shall render 326 IAC 2-7 (Part 70 Permits), not applicable.

D.1.2 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan is required for polyethylene sheet foam extruder (SFE-01) and regenerative thermal oxidizer (RTO). Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.3 Volatile Organic Compounds (VOC)

Compliance with the VOC emission limitation contained in Condition D.1.1 shall be determined as follows:

Monthly VOC emission shall be calculated with the following equation:

$$\text{VOC} = [(\text{BA}) * (1 - \text{CE}/100)]$$

Where:

VOC = VOC emissions in pounds per month

BA = Usage of blowing agent in pounds per month

CE = Overall control efficiency (Minimum of 98% or the overall control based on the most recent compliance test)

D.1.4 Testing Requirements [326 IAC 2-8-5(a)(1), (4)] [326 IAC 2-1.1-11]

In order to demonstrate compliance with Condition D.1.1, the Permittee shall perform inlet and outlet VOC testing of the regenerative thermal oxidizer (RTO), utilizing methods approved by the Commissioner not later than one hundred and eighty (180) days after initial startup of the polyethylene sheet foam extruder (SFE-01). This test shall be repeated 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 2-8-4] [326 IAC 2-8-5(a)(1)]

D.1.5 Regenerative Thermal Oxidizer Temperature

- (a) A continuous monitoring system shall be calibrated, maintained, and operated on the regenerative thermal oxidizer (RTO) for measuring operating temperature. For the purpose of this condition, continuous means no less than once per fifteen (15) minutes. The output of this system shall be recorded as a 3-hour rolling average. The Permittee shall operate the RTO at or above the 3-hour rolling average temperature as determined in the latest compliance testing.
- (b) The Permittee shall determine the 3-hour rolling average temperature from the most recent valid stack test that demonstrates compliance with the limits in Conditions D.1.1 and D.1.2.
- (c) When for any one reading, the 3-hour rolling average temperature of the regenerative thermal oxidizer (RTO) is below the 3-hour rolling average temperature as stated in (a), the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A 3-hour rolling average temperature that is below this value is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

D.1.6 Regenerative Thermal Oxidizer Duct Pressure and Fan Amperage

- (a) The Permittee shall determine the duct pressure or fan amperage of the regenerative thermal oxidizer (RTO) from the most recent valid stack test that demonstrates compliance with limits in Condition D.1.1.
- (b) The duct pressure or fan amperage of the regenerative thermal oxidizer (RTO) shall be observed at least once per day when the polyethylene sheet foam extruder (SFE-01) is in

operation. When for any one reading, the fan amperage is outside the normal range the range established in most recent compliant stack test, the Permittee shall take reasonable response steps. Section C - Response to Excursions and Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A reading that is outside this 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 2-8-4(3)]

D.1.7 Record Keeping Requirement

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records of the monthly usage of isobutane blowing agent in the polyethylene sheet foam extruder (SFE-01). Records necessary to demonstrate compliance shall be available no later than 30 days of the end of each compliance period.
- (b) To document the compliance status with Condition D.1.5, the Permittee shall maintain continuous temperature records (on a 3-hour rolling average basis) for the regenerative thermal oxidizer (RTO) and the 3-hour rolling average temperature used to demonstrate compliance during the most recent compliant stack test.
- (c) To document the compliance status with Condition D.1.6, the Permittee shall maintain records of the duct pressure or fan amperage for the regenerative thermal oxidizer (RTO) taken once per day. The Permittee shall include in its daily record when a duct pressure or fan amperage reading is not taken and the reason for the lack of reading (e.g., the process did not operate that day).
- (d) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

D.1.8 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.1.1 shall be submitted no 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 report submitted by the Permittee does require a certification that meet the requirement of 326 IAC 2-8-5(a)(1) by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Fagerdala Packaging Inc. (Indiana)
Source Address: 2532 Airwest Boulevard, Plainfield, Indiana 46168
FESOP Permit No.: F063-34203-00071

**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:

Date:

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
Phone: (317) 233-0178
Fax: (317) 233-6865**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT**

Source Name: Fagerdala Packaging Inc. (Indiana)
Source Address: 2532 Airwest Boulevard, Plainfield, Indiana 46168
FESOP Permit No.: F063-34203-00071

This form consists of 2 pages

Page 1 of 2

- | |
|--|
| <p><input type="checkbox"/> This is an emergency as defined in 326 IAC 2-7-1(12)</p> <ul style="list-style-type: none">• The Permittee must notify the Office of Air Quality (OAQ), within four (4) business hours (1-800-451-6027 or 317-233-0178, ask for Compliance Section); and• The Permittee must submit notice in writing or by facsimile within two (2) working days (Facsimile Number: 317-233-6865), and follow the other requirements of 326 IAC 2-7-16 |
|--|

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

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

FESOP Quarterly Report

Source Name: Fagerdala Packaging Inc. (Indiana)
Source Address: 2532 Airwest Boulevard, Plainfield, Indiana 46168
FESOP Permit No.: F063-34203-00071
Facility: polyethylene sheet foam extruder (SFE-01)
Parameter: Input of isobutane blowing agent
Limit: 241.4 tons per twelve (12) consecutive month period

YEAR: _____

Month	Column 1	Column 2	Column 1 + Column 2
	This Month	Previous 11 Months	12 Month Total
Month 1			
Month 2			
Month 3			

- No deviation occurred in this quarter.
- Deviation/s occurred in this quarter.
Deviation has been reported on: _____

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

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Fagerdala Packaging Inc. (Indiana)
Source Address: 2532 Airwest Boulevard, Plainfield, Indiana 46168
FESOP Permit No.: F063-34203-00071

Months: _____ to _____ Year: _____

Page 1 of 2

<p>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".</p>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Mail to: Permit Administration and Support Section
Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Fagerdala Packaging Inc. (Indiana)
2532 Airwest Boulevard
Plainfield, Indiana 46168

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of _____ for _____.
(Title) (Company Name)
3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of _____.
(Company Name)
4. I hereby certify that Fagerdala Packaging Inc. (Indiana), 2532 Airwest Boulevard, Plainfield, Indiana 46168, completed construction of the polyethylene extruded foam manufacturing plant on _____ in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on February 19, 2014 and as permitted pursuant to New Source Construction Permit and Federally Enforceable State Operating Permit No. F063-34203-00071, Plant ID No. 063-00071 issued on _____.
5. **Permittee, please cross out the following statement if it does not apply:** Additional (operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit.

