



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

To: Interested Parties

Date: July 31, 2014

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

Source Name: A. Schulman, Inc.

Permit Level: Federally Enforceable State Operating Permit (FESOP)
Significant Permit Revision

Permit Number: 163-34154-00120

Source Location: 5001, 4991, and 4917 O'Hara Drive and 4400 Hitch Peters Road,
Evansville, Indiana

Type of Action Taken: Modification at an existing source
Revisions to permit requirements
Changes that are administrative in nature

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 34154.

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.



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Ms. Lisa McLaughlin
A. Schulman, Inc.
5001 O'Hara Drive
Evansville, Indiana 47711

July 31, 2014

Re: 163-34154-00120
Significant Revision to
F163-13771-00120

Dear Ms. McLaughlin:

Ferro Corporation, Filled and Reinforced Plastics Division was issued a Federally Enforceable State Operating Permit (FESOP) Renewal No. F163-13771-00120 on March 8, 2006, for a stationary manufacturing plant engaged in the custom compounding of purchased resins located at 5001 O'Hara Drive, Evansville, Indiana 47711. On February 6, 2014, the Office of Air Quality (OAQ) received an application from the source requesting to convert an existing research and development line at Building #3, located at 4400 Hitch Peters Road, Evansville, to a small production line. This request involves:

1. Adding five (5) blenders, identified as B33, B-34, B-35A, B-35B, and B36, three (3) extruders, identified as C33, C34, and C36, a dust collector, and two (2) pellet silos to the permit that were used in research and development to now serve as a small batch production line.

The attached Technical Support Document (TSD) provides additional explanation of the changes to the permit. Pursuant to the provisions of 326 IAC 2-8-11.1, these changes to the permit are required to be reviewed in accordance with the Significant Permit Revision (SPR) procedures of 326 IAC 2-8-11.1(f). Pursuant to the provisions of 326 IAC 2-8-11.1, a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document (TSD).

Pursuant to 326 IAC 2-8-11.1, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Please find attached the entire FESOP as revised.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Brandon Miller of my staff at 317-234-5373 or 1-800-451-6027, and ask for extension 4-5373.

Sincerely,

Iryn Callung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Technical Support Document and revised permit

IC/bdm

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



A State that Works



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FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP) RENEWAL
OFFICE OF AIR QUALITY

A. Schulman, Inc.
5001, 4991, and 4917 O'Hara Drive and 4400 Hitch Peters Road
Evansville, Indiana 47711

(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

The Permittee must comply with all conditions of this permit. Noncompliance with any provision of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; and 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.

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.

Table with 2 columns: Issuance/Expiration Date and Issued By/Permit Branch. Row 1: Operation Permit No.: F163-13771-00120. Row 2: Issuance Date: March 8, 2006; Expiration Date: March 8, 2016. Row 3: Original Signed by: Paul Dubenetzky, Assistant Commissioner; Permit Branch: Office of Air Quality.

Significant Permit Revision No. 163-24005-00120, issued December 13, 2007;
Administrative Amendment No. F163-25755-00120, issued January 28, 2008;
Administrative Amendment No. F163-29005-00120, issued March 19, 2010; and
Administrative Amendment No. F163-31096-00120, issued December 21, 2011.

Table with 2 columns: Issuance/Expiration Date and Issued By/Permit Branch. Row 1: Significant Permit Revision No. F163-34154-00120. Row 2: Issuance Date: July 31, 2014; Expiration Date: March 8, 2016. Row 3: Issued By: Iryn Calilung, Section Chief; Permits Branch: Office of Air Quality.

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and Evansville EPA. 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 manufacturing plant engaged in the custom compounding of purchased resins.

Source Address:	5001, 4991, and 4917 O'Hara Drive, Evansville, Indiana 47711 4400 Hitch Peters Road, Evansville, Indiana 47711
General Source Phone Number:	(812) 423-5218
SIC Code:	3087 (Custom Compound Purchased Resins)
County Location:	Vanderburgh
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 FESOP Source Definition [326 IAC 2-7-1(22)]

This stationary manufacturing plant engaged in the custom compounding of purchased resins consists of four (4) buildings:

- (a) Building #1 is located at 5001 O'Hara Drive, Evansville, Indiana
- (b) Building #2 is located at 4991 O'Hara Drive, Evansville, Indiana
- (c) Building #3 is located at 4400 Hitch Peters Road, Evansville, Indiana
- (d) Building #5 is located at 4917 O'Hara Drive, Evansville, Indiana

Since the four (4) plants are located on contiguous or adjacent properties, belong to the same industrial grouping, and under common control of the same entity, they will be considered one (1) source, effective from the date of issuance of this permit revision (163-34154-00120).

A.3 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) Building 1, which is capable of processing 27,697 pounds of raw materials per hour, consists of the following:
 - (1) Raw materials handling, includes two (2) rail unloading systems, and are controlled by baghouses EX 3 and EX 4;
 - (2) Eight (8) blenders C04, C06, C15, C16, C18, C31, C32 and C51, capable of blending 27,697 pounds of raw materials per hour and controlled by baghouse EX 1;

- (3) Eight (8) extruders C04, C06, C15, C16, C18, C31, C32 and C51, capable of extruding 27,697 pounds of raw materials per hour and are controlled by baghouse EX 2; and
- (4) One (1) regrinder.
- (b) Building 2, which is capable of processing 17,344 pounds of raw materials per hour, consists of the following:
 - (1) Five (5) blenders C22, C23, C24, C25 and C45, capable of blending 17,344 pounds of raw materials per hour, with raw materials conveyed from rail cars to the blenders using a pneumatic transfer system equipped with an integral baghouse EX30;
 - (2) Five (5) extruders C22, C23, C24, C25 and C45, capable of extruding 17,344 pounds of raw materials per hour; and
 - (3) One (1) Cumberland regrinder, installed in 1979, regrinding scrap plastic for reuse directly into a hopper, with no control device, exhausting inside Building 2.

Each extrusion line consists of a dedicated blender, material handling, extruder and pelletizing. The source utilizes different types of plastic in the process such as: Polyethylenes, Polypropylene, ABS, EVA, Nylons and Polystyrenes.

- (c) Building 3 which is capable of processing 500 pounds of raw materials per hour consisting of the following:
 - (1) Five (5) blenders, identified as B33, B-34, B-35A, B-35B, and B36, capable of blending a combined 500 pounds of raw material per hour, all 5 blenders were constructed in 1987, and using a common dust collector E3 as control and exhausting to stack E3;
 - (2) Three (3) extruders, identified as C33, C34, and C36, capable of extruding raw material, and using dust collector E3 as control and exhausting to stack E3;

Emission Unit ID	Year Constructed	Extrusion Rate (lbs/hr)
C33	1987	175
C34	1988	150
C36	1994	175

- (3) Two (2) pellet storage silos, identified as Silo 1 and Silo 2, with a maximum storage capacity of 20,000 pounds each, both constructed in 1987, and a maximum throughput of 500 pounds per hour each, no control, and exhausting indoors.

Note: Building 3 was previously used as a research and development facility. It is now being utilized as a small production line. The source utilizes different types of plastic in the process such as: Polyethylenes, Polypropylene, ABS, EVA, Nylons, and Polystyrenes.

A.4 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, as defined in 326 IAC 2-7-1(21):

Other activities or categories where emissions are equal to or less than 5 pounds of PM per hour or 25 pounds per day:

- (a) These activities include thirty four (34) pellet silos, eight (8) weigh hoppers, pellet conveyor elevators, pellet conveyor augers and cooling towers;
- (b) Building 5, which is capable of processing 1,345 pounds of raw material per hour. This building consists of the following:
 - (1) One (1) blender, identified as C03, capable of blending 1,345 pounds of raw material per hour; and
 - (2) One (1) extruder, identified as C03, capable of extruding 1,345 pounds of raw material per hour;
- (c) One (1) Beringer Jet Cleaner, identified as "Beringer Burn Off Oven," installed in 2004, to remove melted plastic residue from dies, using a vacuum pyrolysis process during which a part is heated in the absence of oxygen until the polystyrene falls off the part, and located in Building 1.

A.5 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) to renew 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 Permit Term [326 IAC 2-8-4(2)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

- (a) This permit, F163-13771-00120, is issued for a fixed term of ten (10) 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.3 Term of Conditions [326 IAC 2-1.1-9.5]

Notwithstanding the permit term of a permit to construct, a permit to operate, or a permit modification, any condition established in a permit issued pursuant to a permitting program approved in the state implementation plan shall remain in effect until:

- (a) the condition is modified in a subsequent permit action pursuant to Title I of the Clean Air Act; or
- (b) the emission unit to which the condition pertains permanently ceases operation.

B.4 Enforceability [326 IAC 2-8-6] [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.5 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.6 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.7 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.8 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.9 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. All certifications shall cover the time period from January 1 to December 31 of the previous year, and shall be submitted no later than April 15 of each year to:

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

- (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.10 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.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)]

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

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

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

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

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

The Permittee shall implement the PMPs.