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature _____
Date _____

STATE OF INDIANA)
)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana
on this _____ day of _____, 20 _____. My Commission expires: _____.

Signature _____
Name _____ (typed or printed)

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

Technical Support Document (TSD) for a New Source Construction and
Federally Enforceable State Operating Permit (FESOP)

Source Description and Location

Source Name: Fagerdala Packaging Inc. (Indiana)
Source Location: 2532 Airwest Boulevard, Plainfield, IN 46168
County: Hendricks
SIC Code: 3086 (Plastics Foam Products)
Operation Permit No.: F 063-34203-00071
Permit Reviewer: Ryan Graunke

On February 19, 2014, the Office of Air Quality (OAQ) received an application from Fagerdala Packaging Inc. (Indiana) related to the construction and operation of a new stationary polyethylene extruded foam manufacturing plant.

Existing Approvals

There have been no previous approvals issued to this source.

County Attainment Status

The source is located in Hendricks County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard. ¹
PM _{2.5}	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.

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

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Hendricks 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}**
 Hendricks County has been classified as attainment for PM_{2.5}. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5} emissions. These rules became effective on July 15, 2008. On May 4, 2011, the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective June 28, 2011. 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) Other Criteria Pollutants
Hendricks County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

Fugitive Emissions

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

Background and Description of New Source Construction

The Office of Air Quality (OAQ) has reviewed an application, submitted by Fagerdala Packaging Inc. (Indiana) on February 19, 2014, relating to the construction of a new stationary polyethylene extruded foam manufacturing plant.

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

- (a) One (1) polyethylene sheet foam extruder line in a permanent total enclosure, identified as SFE-01, approved in 2014 for construction, with a maximum capacity of 684 pounds per hour of resin and 55.1 pounds per hour of isobutane as a blowing agent, using a regenerative thermal oxidizer for VOC control, and exhausting to stack SFE-01.

Note: The blowing agent is the only source of VOC for this unit. The permanent total enclosure also includes temporary storage space to store rolls of extruded sheets for 12 hours. All blowing agent used is assumed to be emitted during extrusion and temporary storage within the permanent total enclosure and controlled by the regenerative thermal oxidizer.

- (b) One (1) natural gas-fired regenerative thermal oxidizer, identified as RTO, approved in 2014 for construction, used to control VOC emissions from the extruder line and temporary storage area, with a maximum heat input capacity of 5.00 million Btu per hour, and exhausting to SFE-01.

- (c) Insignificant activities consisting of the following:

- (1) One (1) resin storage area with a maximum capacity of 150,000 pounds of resin pellets;
- (2) One (1) pressurized isobutane storage tank with a maximum capacity of 6565 gallons of isobutane gas;
- (3) One (1) bonding area using heat to laminate foam sheets into planks;
- (4) One (1) die-cutting area for cutting foam planks into different shapes;
- (5) One (1) foam welding area using heat to weld foam planks together;
- (6) One (1) packaging area;

Note: These insignificant are assumed to have no emissions.

- (7) One (1) reprocessor for grinding scrap foam back into recycled resin.

Enforcement Issues

There are no pending enforcement actions related to this source.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	0.04
PM ₁₀ ⁽¹⁾	0.2
PM _{2.5} ⁽¹⁾	0.2
SO ₂	0.013
NO _x	2.15
VOC	241.5
CO	1.80
GHGs as CO ₂ e	2,592

(1) Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM₁₀) and particulate matter with an aerodynamic diameter less than or equal to a nominal 2.5 micrometers (PM_{2.5}), not particulate matter (PM), are each considered as a "regulated air pollutant".

HAPs	Potential To Emit (tons/year)
Hexane	0.04
TOTAL HAPs	0.04

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of VOC is greater than one hundred (100) tons per year. The PTE of all other regulated criteria pollutants are each less than one hundred (100) tons per year. The source would have been subject to the provisions of 326 IAC 2-7. However, the source will be issued a New Source Construction Permit (326 IAC 2-5.1-3) and a Federally Enforceable State Operating Permit (FESOP) (326 IAC 2-8), because the source will limit emissions to less than the Title V major source threshold levels.
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).
- (c) The potential to emit (PTE) (as defined in 326 IAC 2-7-1(29)) greenhouse gases (GHGs) is less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year.

PTE of the Entire Source After Issuance of the FESOP

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

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of FESOP (tons/year)									
	PM	PM ₁₀ *	PM _{2.5} *	SO ₂	NO _x	VOC	CO	GHGs as CO _{2e} **	Total HAPs	Worst Single HAP
Extruder	-	-	-	-	-	4.83***	-	-	-	-
Regenerative thermal oxidizer (RTO)	0.04	0.16	0.16	0.013	2.15	0.12	1.80	2,592	0.04	0.04 - Hexane
Isobutane storage tank	-	-	-	-	-	Negl.	-	-	-	-
Scrap grinding	0.72	0.72	0.72	-	-	-	-	-	-	-
Total PTE of Entire Source	0.76	0.89	0.89	0.013	2.15	4.95	1.80	2,592	0.04	0.04 - Hexane
Title V Major Source Thresholds**	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds**	250	250	250	250	250	250	250	100,000	NA	NA
negl. = negligible *Under the Part 70 Permit program (40 CFR 70), PM ₁₀ and PM _{2.5} , not particulate matter (PM), are each considered as a regulated air pollutant". **The 100,000 CO _{2e} threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD. *** VOC limit under 326 IAC 8-1-6 (BACT).										

(a) FESOP Status

This new source is not a Title V major stationary source, because the potential to emit criteria pollutants from the entire source will be limited to less than the Title V major source threshold levels. In addition, this new source is not a major source of HAPs, as defined in 40 CFR 63.41, because the potential to emit HAPs is less than ten (10) tons per year for a single HAP and twenty-five (25) tons per year of total HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act and is subject to the provisions of 326 IAC 2-8 (FESOP).

The BACT requirements to comply with 326 IAC 8-1-6 also show compliance with 326 IAC 2-8-4 (FESOP) and renders 326 IAC 2-7 not applicable. See State Rule Applicability Determination section below for details.

(b) PSD Minor Source

This new source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit all attainment regulated criteria pollutants are less than 250 tons per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1). The potential to emit greenhouse gases (GHGs) is less than the PSD subject to regulation threshold of one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO_{2e}) per year. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (b) The requirements of the NESHAP: Group I Polymers and Resins, 40 CFR 63, Subpart U (326 IAC 20-19), are not included in the permit, since this source does not operate any elastomer product process units (EPPU) as defined in 40 CFR 63.482 and is not a major source of HAPs.
- (c) The requirements of the NESHAP for Flexible Polyurethane Foam Production, 40 CFR 63, Subpart III (3I) (326 IAC 20-11), are not included in the permit, since this source does not produce flexible polyurethane or rebond foam, as defined in 40 CFR 63.1292 and is not a major source of HAPs.
- (d) The requirements of the NESHAP: Group IV Polymers and Resins, 40 CFR 63, Subpart JJJ (3J) (326 IAC 20-21), are not included in the permit, since this source does not operate any thermoplastic product process units (TPPU) as defined in 40 CFR 63.1312 and is not a major source of HAPs.
- (e) The requirements of the NESHAP: Flexible Polyurethane Foam Fabrication Operations, 40 CFR 63, Subpart M (5M) (326 IAC 20-66), are not included in the permit, since this source does not fabricate flexible polyurethane foam, as defined in 40 CFR 63.8782(b), and is not a major source of HAPs.
- (e) The requirements of the NESHAP: Flexible Polyurethane Foam Production and Fabrication Area Sources, 40 CFR 63, Subpart O (6O), are not included in the permit, since this source does not produce flexible polyurethane or rebond foam, as defined in 40 CFR 63.1292 and is not a flexible polyurethane foam fabrication facility, as defined in 40 CFR 61.11419.
- (f) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

Compliance Assurance Monitoring (CAM)

- (g) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the potential to emit of the source is limited to less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the source:

- (a) 326 IAC 2-8-4 (FESOP)
FESOP applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
PSD applicability is discussed under the PTE of the Entire Source After Issuance of the FESOP section above.
- (c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
This source is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the new units is 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.
- (d) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte

County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.

- (e) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
 - (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
 - (2) 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.
- (f) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.

Polyethylene sheet foam extruder

- (g) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
The polyethylene sheet foam extruder, SFE-01, has potential VOC emissions of 25 tons or more per year, is located anywhere in the state, and is not otherwise regulated by other Article 8 rules, 326 IAC 20-48, or 326 IAC 20-56. Therefore, this unit is subject to 326 IAC 8-1-6.

Pursuant to 326 IAC 8-1-6:

- (a) The input of blowing agent (isobutane) to the polyethylene sheet foam extruder and temporary storage area (SFE-01) shall not exceed 241.4 tons per twelve (12) consecutive month period, which is equivalent to 4.83 tons per year of VOC emissions after control.
- (b) The polyethylene sheet foam extruder and temporary storage area (SFE-01) shall use a combination of a permanent total enclosure and a regenerative thermal oxidizer to control VOC emissions with an overall control efficiency (including capture efficiency and destruction efficiency) equal to or greater than 98%.
- (c) The permanent total enclosure and regenerative thermal oxidizer shall operate at all times when the polyethylene sheet foam extruder (SFE-01) is in operation.

See Appendix B for the full BACT determination.

Compliance with this limits, combined with the potential to emit VOC from all other emission units at this source, shall also limit the source-wide total potential to emit of VOC to less than 100 tons per 12 consecutive month period, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) not applicable.

Compliance Determination, Monitoring and Testing Requirements

- (a) The compliance determination and monitoring requirements applicable to this source are as follows:

Emission Unit/Control	Operating Parameters	Frequency
-----------------------	----------------------	-----------

Emission Unit/Control	Operating Parameters	Frequency
Regenerative thermal oxidizer (RTO)	Temperature	Continuous and 3-hr rolling average
	Fan amperage or duct pressure	Once per day

These monitoring requirements are necessary because the RTO must operate properly to ensure compliance with 326 IAC 2-8 (FESOP) and 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities).