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

B.12 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, or Southwest Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

Telephone Number: 1-800-451-6027 (ask for Office of Air Quality, Compliance and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality, Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865
Southwest Regional Office phone: (812) 380-2305; fax: (812) 380-2304.

- (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.13 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to F163-13771-00120 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.14 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.15 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.16 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(40). 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.17 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.18 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.19 Source Modification Requirement [326 IAC 2-8-11.1]

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

B.20 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.21 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.22 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.23 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 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.2 Opacity [326 IAC 5-1]

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

- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.5 Fugitive Dust Emissions [326 IAC 6-4]

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions).

C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-8-5(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.7 Performance Testing [326 IAC 3-6]

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

Indiana Department of Environmental Management
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.8 Compliance Requirements [326 IAC 2-1.1-11]

The commissioner may require stack testing, monitoring, or reporting at any time to assure compliance with all applicable requirements by issuing an order under 326 IAC 2-1.1-11. Any monitoring or testing shall be performed in accordance with 326 IAC 3 or other methods approved by the commissioner or the U. S. EPA.

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

C.9 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.10 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.11 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.12 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.13 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.14 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.15 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) 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.16 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 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

(a) Building 1, which is capable of processing 27,697 pounds of raw materials per hour, consists of the following:

- (1) Raw materials handling, includes two (2) rail unloading systems, and are controlled by baghouses EX 3 and EX 4;
- (2) Eight (8) blenders C04, C06, C15, C16, C18, C31, C32 and C51, capable of blending 27,697 pounds of raw materials per hour and controlled by baghouse EX1;
- (3) Eight (8) extruders C04, C06, C15, C16, C18, C31, C32, and C51, capable of extruding 27,697 pounds of raw materials per hour and are controlled by baghouse EX 2; and;
- (4) One (1) regrinder.

(b) Building 2, which is capable of processing 17,344 pounds of raw materials per hour, consists of the following:

- (1) Five (5) blenders C22, C23, C24, C25 and C45, capable of blending 17,344 pounds of raw materials per hour, with raw materials conveyed from rail cars to the blenders using a pneumatic transfer system equipped with an integral baghouse EX30;
- (2) Five (5) extruders C22, C23, C24, C25 and C45, capable of extruding 17,344 pounds of raw materials per hour; and
- (3) One (1) Cumberland regrinder, installed in 1979, regrinding scrap plastic for reuse directly into a hopper, with no control device, exhausting inside Building 2.

(c) Building 3 which is capable of processing 500 pounds of raw materials per hour consisting of the following:

- (1) Five (5) blenders, identified as B33, B-34, B-35A, B-35B, and B36, capable of blending a combined 500 pounds of raw material per hour, all 5 blenders were constructed in 1987, and using a common dust collector E3 as control and exhausting to stack E3;
- (2) Three (3) extruders, identified as C33, C34, and C36, capable of extruding raw material, and using dust collector E3 as control and exhausting to stack E3;

Emission Unit ID	Year Constructed	Extrusion Rate (lbs/hr)
C33	1987	175
C34	1988	150
C36	1994	175

- (3) Two (2) pellet storage silos, identified as Silo 1 and Silo 2, with a maximum storage capacity of 20,000 pounds each, both constructed in 1987, and a maximum throughput of 500 pounds per hour each, no control, and exhausting indoors.

Note: Building 3 was previously used as a research and development facility. It is now being utilized as a small production line. The source utilizes different types of plastic in the process such as: Polyethylenes, Polypropylene, ABS, EVA, Nylons, and Polystyrenes.

Insignificant Activities:

- (b) Building 5, which is capable of processing 1,345 pounds of raw material per hour, consists of the following:
- (1) One (1) blender, identified as C03, capable of blending 1,345 pounds of raw material per hour; and
 - (2) One (1) extruder, identified as C03, capable of extruding 1,345 pounds of raw material per hour;

Each extrusion line consists of a dedicated blender, material handling, extruder and pelletizing. The source utilizes different types of plastic in the process such as: Polyethylenes, Polypropylene, ABS, EVA, Nylons and Polystyrenes.

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

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

D.1.1 Particulate Matter Less Than 10 Microns (PM10) and PM2.5 [326 IAC 2-8] [326 IAC 2-1.1-5]

Pursuant to 326 IAC 2-8 (FESOP), the Permittee shall comply with the following:

Facilities	Baghouse ID	PM10 (lb/hr)	PM2.5 (lb/hr)
Building 1: Blenders C04, C06, C15, C16, C18, C31, C32, and C51	EX1	6.68	6.68
Building 1: Extruders C04, C06, C15, C16, C18, C31, C32, and C51	EX2	3.34	3.34
Building 1: Rail Unloading	EX3	0.23	0.23
Building 1: Rail Unloading	EX4	0.23	0.23
Building 2: Raw Material Handling-Truck Unloading; Blenders C22, C23, C24, C25 and C45	EX30	3.47	3.47
Building 3: Blenders B33, B-34, B-35A, B-35B, B36 and Extruders C33, C34, and C36	E3	0.011	0.011

Compliance with these limits, combined with the PM10 and PM2.5 from other emission units, shall limit emissions from the entire source to less than one hundred (100) tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable.

D.1.2 Particulate Matter (PM) [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a) (Vanderburgh County Particulate Limitations), particulate matter (PM) emissions shall be limited to 0.03 grain per dry standard cubic foot of exhaust air as follows:

Facilities	Baghouse ID
Building 1: Blenders C04, C06, C15, C16, C18, C31, C32, and C51	EX1
Building 1: Extruders C04, C06, C15, C16, C18, C31, C32, and C51	EX2
Building 1: Rail Unloading	EX3
Building 1: Rail Unloading	EX4
Building 2: Raw Material Handling-Truck Unloading; Blenders C22, C23, C24, C25 and C45	EX30
Building 3: Blenders B33, B-34, B-35A, B-35B, B36 and Extruders C33, C34, and C36	E3
Building 3: Silo 1 and Silo 2	--
Building 5:Blender C03, Extruder C03	--

D.1.3 PSD Minor Limits [326 IAC 2-2]

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

Facilities	Baghouse ID	PM
Building 1: Blenders C04, C06, C15, C16, C18, C31, C32, and C51	EX1	6.68
Building 1: Extruders C04, C06, C15, C16, C18, C31, C32, and C51	EX2	3.34
Building 1: Rail Unloading	EX3	0.23
Building 1: Rail Unloading	EX4	0.23
Building 2: Raw Material Handling-Truck Unloading; Blenders C22, C23, C24, C25 and C45	EX30	3.47

Compliance with these limits, combined with the PM from other emission units, shall limit emissions from the entire source to less than two hundred fifty (250) tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 (PSD).

Compliance Determination Requirements

D.1.4 Particulate Control

- (a) In order to comply with D.1.1, D.1.2, and D.1.3 the baghouses for particulate control shall be in operation and control emissions from the Building 1 and Building 2 extruders and blenders at all times that the extruders and blenders are in operation.
- (b) In order to comply with D.1.1 and D.1.2, the baghouse E3 for particulate control shall be in operation and control emissions from Building 3 extruders and blenders at all times that the extruders and blenders from Building 3 are in operation.
- (c) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.1.5 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

- (a) To demonstrate compliance with the PM and PM₁₀ limits in D.1.1, D.1.2, and D.1.3, the Permittee shall perform PM and PM₁₀ testing on baghouses EX1 and EX2 no later than five (5) years from March 8, 2006 utilizing methods as approved by the Commissioner.

This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

PM₁₀ includes filterable and condensable PM₁₀.

- (b) In order to demonstrate compliance with D.1.1, the Permittee shall perform PM_{2.5} testing of on baghouses EX1 and EX2, not later than 180 days after final promulgation of the new or revised condensable PM test method(s) referenced in the U. S. EPA's Final Rule for Implementation of the New Source Review (NSR) Program for Particulate Matter Less Than 2.5 Micrometers (PM_{2.5}), signed on May 8th, 2008 or once every five (5) years of the valid compliant stack test, whichever is later. This testing shall be conducted utilizing methods as approved by the Commissioner.

These tests shall be conducted utilizing methods approved by the Commissioner. These tests shall be repeated at least five (5) years from the date of the most recent valid compliance demonstration.

PM_{2.5} includes filterable PM_{2.5} and condensable PM.

- (c) In order to demonstrate compliance with Condition D.1.2, the Permittee shall perform PM testing on the baghouse, identified as E3, controlling Blenders B33, B-34, B-35A, B-35B, B36 and Extruders C33, C34, and C36, not later than 180 days after approval of the significant permit revision 163-34154-00120. The Permittee shall perform PM testing utilizing methods as approved by the Commissioner.