Testing Requirements				
Emission Unit	Control Device	Pollutant	Timeframe for Testing	Frequency of Testing
Polyethylene Sheet Foam Extruder	Regenerative thermal oxidizer (RTO)	VOC	180 days after initial startup	Once every 5 years

These testing requirements are necessary because the RTO must achieve a minimum overall control efficiency of 98.0% to properly to ensure compliance with 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities) and 326 IAC 2-8 (FESOP).

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 February 19, 2014.

The construction and operation of this source shall be subject to the conditions of the attached proposed New Source Construction and FESOP No. 003-34203-00071. The staff recommends to the Commissioner that this New Source Construction and FESOP be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Ryan Graunke at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5374 or toll free at 1-800-451-6027 extension 4-5374.
- (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's Guide for Citizen Participation and Permit Guide on the Internet at: www.in.gov/idem

**Appendix A: Emissions Calculations
Source Summary**

Company Name: Fagerdala Packaging Inc. (Indiana)
Address City IN Zip: 2532 Airwest Boulevard, Plainfield, IN 46168
Permit Number: F063-34203-00071
Reviewer: Ryan Graunke

Unlimited PTE (tons/yr)

Emission Units	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	GHGs (as CO ₂ e)	Total HAPs	Worst single HAP	
Extruder	-	-	-	-	-	241.4	-	-	-	-	-
RTO	0.04	0.16	0.16	0.01	2.15	0.12	1.80	2,592	0.04	0.04	Hexane
Isobutane storage tank*	-	-	-	-	-	Negl.	-	-	-	-	-
Scrap grinding	0.72	0.72	0.72	-	-	-	-	-	-	-	-
Total	0.76	0.89	0.89	0.013	2.15	241.5	1.80	2,592	0.04	-	Hexane

* The isobutane storage tank is a pressurized gas tank. Emissions are assumed to be negligible.

Limited PTE (tons/yr)

Emission Units	PM	PM ₁₀	PM _{2.5}	SO ₂	NO _x	VOC	CO	GHGs (as CO ₂ e)	Total HAPs	Worst single HAP	
Extruder	-	-	-	-	-	4.83	-	-	-	-	-
RTO	0.04	0.16	0.16	0.013	2.15	0.12	1.80	2,592	0.04	0.04	Hexane
Isobutane storage tank	-	-	-	-	-	Negl.	-	-	-	-	-
Scrap grinding	0.72	0.72	0.72	-	-	-	-	-	-	-	-
Total	0.76	0.89	0.89	0.013	2.15	4.95	1.80	2,592	0.04	-	Hexane

Appendix A: Emissions Calculations
Polyethylene sheet foam extruder (SFE-01)

Company Name: Fagerdala Packaging Inc. (Indiana)
Address City IN Zip: 2532 Airwest Boulevard, Plainfield, IN 46168
Permit Number: F063-34203-00071
Reviewer: Ryan Graunke

Blowing agent Usage rate (kg/hour)	Uncontrolled PTE of VOC (lb/hr)	Uncontrolled PTE of VOC (ton/yr)	Control efficiency	Controlled PTE of VOC (tons/yr)	Limited PTE of VOC (ton/yr)
25	55.1	241.4	98%	4.83	4.8

Notes:

The source estimates the maximum usage rate of blowing agent to be 25 kg/hr, based on similar Fagerdala facilities.

Blowing agent is 100% isobutane (a VOC, non-HAP)

It is assumed that all of the blowing agent is emitted either during extrusion or storage.

The extruder and foam storage space have a permanent total enclosure and emissions are controlled by a regenerative thermal oxidizer.

The BACT requirement (326 IAC 8-1-6) for this unit is to not exceed the use of 241.4 tons of blowing agent per year and to control VOC emissions with a regenerative thermal oxidizer at a minimum of 98% overall control efficiency

Compliance with this BACT requirement shall also limit VOC emissions to comply with 326 IAC 2-8 (FESOP).

Methodology:

Uncontrolled PTE of VOC (lb/hr) = Usage rate (kg/hr) * 2.20462 lbs/kg

Uncontrolled PTE of VOC (ton/yr) = Uncontrolled PTE of VOC (lb/hr) * 8760 hr/yr * 1 ton/2000 lb

Controlled PTE of VOC (tons/yr) = Uncontrolled PTE of VOC (tons/yr) * (1 - Control efficiency)

Control efficiency needed = 1 - (Limited PTE of VOC (ton/yr) / Uncontrolled PTE of VOC (ton/yr))

**Appendix A: Emissions Calculations
Natural Gas Combustion Only**

Company Name: Fagerdala Packaging Inc. (Indiana)
Address City IN Zip: 2532 Airwest Boulevard, Plainfield, IN 46168
Permit Number: F063-34203-00071
Reviewer: Ryan Graunke

Emission unit	Emission Unit ID	Heat Input Capacity Each (MMBtu/hr/unit)	Potential Throughput (MMCF/yr)
Regenerative thermal oxidizer	RTO	5.00	42.9

	Pollutant						
	PM*	PM ₁₀ *	Direct PM _{2.5} *	SO ₂	NO _x	VOC	CO
Emission Factor (lb/MMCF)	1.90	7.60	7.60	0.60	100.0	5.50	84.00
Potential Emission (tons/yr)	0.04	0.16	0.16	0.01	2.15	0.12	1.80

*PM emission factor is filterable PM only. PM₁₀ emission factor is filterable and condensable PM₁₀ combined.

PM_{2.5} emission factor is filterable and condensable PM_{2.5} combined.