This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

- (d) In order to demonstrate compliance with Condition D.1.1, the Permittee shall perform PM₁₀ and PM_{2.5} testing on the baghouse, identified as E3, controlling Blenders B33, B-34, B-35A, B-35B, B36 and Extruders C33, C34, and C36, not later than 180 days approval of the significant permit revision 163-34154-00120. The Permittee shall perform PM₁₀ and PM_{2.5} testing utilizing methods as approved by the Commissioner.

This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

PM₁₀ includes filterable PM₁₀ and condensable PM. PM_{2.5} includes filterable PM_{2.5} and condensable PM.

- (e) 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.1.6 Visible Emissions Notations

- (a) Visible emission notations of EX1, EX2, and E3 shall be performed once per day during plant production operations. A trained employee shall record whether emissions are normal or abnormal.

- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take 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. Failure to take response shall be considered a deviation from this permit.

D.1.7 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouses used in conjunction with the Building 1 rail unloading systems, blenders, and extruders, at least once per day when the processes are in operation. When for any one reading, the pressure drop across the baghouses EX1 and EX2 is outside the normal range the Permittee shall take reasonable response. The normal range for these units is a pressure between 0.8 to 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test. When for any one reading, the pressure drop across the baghouses EX3 and EX4 is outside the normal range the Permittee shall take reasonable response. The normal range for these units is a pressure between 0.2 to 4.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the most recent stack test. Section C- Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. A pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (b) The Permittee shall record the pressure drop across baghouse E3, used in conjunction with the Building 3 blenders and extruders, at least once per day when the processes are in operation. When for any one reading, the pressure drop across the baghouse E3 is outside the normal range the Permittee shall take reasonable response. The normal range for this unit is 0.8 to 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test, 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 pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.
- (c) The instruments used for determining the pressure shall comply with Section C – Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated or replaced at least once every six (6) months.

D.1.8 Broken or Failed Bag Detection

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

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

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

Record Keeping and Reporting Requirement [326 IAC 2-8-4(3)] [326 IAC 2-8-16]

D.1.9 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.6, the Permittee shall maintain records of visible emission notations of the EX1, EX2, and E3 stack exhaust once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) To document the compliance status with Condition D.1.7, the Permittee shall maintain records once per day of the pressure drop. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).
- (c) Section C - General Record Keeping Requirements, of this permit contains the Permittee's obligations with regard to the records required by this condition.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP) CERTIFICATION

Source Name: A. Schulman, Inc.
Source Address: 5001, 4991, and 4917 O'Hara Drive, Evansville, Indiana 47711
4400 Hitch Peters Road, Evansville, Indiana 47711
FESOP Renewal No.: F 163-13771-00120

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: A. Schulman, Inc.
Source Address: 5001, 4991, and 4917 O'Hara Drive, Evansville, Indiana 47711
4400 Hitch Peters Road, Evansville, Indiana 47711
FESOP Renewal No.: F 163-13771-00120

This form consists of 2 pages

Page 1 of 2

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

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

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

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

Page 2 of 2

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

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: A. Schulman, Inc.
Source Address: 5001, 4991, and 4917 O'Hara Drive, Evansville, Indiana 47711
4400 Hitch Peters Road, Evansville, Indiana 47711
FESOP Renewal No.: F 163-13771-00120

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: _____

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

Addendum to the Technical Support Document (ATSD) for a
Significant Permit Revision to a Federally Enforceable State Operating
Permit (FESOP)

Source Background and Description

Source Name:	A. Schulman, Inc.
Source Location:	5001, 4991, and 4917 O'Hara Drive, Evansville, Indiana 47711 4400 Hitch Peters Drive, Evansville, Indiana 47711
County:	Vanderburgh
SIC Code:	3087 (Custom Compound Purchased Resins)
Operation Permit No.:	F163-13771-00120
Operation Permit Issuance Date:	March 8, 2006
Significant Permit Revision No.:	163-34154-00120
Permit Reviewer:	Brandon Miller

On June 26, 2014, the Office of Air Quality (OAQ) had a notice published in the Evansville Courier, Evansville, Indiana, stating that Ferro Corporation, Filled and Reinforced Plastics Division had applied for a Significant Permit Revision to a Federally Enforceable State Operating Permit (FESOP) to convert Building #3 at 4400 Hitch Peters Drive from a research and development facility to a small production line. The notice also stated that the OAQ proposed to issue a Significant Permit Revision to a FESOP for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

On July 24, 2014, IDEM, OAQ received a permit application from the Permittee requesting to change the name on the permit. The change in the name of the permit is described below in the Comments and Responses Section of this ATSD.

Comments and Responses

On July 17, 2014, Ferro Corporation, Filled and Reinforced Plastics Division submitted comments to IDEM, OAQ on the draft Significant Permit Revision to a FESOP. On July 29, 2014, Ferro Corporation, Filled and Reinforced Plastics Division provided clarification to the comments provided on July 17, 2014.

The Technical Support Document (TSD) is used by IDEM, OAQ for historical purposes. IDEM, OAQ does not make any changes to the original TSD, but the Permit will have the updated changes. The comments and revised permit language are provided below with deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

In Section A.3(c), the processes described for Building #3 use the phrase "plastic raw materials" which is an incorrect phrase since the raw materials can include other items other than just "plastic raw materials." Please remove the three instances of "plastic" from the description of Building #3 in the phrases "plastic raw materials."

Response to Comment 1:

IDEM agrees with the recommended changes, since the processes for Building #3 use the same raw materials as the other existing processes. The permit has been revised as requested above:

...

A.3 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:

...

- (c) Building 3 which is capable of processing 500 pounds of ~~plastic~~ raw materials per hour consisting of the following:
 - (1) Five (5) blenders, identified as B33, B-34, B-35A, B-35B, and B36, capable of blending a combined 500 pounds of ~~plastic~~ raw material per hour, all 5 blenders were constructed in 1987, and using a common dust collector E3 as control and exhausting to stack E3;
 - (2) Three (3) extruders, identified as C33, C34, and C36, capable of extruding ~~plastic~~ raw material, and using dust collector E3 as control and exhausting to stack E3;

...

Comment 2:

In Section D.1, under the facility description for item (c), the processes described for Building #3 use the phrase "plastic raw materials" which is an incorrect phrase since the raw materials can include other items other than just "plastic raw materials." Please remove the three instances of "plastic" from the description of Building #3 in the phrases "plastic raw materials."

Response to Comment 2:

IDEM agrees with the recommended changes, since the processes for Building #3 use the same raw materials as the other existing processes. The permit has been revised as requested above:

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

...

- (c) Building 3 which is capable of processing 500 pounds of ~~plastic~~ raw materials per hour consisting of the following:
 - (1) Five (5) blenders, identified as B33, B-34, B-35A, B-35B, and B36, capable of blending a combined 500 pounds of ~~plastic~~ raw material per hour, all 5 blenders were constructed in 1987, and using a common dust collector E3 as control and exhausting to stack E3;
 - (2) Three (3) extruders, identified as C33, C34, and C36, capable of extruding ~~plastic~~ raw material, and using dust collector E3 as control and exhausting to stack E3;

...

On July 24, 2014, IDEM, OAQ received an application from the source requesting the name on the permit to be changed. Pursuant to 326 IAC 2-8-10(a)(4), this change to the permit is considered an administrative amendment because the permit is amended to indicate a change in ownership or operational control of the source where there is no other change in the permit is necessary. Instead of issuing a separate permit, the change in the company name is being in this significant permit revision.

The company name has been revised throughout the permit as follows:

Company Name: ~~Ferro Corporation, Filled and Reinforced Plastics Division~~
A. Schulman, Inc.

The permit has been revised as follows in Section A.2, because the source name has changed but the source determination results have not changed.

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

This stationary manufacturing plant engaged in the custom compounding of purchased resins consists of four (4) buildings:

- (a) ~~Ferro Corporation~~ Building #1 is located at 5001 O'Hara Drive, Evansville, Indiana
- (b) ~~Ferro Corporation~~ Building #2 is located at 4991 O'Hara Drive, Evansville, Indiana
- (c) ~~Ferro Corporation~~ Building #3 is located at 4400 Hitch Peters Road, Evansville, Indiana
- (d) ~~Ferro Corporation~~ Building #5 is located at 4917 O'Hara Drive, Evansville, Indiana

...

IDEM Contact

- (a) Questions regarding this proposed Significant Permit Revision to a FESOP can be directed to Brandon Miller 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) 234-5373 or toll free at 1-800-451-6027 extension 4-5373.
- (b) A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

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

Technical Support Document (TSD) for a Significant Permit Revision to a
Federally Enforceable State Operating Permit (FESOP)

Source Description and Location
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Source Name:	Ferro Corporation, Filled and Reinforced Plastics Division
Source Location:	5001, 4991, and 4917 O'Hara Drive, Evansville, Indiana 47711 4400 Hitch Peters Drive, Evansville, Indiana 47711
County:	Vanderburgh
SIC Code:	3087 (Custom Compound Purchased Resins)
Operation Permit No.:	F163-13771-00120
Operation Permit Issuance Date:	March 8, 2006
Significant Permit Revision No.:	163-34154-00120
Permit Reviewer:	Brandon Miller

On February 6, 2014, the Office of Air Quality (OAQ) received an application from Ferro Corporation, Filled and Reinforced Plastics Division related to a modification to an existing stationary manufacturing plant engaged in the custom compounding of purchased resins.