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor (lb/MMCF)	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission (tons/yr)	4.509E-05	2.576E-05	1.610E-03	3.865E-02	7.300E-05

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor (lb/MMCF)	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission (tons/yr)	1.074E-05	2.362E-05	3.006E-05	8.159E-06	4.509E-05

Total HAPs: **4.052E-02**

	Greenhouse Gas		
	CO ₂	CH ₄	N ₂ O
Emission Factor (lb/MMCF)	120,000	2.3	2.2
Potential Emission (tons/yr)	2,576	0.0	0.0
Summed Potential Emissions (tons/yr)	2,577		
CO ₂ e Total (tons/yr)	2,592		

Notes:

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Methodology:

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

Potential Emission (tons/yr) = Potential Throughput (MMCF/yr) * Emission Factor (lb/MMCF) * 1 ton/2000 lbs

CO₂e (tons/yr) = CO₂ Potential Emission (tons/yr) * CO₂ GWP (1) + CH₄ Potential Emission (tons/yr) * CH₄ GWP (25) + N₂O Potential Emission (tons/yr) * N₂O GWP (298).

**Appendix A: Emissions Calculations
Reprocessor (scrap grinding)**

Company Name: Fagerdala Packaging Inc. (Indiana)
Address City IN Zip: 2532 Airwest Boulevard, Plainfield, IN 46168
Permit Number: F063-34203-00071
Reviewer: Ryan Graunke

Scrap rate (lb/hr)	Emission factor (lb/ton)	PTE of PM (lb/hr)	PTE of PM (ton/hr)
220	1.50	0.165	0.7227

Notes:

Scrap rate (lb/hr) is the amount of scrap polyethylene foam that is sent to the grinder, as reported by the source.

Emission factor is from AP-42 Section 11.21, Table 11.21-7 for phosphate rock grinding (SCC 3-05-019-02)

This emission factor was previously approved by IDEM in FESOP Renewal #179-31710-00024, issued on August 27, 2012 for Buckhorn, Inc. as a conservative emission factor for scrap polyethylene grinding.

Assume PM = PM₁₀ = PM_{2.5}

Methodology:

PTE of PM (lb/hr) = Scrap rate (lb/hr) * Emission factor (lb/hr)

PTE of PM (ton/hr) = PTE of PM (lb/hr) * 8760 hr/yr * 1 ton/2000 lbs

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

**Appendix B
Best Available Control Technology (BACT) Determination**

Source Description and Location

Source Name:	Fagerdala Packaging Inc. (Indiana)
Source Location:	2532 Airwest Boulevard, Plainfield, IN 46168
County:	Hendricks
SIC Code:	3086 (Plastics Foam Products)
Operation Permit No.:	F 063-34203-00071
Permit Reviewer:	Ryan Graunke

Introduction

The Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) has performed the following Best Available Control Technology (BACT) review for one (1) polyethylene sheet foam extruder at a new stationary polyethylene extruded foam manufacturing plant.

Description of Process

The following process is subject to 326 IAC 8-1-6 because the VOC potential emissions are greater than 25 tons per year:

- (a) One (1) polyethylene sheet foam extruder line in a permanent total enclosure, identified as SFE-01, approved in 2014 for construction, with a maximum capacity of 684 pounds per hour of resin and 55.1 pounds per hour of isobutane as a blowing agent, using a regenerative thermal oxidizer for VOC control, and exhausting to stack SFE-01.

Note: The blowing agent is the only source of VOC for this unit. The permanent total enclosure also includes temporary storage space to store rolls of extruded sheets for 12 hours. All blowing agent used is assumed to be emitted during extrusion and temporary storage within the permanent total enclosure and controlled by the regenerative thermal oxidizer.

Summary of the Best Available Control Technology (BACT) Process

BACT is a mass emission limitation based on the maximum degree of pollution reduction of emissions, which is achievable on a case-by-case basis. BACT analysis takes into account the energy, environmental, and economic impacts on the source. These reductions may be determined through the application of available control techniques, process design, work practices, and operational limitations.

Federal guidance on BACT requires an evaluation that follows a "top down" process. In this approach, the applicant identifies the best-controlled similar source on the basis of controls required by regulation or controls achieved in practice. The highest level of control is then evaluated for technical and economic feasibility.

The five (5) basic steps of a top-down BACT analysis are listed below:

Step 1: Identify Potential Control Technologies

The first step is to identify potentially “available” control options for each emission unit and for each pollutant under review. Available options should consist of a list of those technologies with a potentially practical application to the emissions unit in question. The list should include lowest achievable emission rate (LAER) technologies and controls applied to similar source categories.

Step 2: Eliminate Technically Infeasible Options

The second step is to eliminate technically infeasible options from further consideration. To be considered feasible, a technology must be both available and applicable. It is important in this step that any presentation of a technical argument for eliminating a technology from further consideration be documented based on physical, chemical, engineering, and source-specific factors related to safe and successful use of the controls. Innovative control means a control that has not been demonstrated in a commercial application on similar units. Only available and proven control technologies are evaluated. A control technology is considered available when there are sufficient data indicating that the technology results in confirmed reductions in emissions of regulated pollutants.

Step 3: Rank the Remaining Control Technologies by Control Effectiveness

The third step is to rank the technologies not eliminated in Step 2 in order of descending control effectiveness for each pollutant of concern. The ranked alternatives are reviewed in terms of environmental, energy, and economic impacts specific to the proposed modification. If the analysis determines that the evaluated alternative is not appropriate as BACT due to any of the impacts, then the next most effective is evaluated. This process is repeated until a control alternative is chosen as BACT. If the highest ranked technology is proposed as BACT, it is not necessary to perform any further technical or economic evaluation.

Step 4: Evaluate the Most Effective Controls and Document the Results

The fourth step entails an evaluation of energy, environmental, and economic impacts for determining a final level of control. The evaluation begins with the most stringent control option and continues until a technology under consideration cannot be eliminated based on adverse energy, environmental, or economic impacts.