Source Definition

This source consists of the following plants:

- (a) Ferro Corporation Building #1 is located at 5001 O'Hara Drive, Evansville, Indiana
- (b) Ferro Corporation Building #2 is located at 4991 O'Hara Drive, Evansville, Indiana
- (c) Ferro Corporation Building #3 is located at 4400 Hitch Peters Road, Evansville, Indiana
- (d) Ferro Corporation Building #5 is located at 4917 O'Hara Drive, Evansville, Indiana

Prior to this revision, Ferro Corporation has three large production run buildings, Buildings #1, #2, and #5, at 5001 O'Hara Drive, Evansville indicated in its existing permit. Buildings #1, #2, and #5 have been permitted previously under the source identification of 163-00120.

It also has a building, Building #3, which is used for research and development and shipping. Building #3 has never been permitted and does not have a source identification number. Building #3 is used for smaller production runs in addition to research and development and shipping operations. Building #3 is located at 4400 Hitch Peters Road, Evansville.

Ferro Corporation owns all 4 buildings. Raw materials are shipped from Buildings #1, #2, and #5 to Building #3. All production runs at Buildings #1, #2, and #5 are sent to Building #3 for shipping.

IDEM, OAQ has examined whether these plants are part of the same major source. The term "major source" is defined at 326 IAC 2-7-1(22). In order for these plants to be considered one major source, they must meet all three of the following criteria:

- (1) the plants must be under common ownership or common control;
- (2) the plants must have the same two-digit Standard Industrial Classification (SIC) Code or one must serve as a support facility for another; and,
- (3) the plants must be located on contiguous or adjacent properties.

IDEM's Nonrule Policy Document Air-005, *Guidance on Definition of "Source" for Collocated Activities* (available at <http://www.in.gov/idem/4694.htm> on IDEM's website) applies to the definition of "major source" in 326 IAC 2-7-1(22). Air-005 states that if plants are owned by the same person or entity, common control exists. Air-005 also states that common ownership may exist in several forms. If a third party has ownership of fifty-one percent (51%) or more in each of two or more plants, common ownership exists. If two or more entities share common corporate officers, in whole or in substantial part, who are responsible for the day-to-day operations of the entities, common ownership exists. If one entity has fifty-one percent (51%) or greater ownership of another entity, common ownership exists.

Ferro Corporation owns Buildings #1, #2, #3, and #5. In addition, all of the buildings share plant management staff and maintenance staff that are responsible for the day-to-day operations of all four buildings. Therefore, all four buildings are under common ownership and common control, meeting the first part of the major source definition.

The SIC Code Manual of 1987 sets out how to determine the proper SIC Code for each type of business. More information about SIC Codes is available at http://www.osha.gov/pls/imis/sic_manual.html on the Internet. The SIC Code is determined by looking at the principal product or activity of each plant. Buildings #1, #2, and #5 are engaged in the custom compounding of purchased plastic resins. Building #3 is engaged in the custom compounding of purchased plastic resins. All of the buildings have the same two-digit SIC Code, 30, for the Major Group Rubber and Miscellaneous Plastic Products.

A plant is a support facility to another plant if it dedicates 50% or more of its output to the other plant. Buildings #1, #2, and #5 send more than 50% of their output to Building #3. Buildings #1, #2, and #5 do not send any output to one another. Building #3 receives all of its raw materials for production from Building #1, #2, and #5. Therefore, Buildings #1, #2, #5, each, have a support relationship with Building #3. Buildings #1, #2, and #5 do not have a support relationship with one another. However, all of the buildings have the same two-digit SIC Code. Therefore, the second part of the major source definition is met.

The last criterion of the definition is whether the sources are on the same, contiguous or adjacent properties. Buildings #1, #2, and #5 are located on the same property. Building #3 is located 0.8 miles from the other buildings. Since Building #3 is not located on a contiguous property with the other buildings, IDEM, OAQ must determine if they are located on adjacent properties.

The term "adjacent" is not defined in Indiana's rules. IDEM's Nonrule Policy Document Air-005 provides guidance in determining when two properties are adjacent. Air-005 states:

- properties that actually abut at any point would satisfy the requirement of contiguous or adjacent property.
- properties that are separated by a public road or public property would satisfy this requirement, absent special circumstances.
- other scenarios would be examined on an individual basis with the focus on the distance between the activities and the relationship between the activities.

The U.S. EPA has a similar view on how to interpret the term "adjacent" when defining a source. Two U.S. EPA letters; the May 21, 1988 letter from U.S. EPA Region 8 to the Utah Division of Air Quality, and the U.S. EPA Region 5 letter dated October 18, 2010, to Scott Huber at Summit Petroleum Corporation, discuss the term "adjacent" as it is used in making major source determinations. These letters are not binding on IDEM but they are persuasive for two reasons. The letters follow the guidance in NPD Air-005 that IDEM will examine both the distance between the plants and their relationship and, secondly, they illustrate a longstanding U.S. EPA analysis used to determine if two plants are "adjacent" going back to the preamble to the 1980 NSR program definition of "major source". U.S. EPA's consistent approach is that any evaluation of what is "adjacent" must relate to the guiding principal of a common sense notion of "source".

All IDEM evaluations of adjacency are done on a case-by-case basis looking at the specific factors for the plants involved. In addition to determining the distance between the properties, IDEM asks:

- (1) Are materials routinely transferred between the plants?
- (2) Do managers or other workers frequently shuttle back and forth to be involved actively in the plants?
- (3) Is the production process itself split in any way between the plants?

These questions focus on whether the buildings are so interrelated that they are functioning as one source, and whether the distance between them is small enough that it enables them to operate as one source. U.S. EPA Assistant Administrator Gina McCarthy issued a memorandum on September 22, 2009, that confirmed U.S. EPA's view that each source determination must be done on a case-by-case basis and stated that after that analysis is completed it may be that physical proximity serves as an overwhelming factor in determining if the properties are adjacent.

There are no physical connections between Building #3 and Buildings #1, #2, and #5. Building #3 has a dedicated workforce of only 5 individuals. Building #3 contains the research and development portion of Ferro Corporation. All of the chemists' offices are located at 5001 O'Hara Drive, where Buildings #1, #2, and #5 are located. The chemists must travel to Building #3 for research and development activities. All of the buildings share the same plant management staff and maintenance staff.

Building #3 receives all of the raw materials needed for production from Buildings #1, #2, and #5. Building #3 also receives all finished products from Buildings #1, #2, and #5 to ship out to customers. Building #3 does not send any raw materials, intermediate or finished products to Buildings #1, #2, or #5. Even though the production is split between the buildings, Building #3 provides support to Buildings #1, #2, and #5. Buildings #1, #2, and #5 are only eight tenths (0.8) of a mile from Building #3, which is physically close to be able to provide support. IDEM, OAQ has determined that the Building #3 property is adjacent to the Buildings #1, #2, and #5 property. The third part of the major source definition is met.

The four buildings, Building #1, #2, #3 and #5 meet all three parts of the major source definition. IDEM, OAQ finds that Ferro Corporation's Building #1, #2, #3, and #5 are part of the same major source. There is an existing source identification of 163-00120. Building #3 currently has no source identification number. Therefore, Building #3 will fall under the same source identification number as Buildings #1, #2, and #5 (163-00120).

Existing Approvals

The source was issued FESOP Renewal No. 163-13771-00120 on March 8, 2006. The source has since received the following approvals:

- (a) Significant Permit Revision No. 163-24005-00120, issued on December 13, 2007;
- (b) Administrative Amendment No. 163-25755-00120, issued on January 28, 2008;
- (c) Administrative Amendment No. 163-29005-00120, issued on March 19, 2010; and
- (d) Administrative Amendment No. 163-31096-00120, issued on December 21, 2011.

County Attainment Status

The source is located in Vanderburgh 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 8-hour ozone standard. ¹
PM _{2.5}	Attainment effective October 27, 2011, for the annual PM _{2.5} standard.
PM _{2.5}	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM _{2.5} standard.
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.
¹ Attainment effective October 18, 2000, for the 1-hour ozone standard for the Evansville area, including Vanderburgh County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X. The 1-hour designation was revoked effective June 15, 2005.	

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO_x) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO_x emissions are considered when evaluating the rule applicability relating to ozone. Vanderburgh 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}**
 Vanderburgh County has been classified as attainment for PM_{2.5}. Therefore, direct PM_{2.5}, SO₂, and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) **Other Criteria Pollutants**
 Vanderburgh 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.

Status of the Existing Source

The table below summarizes the potential to emit of the entire source, prior to the proposed revision, after consideration of all enforceable limits established in the effective permits:

This PTE table is from the Appendix A of the TSD of Permit No. 163-31096-00120, issued on December 21, 2011.

Process/ Emission Unit	Potential To Emit of the Entire Source Prior to Revision (tons/year)*									
	PM	PM10 ¹	PM2.5 ¹	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
Blenders in Building #1 ²	29.26	29.26	29.26	-	-	-	-	-	-	negl.
Extruders in Building #1 ²	14.63	14.63	14.63	-	-	45.10	-	-	-	negl.
Material Handling in Building #1 ²	2.02	2.02	2.02	-	-	-	-	-	-	negl.
Blenders and Extruders in Building #2 ²	15.20	15.20	15.20	-	-	27.90	-	-	-	negl.
Insignificant Activities ³	3.48	3.48	3.48	-	-	2.85	-	-	-	negl.
Total PTE of Entire Source	64.58	64.58	64.58	-	-	75.10	-	-	-	negl.
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
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

negl. = negligible
 *These emissions are based upon Appendix A from the TSD for permit No. 163-31096-00120.
 **The 100,000 CO₂e 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.
¹PM2.5 was not explicitly identified in the calculations for the previous permit iterations. It is assumed that all PM = PM10 = PM2.5. PM2.5 was identified in existing limitations for FESOP applicability.
²Maximum allowable PM emissions in order to comply with 326 IAC 6-3-2.
³Insignificant Activities include the emission units located in Building 5 and the twenty (20) pellets silos, two (2) weigh hoppers, pellet conveyor elevators, pellet conveyor augers and cooling towers, and the Jet Cleaner in Building 1.

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because the unlimited potential to emit HAPs are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

Description of Proposed Revision

The Office of Air Quality (OAQ) has reviewed an application, submitted by Ferro Corporation, Filled and Reinforced Plastics Division on February 6, 2014, relating to the units at Building #3 that have been used in research and development be added to the existing permit. The units used in research and development included five (5) blenders, three (3) extruders, a dust collector, and two (2) storage silos. The limitations for PM, PM10, and PM2.5 are being updated as a result of this addition as well because

there were typographical errors in regards to meeting the 326 IAC 2-8 limitations and the corresponding 326 IAC 6-3-2 limits.

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

- (a) Building 3 which is capable of processing 500 pounds of plastic raw materials per hour consisting of the following:
 - (1) Five (5) blenders, identified as B33, B-34, B-35A, B-35B, and B36, capable of blending a combined 500 pounds of plastic raw material per hour, all 5 blenders were constructed in 1987, and using a common dust collector E3 as control and exhausting to stack E3;
 - (2) Three (3) extruders, identified as C33, C34, and C36, capable of extruding plastic raw material, and using dust collector E3 as control and exhausting to stack E3;

Emission Unit ID	Year Constructed	Extrusion Rate (lbs/hr)
C33	1987	175
C34	1988	150
C36	1994	175

- (3) Two (2) pellet storage silos, identified as Silo 1 and Silo 2, with a maximum storage capacity of 20,000 pounds each, both constructed in 1987, and a maximum throughput of 500 pounds per hour each, no control, and exhausting indoors.

Note: Building 3 was previously used as a research and development facility for Ferro Corporation. It is now being utilized as a small production line. The source utilizes different types of plastic in the process such as: Polyethylenes, Polypropylene, ABS, EVA, Nylons, and Polystyrenes.

Enforcement Issues

Pursuant to 326 IAC 2-7-1(21)(H), the existing emission units in Building 3 were considered insignificant units because they operated as a research and development facility. The source has not started production on the research and development line.

There are no pending enforcement actions related to this revision.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – FESOP Revision

The following table is used to determine the appropriate permit level under 326 IAC 2-8.11.1. This table reflects the PTE before controls of the proposed revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	PTE of Proposed Revision (tons/year)									
	PM	PM10 ¹	PM2.5 ¹	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e	Total HAPs	Worst Single HAP
Blenders and Extruders in Building #3	48.81	48.81	48.81	-	-	1.10	-	-	-	negl.
Silos 1 and 2 in Building 3	1.75	1.75	1.75	-	-	-	-	-	-	-
Total PTE of Proposed Revision	50.56	50.56	50.56	-	-	1.10	-	-	-	negl.
negl. = negligible										

Pursuant to 326 IAC 2-8-11.1(f)(1)(E), this FESOP is being revised through a FESOP Significant Permit Revision because the proposed revision is not an Administrative Amendment or Minor Permit revision and the proposed revision involves a change in the operation with potential to emit (PTE) of PM, PM10, and direct PM2.5 greater than or equal to twenty-five (25) tons per year.

PTE of the Entire Source After Issuance of the FESOP Revision

The table below summarizes the potential to emit of the entire source, with updated emissions shown as **bold** values and previous emissions shown as ~~strikethrough~~ values.

Process/ Emission Unit	Potential To Emit of the Entire Source to accommodate the Proposed Revision (tons/year)									
	PM	PM10*	PM2.5*	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
Blenders in Building #1 ²	29.26	29.26	29.26	-	-	-	-	-	-	negl.
Extruders in Building #1 ²	14.63	14.63	14.63	-	-	45.40 45.11	-	-	-	negl.
Material Handling in Building #1 ²	2.02	2.02	2.02	-	-	-	-	-	-	negl.
Blenders and Extruders in Building #2 ²	15.20	15.20	15.20	-	-	27.90 27.86	-	-	-	negl.
Insignificant Activities ³	3.48	3.48	3.48	-	-	2.85	-	-	-	negl.
Blenders and Extruders in Building #3⁴	48.81	0.05	0.05	-	-	1.10	-	-	-	negl.
Silos in Building #3	1.75	1.75	1.75	-	-	-	-	-	-	negl.
Total PTE of Entire Source	64.58 115.14	64.58 66.38	64.58 66.38	-	-	75.40 76.93	-	-	-	negl.
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
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

negl. = negligible
 *Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a "regulated air pollutant".
 **The 100,000 CO₂e 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.
¹PM2.5 was not explicitly identified in the calculations for the previous permit iterations. It is assumed that all PM = PM10 = PM2.5. PM2.5 was identified in existing limitations for FESOP applicability.
²Maximum allowable PM emissions in order to comply with 326 IAC 6.5.
³Insignificant Activities include the emission units located in Building 5 and the twenty (20) pellets silos, two (2) weigh hoppers, pellet conveyor elevators, pellet conveyor augers and cooling towers, and the Jet Cleaner in Building 1.
⁴Source requested a more stringent limit than was needed in order to comply with 326 IAC 6.5 and 326 IAC 2-8.

The table below summarizes the potential to emit of the entire source after issuance of this revision, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this FESOP permit revision, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. Note: The table below was generated from the above table, with bold text un-bolded and strikethrough text deleted.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)									
	PM	PM10*	PM2.5*	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
Blenders in Building #1 ²	29.26	29.26	29.26	-	-	-	-	-	-	negl.
Extruders in Building #1 ²	14.63	14.63	14.63	-	-	45.11	-	-	-	negl.
Material Handling in Building #1 ²	2.02	2.02	2.02	-	-	-	-	-	-	negl.
Blenders and Extruders in Building #2 ²	15.20	15.20	15.20	-	-	27.86	-	-	-	negl.
Insignificant Activities ³	3.48	3.48	3.48	-	-	2.85	-	-	-	negl.
Blenders and Extruders in Building #3 ⁴	48.81	0.05	0.05	-	-	1.10	-	-	-	negl.
Silos in Building #3	1.75	1.75	1.75	-	-	-	-	-	-	negl.
Total PTE of Entire Source	115.14	66.38	66.38	-	-	76.93	-	-	-	negl.
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
Emission Offset/ Nonattainment NSR Major Source Thresholds	NA	NA	NA	NA	NA	NA	NA	NA	NA	NA

negl. = negligible
 *Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a "regulated air pollutant".
 **The 100,000 CO₂e 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.
¹PM2.5 was not explicitly identified in the calculations for the previous permit iterations. It is assumed that all PM = PM10 = PM2.5. PM2.5 was identified in existing limitations for FESOP applicability.
²Maximum allowable PM emissions in order to comply with 326 IAC 6.5.
³Insignificant Activities include the emission units located in Building 5 and the twenty (20) pellets silos, two (2) weigh hoppers, pellet conveyor elevators, pellet conveyor augers and cooling towers, and the Jet Cleaner in Building 1.
⁴Source requested a more stringent limit than was needed in order to comply with 326 IAC 6.5 and 326 IAC 2-8.

(a) FESOP Status

This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-8 (FESOP).