Step 5: Select BACT

The fifth and final step is to select as BACT the most effective of the remaining technologies under consideration for each pollutant of concern. For the technologies determined to be feasible, there may be several different limits that have been set as BACT for the same control technology. The final BACT determination would be the technology with the most stringent corresponding limit that is economically feasible. BACT must be no less stringent than the level of control required by any applicable New Source Performance Standard (NSPS) and National Emissions Standard for Hazardous Air Pollutants (NESHAP) or state regulatory standards applicable to the emission units included in the permits.

The Office of Air Quality (OAQ) makes BACT determinations by following the five steps identified above.

A summary of the BACT review for the polyethylene sheet foam extruder is provided below. This BACT determination is based on the following information:

- (1) BACT analysis information submitted by Fagerdala Packaging Inc. (Indiana)
- (2) The EPA RACT/BACT/LAER (RBLCL) Clearinghouse; and
- (3) State and local air quality permits.

VOC BACT Analysis

Step 1 – Identify All Potentially Available Control Options

Based on the information reviewed for this BACT determination, the following potentially available control technologies were identified for controlling VOC emissions from the polyethylene sheet foam extruder:

- (1) **Thermal Oxidizer:**
Thermal oxidation is the process of oxidizing organic contaminants in a waste gas stream by raising the temperature above the auto ignition point in the presence of oxygen for sufficient time to completely oxidize the organic contaminants to carbon dioxide and water. The residence time, temperature, flow velocity and mixing, and the oxygen concentration in the combustion chamber affect the oxidation rate and destruction efficiency. Thermal oxidizers typically require combustion of an auxiliary fuel (e.g., natural gas) to maintain combustion chamber temperature high enough to completely oxidize the contaminant gases. Thermal oxidizers are typically designed to have a residence time of one second or less and combustion chamber temperatures between 1,200 and 2,000°F.
- (2) **Regenerative Thermal Oxidizer (RTO):**
A regenerative thermal oxidizer uses a high-density media such as a packed ceramic bed, which was heated in a previous cycle, to preheat the incoming waste gas stream, resulting in improved oxidizer efficiency and significant fuel cost savings. Process gases pass through the RTO inlet isolation damper before entering the inlet of the RTO. Upon entering the RTO, the gases pass up through a heat recovery section (pre-heating mode), enter the combustion chamber where the VOCs are destroyed and then pass through another heat recovery section (heat recovery mode), and exit the system via the exhaust duct.
- (3) **Rotor Concentrator**
In the concentrator process, a rotating wheel of carbon or zeolite adsorber is used to concentrate and remove the VOCs. The adsorbents are regenerated using a hot inert gas with a high humidity content. The desorbed VOCs are oxidized in a thermal oxidizer. Based on need and economics varying degrees of heat recovery can be incorporated into the system. In a typical concentrator system the pollutant stream is passed through the various chambers of a segmented rotating bed. While the larger volume process gas stream is passing through a "clean" segment, a smaller volume of steam desorbs a "dirty" segment. The cleaned process gas is then discharged to the atmosphere, while desorbing gas is vented to the thermal oxidizer before discharge.

The process is designed to remove VOCs such as chlorinated and non-chlorinated hydrocarbons, esters, ethers, alcohols, and ketones. This process combines the technologies of adsorption with granular activated carbon or zeolite, thermal regeneration with hot gases, and controlled oxidation of the VOCs. As a result, this process combines three technologies, which historically have been used independently of each other. The concentrator process is effective for treatment of large volumes of air or gas streams that contain low concentrations of volatile organic contaminants. The concentrator process is well-suited for applications where the recovery of the volatile organics is not desirable or economically justified.
- (4) **Incineration in boilers**
Boilers are used as afterburners to incinerate air contaminants. The primary function of a boiler is to supply steam or hot water. Like any other types of controls, boilers require a properly design exhaust system to convey air pollutants effectively from the point of origin to the boiler firebox. Contaminated gases may be introduced into the boiler firebox in two ways:
 - (1) Through the burner, serving as combustion air, or
 - (2) Downstream of the burner, serving as secondary air.

Step 2 – Eliminate Technically Infeasible Control Options

Based on the information reviewed for this BACT determination, IDEM, OAQ has determined that the use of a boiler is not a technically feasible option for this source. Boilers primary purpose is to supply steam or hot water, and using them as control devices is most often a secondary purpose. The source will not be constructing a boiler and has no use for steam or hot water; therefore using a boiler as a VOC control device is infeasible.

Step 3 – Rank Remaining Control Technologies by Control Effectiveness

IDEM, OAQ has ranked the technically feasible control technologies and combinations of control technologies as follows:

Control Technology	Overall Control Efficiency (%)
Regenerative Thermal Oxidizer	98%
Thermal Oxidizer	98%
Rotor Concentrator	95%

These overall control efficiencies assume 100% capture efficiency using permanent total enclosure.

IDEM, OAQ is aware that the above-mentioned control technologies may periodically achieve control efficiencies that exceed the listed values under certain operating conditions. However, one factor to consider when evaluating BACT is that the BACT limit must be achievable on a consistent basis under normal operational conditions. BACT limitations should not necessarily reflect the highest possible control efficiency achievable by the technology on which the emission limitation is based. The permitting authority has the discretion to base the emission limitation on a control efficiency that can be lower than the optimal level. There are several reasons why the permitting authority might choose to do this. One reason is that the control efficiency achievable using the technology may fluctuate, so that it would not always achieve its optimal control efficiency. In that case, setting the emission limitation to reflect the highest control efficiency would make violations of the permit unavoidable. To account for this possibility, a permitting authority must be allowed a certain degree of discretion to set the emission limitation at a level that does not necessarily reflect the highest possible control efficiency, but will allow the Permittee to achieve compliance consistently. While IDEM, OAQ recognizes that a greater control efficiency may be achievable as an average during compliance testing, IDEM, OAQ allows sources to include a safety factor, or margin of error, to allow for minor variations in the operation of the emission units and the control device.