In order to comply with the requirements of 326 IAC 2-8-4 (FESOP), the source shall comply with the following:

- (1) The baghouse, identified as E3, controlling the five blenders and three extruders in Building 3 shall be in operation at all times the emission units vented to the baghouse are in operation and the PM10 and the PM2.5 emissions from the baghouse E3 shall not exceed 0.011 pounds per hour each, which is equivalent to 0.05 tons per year.

Note: The source requested a more stringent limitation than the highest maximum allowed. This is a new requirement. This is a Title I change.

- (2) The baghouse, identified as EX1, controlling the blenders C04, C06, C15, C16, C18, C31, C32, and C51 in Building 1 shall be in operation at all times the emission units vented to the baghouse are in operation and the PM10 and PM2.5 emissions from baghouse EX1 shall not exceed 6.68 pounds per hour each, which is equivalent to 29.26 tons per year.

Note: To correct a typographical error in the permit, this requirement has been changed from 5.18 pounds per hour, which is equivalent to 22.69 tons per year, to 6.68 lbs/hr, which is equivalent to 29.26 tons per year. This is a Title I change.

- (3) The baghouse identified as EX2 controlling the extruders in Building 1 shall be in operation at all times the emission units vented to the baghouse are in operation and the PM10 and PM2.5 emissions from baghouse EX2 shall not exceed 3.34 pounds per hour each, which is equivalent to 14.63 tons per year.

Note: To correct a typographical error in the permit, this requirement has been changed from 5.18 pounds per hour, which is equivalent to 22.69 tons per year, to 3.34 lbs/hr, which is equivalent to 14.63 tons per year. This is a Title I change.

- (4) The baghouses identified as EX3 and EX4 controlling the raw materials handling in Building 1, which includes two (2) rail unloading systems shall be in operation at all times the facilities vented to the baghouses are in operation and the PM10 and PM2.5 emissions from baghouses EX3 and EX4 each shall not exceed 0.23 pounds per hour each, which is equivalent to 1.01 tons per year, each.

Note: To correct a typographical error in the permit, this requirement has been changed from 1.3 pounds per hour, each, which is equivalent to 5.69 tons per year, to 0.23 lbs/hr, each, which is equivalent to 1.01 tons per year, each. This is a Title I change.

- (5) The baghouse, identified as EX30, controlling the raw material handling for lines C22, C23, C24, C25, and C45 in Building 2, which is an integral part of the process and is in operation at all times the emission units vented to the baghouse are in operation and controlling PM10 and PM2.5 emissions, shall not exceed 3.47 pounds per hour each, which is equivalent to 15.20 tons per year.

Note 1: To correct a typographical error in the permit, this requirement has been changed from 8.8 pounds per hour, which is equivalent to 38.54 tons per year, to 3.47 lbs/hr, which is equivalent to 15.20 tons per year. This is a Title I change.

Note 2: The source requested the language of this limitation to be updated to be similar in language to the other limitations for PM10 and PM2.5. This is a Title I change.

Compliance with these limits, combined with the potential to emit PM10 and PM2.5 from all other emission units at this source, shall limit the source-wide total potential to emit of PM 10 and PM2.5 to less than 100 tons per 12 consecutive month period, each, and shall render the requirements of 326 IAC 2-7 (Part 70 Permits) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

(b) PSD Minor Source

This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

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

- (1) The baghouse, identified as EX1, controlling the blenders C04, C06, C15, C16, C18, C31, C32, and C51 in Building 1 shall be in operation at all times the emission units vented to the baghouse are in operation and the PM emissions from baghouse EX1 shall not exceed 6.68 pounds per hour each, which is equivalent to 29.26 tons per year.

Note: This is a new requirement. PSD minor limits were not included in previous iterations of the permit when they should have been included. This is a Title I change.

- (2) The baghouse identified as EX2 controlling the extruders in Building 1 shall be in operation at all times the emission units vented to the baghouse are in operation and the PM10 and PM2.5 emissions from baghouse PM shall not exceed 3.34 pounds per hour each, which is equivalent to 14.63 tons per year.

Note: This is a new requirement. PSD minor limits were not included in previous iterations of the permit when they should have been included. This is a Title I change.

- (3) The baghouses identified as EX3 and EX4 controlling the raw materials handling in Building 1, which includes two (2) rail unloading systems shall be in operation at all times the facilities vented to the baghouses are in operation and the PM emissions from baghouses EX3 and EX4 each shall not exceed 0.23 pounds per hour each, which is equivalent to 1.01 tons per year, each.

Note: This is a new requirement. PSD minor limits were not included in previous iterations of the permit when they should have been included. This is a Title I change.

- (4) The baghouse, identified as EX30, controlling the raw material handling for lines C22, C23, C24, C25, and C45 in Building 2, which is an integral part of the process and is in operation at all times the emission units vented to the baghouse are in operation and controlling PM emissions, shall not exceed 3.47 pounds per hour each, which is equivalent to 15.20 tons per year.

Note: This is a new requirement. PSD minor limits were not included in previous iterations of the permit when they should have been included. This is a Title I change.

Compliance with these limits, combined with the potential to emit PM from all other emission units at this source, shall limit the source-wide total potential to emit of PM to less than 250 tons per 12 consecutive month period, each, and shall render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)) not applicable.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Volatile Organic Compound (VOC) Emissions from the Polymer Manufacturing Industry, 40 CFR 60, Subpart DDD (326 IAC 12), are not included for this proposed revision, since this unit does not manufacture polypropylene, polyethylene, polystyrene, or poly (ethylene terephthalate) continuously.
- (b) There are no other New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included for this proposed revision.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Group I Polymers and Resins, 40 CFR 63.480, Subpart U (326 IAC 20-19), are not included for this proposed revision, since this source is not a major source of HAPs.
- (d) The requirements of the NESHAP for Epoxy Resins and Non-Nylon Polyamides, 40 CFR 63.520, Subpart W (326 IAC 20-20), are not included for this proposed revision, since this source is not a major source of HAPs.
- (e) The requirements of the NESHAP for Group IV Polymers and Resins, 40 CFR 63.1310, Subpart JJJ (326 IAC 20-21), are not included for this proposed revision, since this source is not a major source of HAPs.
- (f) The requirements of the NESHAP for Polyether Polyols Production, 40 CFR 63.1420, Subpart PPP (326 IAC 20-59), are not included for this proposed revision, since this source is not a major source of HAPs.
- (g) The requirements of the NESHAP for Reinforced Plastic Composites Production, 40 CFR 63.5780, Subpart WWWW (326 IAC 20-56), are not included for this proposed revision, since this source is not a major source of HAPs.
- (h) The requirements of the NESHAP for Polyvinyl Chloride and Copolymers Production Area Sources, 40 CFR 63.11140, Subpart DDDDDD, are not included for this proposed revision, since this source does not produce polyvinyl chloride or copolymers products.
- (i) The requirements of the NESHAP for Polyvinyl Chloride and Copolymers Production, 40 CFR 63.11860, Subpart HHHHHH, are not included for this proposed revision, since this source is not a major source of HAPs.
- (j) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included for this proposed revision.

Compliance Assurance Monitoring (CAM)

- (k) 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 proposed revision:

- (a) 326 IAC 2-8-4 (FESOP)
This revision to an existing Title V minor stationary source will not change the minor status, because the potential to emit criteria pollutants from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the

provisions of 326 IAC 2-8 (FESOP). See PTE of the Entire Source After Issuance of the FESOP Revision Section above.

- (b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. See PTE of the Entire Source After Issuance of the FESOP Revision Section above.
- (c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The proposed revision 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 thirty percent (30%) 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.
- (g) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.
- (h) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

Building #3 Blenders and Extruders

- (i) 326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
Pursuant to 326 IAC 6.5-1-2(a), the blenders, identified as B33, B-34, B-35A, B-35B, and B36, and the extruders, identified as C33, C34, and C36, are subject to the particulate matter (PM) limit of 0.03 grains per dry standard cubic foot of exhaust gas (gr/dscf). Building #3 has an exhaust gas rate of 26,000 cubic feet per minute.

Based on this grain loading limit and the exhaust gas flow rate, the PM emissions from the blenders and extruders are equivalent to 6.69 pounds per hour. The PM uncontrolled emissions from the blenders and extruders are equivalent to 11.14 pounds per hour. The uncontrolled emission of the blenders and extruders is greater than the PM limit. Based on calculations, the dust collector E3 is needed to comply with this limit.

- (j) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)
 The proposed revision is not subject to the requirements of 326 IAC 8-1-6, since the unlimited VOC potential emissions from the blenders and extruders are less than twenty-five (25) tons per year.

Silos in Building #3

- (k) 326 IAC 6.5 (Particulate Matter Limitations Except Lake County)
 Pursuant to 326 IAC 6.5-1-2(a), the silos in Building #3, identified as Silo 1 and Silo 2, are subject to the particulate matter (PM) limit of 0.03 grains per dry standard cubic foot of exhaust gas (gr/dscf).