Step 4 – Evaluate the Most Effective Controls and Document Results

A review of EPA’s RACT/BACT/LAER Clearinghouse (RBLC) and Indiana Air Permits identified the following previous BACT determinations for sources that operate under the SIC Code 3086 (Plastics Foam Products) or for process type code 99.014 (Polystyrene Foam Products Manufacturing) and keyword search for polyethylene:

Note: The sources are arranged by limits in descending order.

Plant	RBLC ID or Permit #	Date Issued and State	Facility	BACT Determination
Fagerdala Packaging Inc. (Indiana)	F063-34203-00071	Pending	Polyethylene sheet foam extruder	Control: Permanent total enclosure with 100% capture efficiency and a regenerative thermal oxidizer with 98% destruction efficiency = 98% overall control efficiency VOC = 4.83 tons per year after control (BACT - State)

Plant	RBLC ID or Permit #	Date Issued and State	Facility	BACT Determination
Styrotek, Inc.	CA - 0742	7/8/1996 - California	Expandable polystyrene molding	Control: Incineration in boilers with unknown capture efficiency and 99% destruction efficiency VOC Limits: 110 lbs/day (equivalent to 20.1 tons/yr) (BACT - state)
Dart Container Corporation of California	CA-0909	09/10/1999 - California	Polystyrene foam extrusion	Control: Regenerative thermal oxidizer with 98% efficiency VOC Limits: 3,281 lbs/day (equivalent to 599 tons/yr) (BACT - PSD)
Dart Container Corporation of Michigan	MI-0384	3/8/2007 - Michigan	EUCUP: Production of foam containers	Control: Incineration in boilers with 95% efficiency VOC Limits: 75.33 lbs/hr and 219.95 tons/yr (BACT - State)
Dart Container Corporation of Kentucky	KY-0080	4/26/2001 - Kentucky	Foam extrusion lines	Control: Regenerative thermal oxidizer with 95% efficiency VOC Limits: 1.455 tons/day and 523.6 tons/yr (BACT - State)
Knauf USA Polystyrene, Inc.	OH-0234	08/13/1997 - Ohio	Polystyrene foam production	Control: Regenerative thermal oxidizer with 95% efficiency VOC Limits: 19.71 lbs/hr and 3.3 lbs/ 1000 lbs of product (equivalent to 86.3 tons/year) (BACT - state)
Pactuco	CA-0987	11/28/2011 - California	Polystyrene extrusion process	Control: Regenerative thermal oxidizer with 90 to 95% capture and 98.5% destruction efficiency = 94% overall VOC Limits: 10 ppm and 36 lbs/day (equivalent to 6.57 tons/year) (LAER)
Genpak, LLC	T143-11375-00016	2/10/2000 - Indiana	Pre-expansion room	Control: Incineration in boilers with 95% capture and 95% destruction efficiency = 90% overall VOC Limits: 64.36 tons/yr (BACT - State)
Dart Container Corporation of Pennsylvania	PA-0210	12/14/2001 - Pennsylvania	Polystyrene extrusion	Control: Incineration in boilers with 90% efficiency VOC Limit: 314 tons/yr (BACT - State)
Formpac Div, W R Grace & Co.	IN-0074	11/04/1997 - Indiana	Polystyrene foam manufacturing	Control: Recuperative thermal oxidizer with 90% efficiency VOC Limit: 343.8 tons/yr (BACT - PSD)
Pregis Innovative Packaging	CP 099-9807-00028	10/29/1998 - Indiana	Foam sheet and profile extrusion lines	Control: Recuperative thermal oxidizer with 90% control efficiency VOC Limit: 249.0 tons/yr (BACT - State)
Johns Manville International	F099-8546-00042	6/15/1999 - Indiana	Foam panel manufacturing process	Control: Regenerative thermal oxidizer with 90% efficiency VOC Limit: 142 tons/yr input before controls (BACT - State)

Plant	RBLC ID or Permit #	Date Issued and State	Facility	BACT Determination
Cryovac Rigid Packaging, Sealed Air Corporation	CP 097-5348-00093	11/4/1997	Reclaim extruders	Control: Regenerative thermal oxidizer with 90% efficiency VOC Limit: 805.3 tons/yr (BACT - PSD)
Syndicate Sales, Inc.	F067-7701-00053	1/29/2004 - Indiana	Foam production line	Control: Recuperative thermal oxidizer with 90% capture and 95% destruction efficiency VOC Limit: 98.9 tons/yr (BACT - State)
Fagerdala - Paclite Incorporated	MI-0322	02/01/2001 - Michigan	Extrusion, polyethylene	Control: Thermal oxidizer with 12-20% capture efficiency. No destruction efficiency specified. VOC Limits: 35 lbs/hr (equivalent to 153.3 tons/year) (BACT - State)
Amoco Foam Products Company	VA-0187	12/16/1991 - Virginia	Expanded polystyrene products	Control: Low VOC blowing agent VOC Limits: 1.5 tons/day and 394 tons/yr (BACT - PSD)
Nomaco, Inc.	OK-0122	03/31/2008 - Oklahoma	Polyethylene Foam Extrusion	Control: None VOC Limits: 0.7 lbs of VOC/lb of resin, 1,621.8 tons of blowing agent/yr, 1,135 tons of VOC/yr (BACT - PSD)
Nomaco, Inc.	NC-0071	09/17/2003 - North Carolina	Polyethylene Foam Manufacturing	Control: None VOC Limits: 0.6 lbs of VOC/cubic feet of foam, 1,250 tons of VOC/yr (BACT - PSD)
Tuscarora Inc.	MI-0249	4/20/2000 - Michigan	Expandable plastic beads	Control: None VOC Limits: 4.5 lbs of blowing agent/100 lbs beads and 98 tons/year (BACT - State)
Fagerdala - Paclite Incorporated	MI-0273	10/13/2000 - Michigan	Expandable polystyrene molding	Control: None VOC Limits: 5.75 lbs of blowing agent/100lbs beads and 82 tons/year (BACT - State)