Compliance Determination, Monitoring and Testing Requirements

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

Emission Unit/Control	Operating Parameters	Frequency
Building 3/Baghouse E3	Pressure Drop	Once per day
	Visible Emission Notations	Once per day

These monitoring conditions are necessary when Building 3 is in operation because the baghouse for Building 3 must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes).

- (b) The testing requirements applicable to this proposed revision are as follows:

Testing Requirements				
Emission Unit	Control Device	Pollutant	Timeframe for Testing	Frequency of Testing
five blenders and three extruders in Building 3	Baghouse E3	PM	within 180 days of approval of this SPR 163-34154-00120 (since all of the units are already constructed)	Once every 5 years
		PM10		
		PM2.5		

These testing requirements are necessary because the baghouse for Building 3 must operate properly to ensure compliance with 326 IAC 2-8 (FESOP) and 326 IAC 6.5-1-2.

The existing compliance requirements will not change as a result of this revision. The source shall continue to comply with the applicable requirements and permit conditions as contained in FESOP No: 163-24005-00120, issued on December 13, 2007.

Proposed Changes

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

- IDEM, OAQ has added the address of Building #3 to the permit coversheet and Section A.1 because it was determined to be the same source as Buildings #1, #2, and #5.
- IDEM, OAQ has updated the SIC Code definition for 3087 to properly describe the existing SIC Code.

3. IDEM, OAQ has updated the Source Location Status in Section A.1 because Vanderburgh County is currently attainment for all criteria pollutants.
4. IDEM, OAQ has added the source definition as Section A.2.
5. IDEM, OAQ has added the descriptive information for the emission units in Building #3 to Section A.3.
6. Due to this revision, IDEM, OAQ was required to revise Section D.1 to include the new emission units that are subject to 326 IAC 6.5 and to include the new emission units' limitations in Section D.1.2.
7. IDEM, OAQ has added new conditions into Section D.1 to ensure that the Particulate Matter limitations are included to ensure the source remains PSD minor.
8. IDEM, OAQ has updated the Certification Form, Emergency Occurrence Form, and Quarterly Deviation and Compliance Monitoring Report Forms to include the address of Building #3.

...

**FEDERALLY ENFORCEABLE STATE
OPERATING PERMIT (FESOP) RENEWAL
OFFICE OF AIR QUALITY**

Ferro Corporation, Filled and Reinforced Plastics Division
5001, **4991, and 4917** O'Hara Drive **and 4400 Hitch Peters Road**
Evansville, Indiana 47711

...

A.1 General Information [326 IAC 2-8-3(b)]

...
Source Address: 5001, **4991, and 4917** O'Hara Drive, Evansville, Indiana
47711
4400 Hitch Peters Road, Evansville, Indiana 47711

...
SIC Code: 3087 (Custom Compounding of Purchased-Plastic Resins)

...
Source Location Status: ~~Nonattainment for PM2.5 standard~~
Attainment for all other criteria pollutants

...

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

This stationary manufacturing plant engaged in the custom compounding of purchased resins consists of four (4) buildings:

- (a) **Ferro Corporation Building #1 is located at 5001 O'Hara Drive, Evansville, Indiana**
- (b) **Ferro Corporation Building #2 is located at 4991 O'Hara Drive, Evansville, Indiana**
- (c) **Ferro Corporation Building #3 is located at 4400 Hitch Peters Road, Evansville, Indiana**
- (d) **Ferro Corporation Building #5 is located at 4917 O'Hara Drive, Evansville, Indiana**

Since the four (4) plants are located on contiguous or adjacent properties, belong to the same industrial grouping, and under common control of the same entity, they will be considered one (1) source, effective from the date of issuance of this permit revision (163-34154-00120).

A.32 Emission Units and Pollution Control Equipment Summary [326 IAC 2-8-3(c)(3)]

...

(c) **Building 3 which is capable of processing 500 pounds of plastic raw materials per hour consisting of the following:**

- (1) **Five (5) blenders, identified as B33, B-34, B-35A, B-35B, and B36, capable of blending a combined 500 pounds of plastic raw material per hour, all 5 blenders were constructed in 1987, and using a common dust collector E3 as control and exhausting to stack E3;**
- (2) **Three (3) extruders, identified as C33, C34, and C36, capable of extruding plastic raw material, and using dust collector E3 as control and exhausting to stack E3;**

Emission Unit ID	Year Constructed	Extrusion Rate (lbs/hr)
C33	1987	175
C34	1988	150
C36	1994	175

- (3) **Two (2) pellet storage silos, identified as Silo 1 and Silo 2, with a maximum storage capacity of 20,000 pounds each, both constructed in 1987, and a maximum throughput of 500 pounds per hour each, no control, and exhausting indoors.**

Note: Building 3 was previously used as a research and development facility for Ferro Corporation. It is now being utilized as a small production line. The source utilizes different types of plastic in the process such as: Polyethylenes, Polypropylene, ABS, EVA, Nylons, and Polystyrenes.

A.43 Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-8-3(c)(3)(I)]

...

A.54 FESOP Applicability [326 IAC 2-8-2]

...

SECTION D.1

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-8-4(10)]:

...

(c) Building 3 which is capable of processing 500 pounds of plastic raw materials per hour consisting of the following:

- (1) Five (5) blenders, identified as B33, B-34, B-35A, B-35B, and B36, capable of blending a combined 500 pounds of plastic raw material per hour, all 5 blenders were constructed in 1987, and using a common dust collector E3 as control and exhausting to stack E3;**
- (2) Three (3) extruders, identified as C33, C34, and C36, capable of extruding plastic raw material, and using dust collector E3 as control and exhausting to stack E3;**

Emission Unit ID	Year Constructed	Extrusion Rate (lbs/hr)
C33	1987	175
C34	1988	150
C36	1994	175

- (3) Two (2) pellet storage silos, identified as Silo 1 and Silo 2, with a maximum storage capacity of 20,000 pounds each, both constructed in 1987, and a maximum throughput of 500 pounds per hour each, no control, and exhausting indoors.**

Note: Building 3 was previously used as a research and development facility for Ferro Corporation. It is now being utilized as a small production line. The source utilizes different types of plastic in the process such as: Polyethylenes, Polypropylene, ABS, EVA, Nylons, and Polystyrenes.

Insignificant Activities:

(b) Building 5, which is capable of processing 1,345 pounds of raw material per hour, consists of the following:

- (1) One (1) blender, identified as C03, capable of blending 1,345 pounds of raw material per hour; and**
- (2) One (1) extruder, identified as C03, capable of extruding 1,345 pounds of raw material per hour;**

Each extrusion line consists of a dedicated blender, material handling, extruder and pelletizing. The source utilizes different types of plastic in the process such as: Polyethylenes, Polypropylene, ABS, EVA, Nylons and Polystyrenes.

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

...

D.1.1 Particulate Matter Less Than 10 Microns (PM10) and PM2.5 [326 IAC 2-8] [326 IAC 2-1.1-5]
Pursuant to 326 IAC 2-8 (FESOP), **the Permittee shall comply with the following:**

Facilities	Baghouse ID	PM10 (lb/hr)	PM2.5 (lb/hr)
Building 1: Blenders C04, C06, C15, C16, C18, C31, C32, and C51	EX1	6.68	6.68
Building 1: Extruders C04, C06, C15, C16, C18, C31, C32, and C51	EX2	3.34	3.34
Building 1: Rail Unloading	EX3	0.23	0.23
Building 1: Rail Unloading	EX4	0.23	0.23
Building 2: Raw Material Handling- Truck Unloading; Blenders C22, C23, C24, C25 and C45	EX30	3.47	3.47
Building 3: Blenders B33, B-34, B-35A, B-35B, B36; Extruders C33, C34, and C36	E3	0.011	0.011

- (a) ~~— The baghouse identified as EX1 controlling the blenders C04, C06, C15, C16, C18, C31, C32 and C51 in Building 1 shall be in operation at all times the emission units vented to the baghouse are in operation and the PM10 and PM2.5 emissions from baghouse EX1 shall not exceed 5.18 pounds per hour each, which is equivalent to 22.69 tons per year.~~
- (b) ~~— The baghouse identified as EX2 controlling the extruders in Building 1 shall be in operation at all times the emission units vented to the baghouse are in operation and the PM10 and PM2.5 emissions from baghouse EX2 shall not exceed 5.18 pounds per hour each, which is equivalent to 22.69 tons per year.~~
- (c) ~~— The baghouses identified as EX3 and EX4 controlling the raw materials handling in Building 1, which includes two (2) rail unloading systems shall be in operation at all times the facilities vented to the baghouses are in operation and the PM10 and PM2.5 emissions from baghouses EX3 and EX4 each shall not exceed 1.3 pounds per hour each, which is equivalent to 5.69 tons per year.~~
- (d) ~~— PM10 and PM2.5 emissions from EX30 (integral part of the process) shall not exceed 8.8 pounds per hour each, which is equivalent to 38.54 tons per year.~~

Compliance with these limits, combined with the PM10 and PM2.5 from other emission units, shall limit emissions from the entire source to less than one hundred (100) tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-7 (Part 70 Permits), 326 IAC 2-2 (PSD) and 326 IAC 2-1.1-5 (Nonattainment NSR) not applicable.