Comparison of Existing BACT with the BACT proposed by Fagerdala Packaging Inc. (Indiana)

Fagerdala Packaging Inc. (Indiana) is proposing the use of a regenerative thermal oxidizer with a permanent total enclosure at a minimum of 98% overall control efficiency.

The only source with a higher overall control efficiency (99%) is for a boiler for Styrotek, Inc. The capture efficiency of the boiler at Styrotek, Inc. was not provided and as the source was not indicated to use a permanent total enclosure, it is assumed that the capture efficiency is less than 100%. Based on this, there might be VOC emissions that are not being controlled. Another factor to consider when evaluating BACT is that the BACT limit must be achievable on a consistent basis under normal operational conditions. BACT limitations should not necessarily reflect the highest possible control efficiency achievable by the technology on which the emission limitation is based. Based on this, the 1% difference is not being considered as BACT for Fagerdala Packaging Inc. (Indiana). Also the extruded foam at

Styrotek Inc. is polystyrene, while the extruded foam produced by Fagerdala Packaging Inc. (Indiana) is polyethylene. Therefore, these processes are not directly comparable.

Since Fagerdala Packaging Inc. (Indiana) has proposed to construct a regenerative thermal oxidizer with a permanent total enclosure, which is one of the most stringent BACT requirements, an economic, energy, and environmental impact analysis is not required.

Step 5 – Select BACT

Pursuant to 326 IAC 8-1-6, based on the BACT analysis mentioned above, IDEM, OAQ has determined that the following requirements represent BACT for the polyethylene sheet foam extruder:

- (a) The input of blowing agent (isobutane) to the polyethylene sheet foam extruder and temporary storage area (SFE-01) shall not exceed 241.4 tons per twelve (12) consecutive month period, which is equivalent to 4.83 tons per year of VOC emissions after control.
- (b) The polyethylene sheet foam extruder and temporary storage area (SFE-01) shall use a combination of a permanent total enclosure and a regenerative thermal oxidizer to control VOC emissions with an overall control efficiency (including capture efficiency and destruction efficiency) equal to or greater than 98%.
- (c) The permanent total enclosure and regenerative thermal oxidizer shall operate at all times when the polyethylene sheet foam extruder (SFE-01) is in operation.



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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

TO: Rodney Fye
Fagerdala Packaging Inc. (Indiana)
2532 Airwest Boulevard
Plainfield, IN 46168-7701

DATE: June 12, 2014

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

SUBJECT: Final Decision
New Source Construction and Federally Enforceable State Operating Permit (FESOP)
063-34203-00071

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

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

A copy of the final decision and supporting materials has also been sent via standard mail to:
George Wiswall, VP
Randel Hanan, TKS Control Systems
Tim Neal, TKS Control Systems
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 6/13/2013



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

June 12, 2014

TO: Plainfield Guilford Township Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**

Applicant Name: Fagerdala Packaging, Inc. (Indiana)
Permit Number: 063-34203-00071

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or 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.

Enclosures
Final Library.dot 6/13/2013

Mail Code 61-53

IDEM Staff	VHAUN 6/12/2014 Fagerdala Packaging Inc Indiana 063-34203-00071 FINAL			AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204	Type of Mail: CERTIFICATE OF MAILING ONLY	

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Rodney Fye Fagerdala Packaging Inc Indiana 2532 Airwest Blvd Plainfield IN 46168-7701 (Source CAATS)			CONFIRMED DELIVERY							
2		George Wiswall VP Fagerdala Packaging Inc Indiana 2532 Airwest Blvd Plainfield IN 46168-7701 (RO CAATS)										
3		Larry and Becky Bischoff 10979 North Smokey Row Road Mooresville IN 46158 (Affected Party)										
4		Hendricks County Commissioners 355 S Washington Danville IN 46122 (Local Official)										
5		Plainfield Public Library 1120 Stafford Rd Plainfield IN 46168-2230 (Library)										
6		Betty Bartley P.O. Box 149 Danville IN 46122 (Affected Party)										
7		Plainfield Town Council and Town Manager P.O. Box 65 Plainfield IN 46168 (Local Official)										
8		Hendricks County Health Department 355 S Washington Street, Suite 210 Danville IN 46122-1759 (Health Department)										
9		Randel Hanan TKS Control Systems 88 Templeton Drive Oswego IL 60543 (Consultant)										
10		Aarons 2548 Airwest Blvd Plainfield IN 46168 (Affected Party)										
11		Apotex, Inc. 2516 Airwest Blvd Plainfield IN 46168 (Affected Party)										
12		Electronic Recyclers International 2540 Airwest Blvd Plainfield IN 46168 (Affected Party)										
13		Mr. Tim Neal TKS Control Systems 88 Templeton Drive Osewgo IL 60543 (Consultant)										
14												
15												

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
12			