D.1.2 Particulate Matter (PM) [326 IAC 6.5-1-2]

Pursuant to 326 IAC 6.5-1-2(a) (Vanderburgh County Particulate Limitations), particulate matter (PM) emissions shall be limited to 0.03 grain per dry standard cubic foot of exhaust air as follows:

Facilities	Baghouse ID
Building 1: Blenders C04, C06, C15, C16, C18, C31, C32, and C51	EX1
Building 1: Extruders C04, C06, C15, C16, C18, C31, C32, and C51	EX2
Building 1: Rail Unloading	EX3
Building 1: Rail Unloading	EX4
Building 2: Raw Material Handling-Truck Unloading; Blenders C22, C23, C24, C25 and C45	EX30
Building 3: Blenders B33, B-34, B-35A, B-35B, B36; Extruders C33, C34, and C36; and Silo 1 and Silo 2	E3
Building 3: Silo 1 and Silo 2	--
Building 5:Blender C03, Extruder C03	--

...
D.1.3 PSD Minor Limits [326 IAC 2-2]

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

Facilities	Baghouse ID	PM
Building 1: Blenders C04, C06, C15, C16, C18, C31, C32, and C51	EX1	6.68
Building 1: Extruders C04, C06, C15, C16, C18, C31, C32, and C51	EX2	3.34
Building 1: Rail Unloading	EX3	0.23
Building 1: Rail Unloading	EX4	0.23
Building 2: Raw Material Handling- Truck Unloading; Blenders C22, C23, C24, C25 and C45	EX30	3.47

Compliance with these limits, combined with the PM from other emission units, shall limit emissions from the entire source to less than two hundred fifty (250) tons per twelve (12) consecutive month period and render the requirements of 326 IAC 2-2 (PSD).

D.1.34 Particulate Control

- (a) In order to comply with D.1.1, ~~and~~D.1.2, **and D.1.3** the baghouses for particulate control shall be in operation and control emissions from the Building 1 **and Building 2** extruders and blenders at all times that the extruders and blenders are in operation.
- (b) **In order to comply with D.1.1 and D.1.2, the baghouse E3 for particulate control shall be in operation and control emissions from Building 3 extruders and blenders at all times that the extruders and blenders from Building 3 are in operation.**
- (bc) In the event that bag failure is observed in a multi-compartment baghouse, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

D.1.45 Testing Requirements [326 IAC 2-8-5(a)(1), (4)][326 IAC 2-1.1-11]

- (a) To demonstrate compliance with the PM and PM₁₀ limits in D.1.1~~and~~, D.1.2, **and D.1.3**,

the Permittee shall perform PM and PM10 testing on baghouses EX1 and EX2 no later than five (5) years from March 8, 2006 utilizing methods as approved by the Commissioner.

...

- (c) **In order to demonstrate compliance with Condition D.1.2, the Permittee shall perform PM testing on the baghouse, identified as E3, controlling Blenders B33, B-34, B-35A, B-35B, B36 and Extruders C33, C34, and C36, not later than 180 days after approval of the significant permit revision 163-34154-00120. The Permittee shall perform PM testing utilizing methods as approved by the Commissioner.**

This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

- (d) **In order to demonstrate compliance with Condition D.1.1, the Permittee shall perform PM₁₀ and PM_{2.5} testing on the baghouse, identified as E3, controlling Blenders B33, B-34, B-35A, B-35B, B36 and Extruders C33, C34, and C36, not later than 180 days approval of the significant permit revision 163-34154-00120. The Permittee shall perform PM₁₀ and PM_{2.5} testing utilizing methods as approved by the Commissioner.**

This test shall be repeated at least once every five (5) years from the date of this valid compliance demonstration.

PM₁₀ includes filterable PM₁₀ and condensable PM. PM_{2.5} includes filterable PM_{2.5} and condensable PM.

- (e) **Testing shall be conducted in accordance with the provisions of 326 IAC 3-6 (Source Sampling Procedures). Section C - Performance Testing contains the Permittee's obligation with regard to the performance testing required by this condition.**

...

D.1.56 Visible Emissions Notations

- (a) Visible emission notations of EX1 ~~and~~, EX2, **and E3** shall be performed once per day during plant production operations. A trained employee shall record whether emissions are normal or abnormal.

...

D.1.67 Parametric Monitoring

- (a) The Permittee shall record the pressure drop across the baghouses used in conjunction with the Building 1 **rail unloading systems**, blenders, and extruders, at least once per day when the processes are in operation. When for any one reading, the pressure drop across the baghouses EX1 and EX2 is outside the normal range **the Permittee shall take reasonable response. The normal range for these units is a pressure between of 0.8 to 6.0 inches of water unless a different upper-bound or lower-bound value for this, or a range is determined established during the latest stack test. and When for any one reading, the pressure drop across the baghouses EX3 and EX4 is outside the normal range the Permittee shall take reasonable response. The normal range for these units is a pressure between of 0.2 to 4.0 inches of water, unless a different upper-bound or lower-bound value for this or a range is determined established during the most recent stack test, 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 pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.

- (b) **The Permittee shall record the pressure drop across baghouse E3, used in conjunction with the Building 3 blenders and extruders, at least once per day when the processes are in operation. When for any one reading, the pressure drop across the baghouse E3 is outside the normal range the Permittee shall take reasonable response. The normal range for this unit is 0.8 to 6.0 inches of water unless a different upper-bound or lower-bound value for this range is determined during the latest stack test, 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 pressure reading that is outside the above mentioned range is not a deviation from this permit. Failure to take response steps shall be considered a deviation from this permit.**

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

D.1.78 Broken or Failed Bag Detection

...

D.1.89 Record Keeping Requirements

- (a) To document the compliance status with Condition D.1.56, the Permittee shall maintain records of visible emission notations of the EX1 ~~and~~, EX2, **and E3** stack exhaust once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) To document the compliance status with Condition D.1.67, the Permittee shall maintain records once per day of the pressure drop. The Permittee shall include in its daily record when a pressure drop reading is not taken and the reason for the lack of a pressure drop reading (e.g. the process did not operate that day).

...

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION

Source Name: Ferro Corporation, Filled and Reinforced Plastics Division
Source Address: 5001, **4991, and 4917** O'Hara Drive, Evansville, Indiana 47711
4400 Hitch Peters Road, Evansville, Indiana 47711

...

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
EMERGENCY OCCURRENCE REPORT

Source Name: Ferro Corporation, Filled and Reinforced Plastics Division
Source Address: 5001, **4991, and 4917** O'Hara Drive, Evansville, Indiana 47711
4400 Hitch Peters Road, Evansville, Indiana 47711

...

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Ferro Corporation, Filled and Reinforced Plastics Division
Source Address: 5001, **4991, and 4917** O'Hara Drive, Evansville, Indiana 47711
4400 Hitch Peters Road, Evansville, Indiana 47711

...

Upon further review, IDEM, OAQ has decided to make the following changes to the permit. Deleted language appears as ~~strike through~~ text and new language appears as **bold** text:

1. On October 27, 2010, the Indiana Air Pollution Control Board issued revisions to 326 IAC 2. These revisions resulted in changes to the rule sites listed in the permit. These changes are not changes to the underlining provisions. The change is only to site of these rules in Section B - Operational Flexibility. IDEM, OAQ has clarified the rule sites for the Preventive Maintenance Plan.
2. IDEM, OAQ has clarified the Permittee's responsibility with regards to record keeping.
3. IDEM clarified the following condition to indicate that the analog instrument must be capable of measuring the parameters outside the normal range.
4. IDEM is changing the Section C Compliance Monitoring Condition to clearly describe when new monitoring for new and existing units must begin.

...

B.11 Preventive Maintenance Plan [326 IAC 1-6-3][326 IAC 2-8-4(9)] [~~326 IAC 2-8-5(a)(1)~~]

...

B.18 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) ~~through (d)~~ **and (c)** without a prior permit revision, if each of the following conditions is met:
- ...
- (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)**~~through (d)~~. 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)~~(2)~~, ~~(c)(1)~~, and ~~(d)~~**(1) and (c)**.

- (b) Emission Trades [326 IAC 2-8-15~~(c)~~**(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)~~**(b)(e)**.
- (c) Alternative Operating Scenarios [326 IAC 2-8-15~~(c)~~**(d)**]

...

C.9 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 ~~or of initial start-up, whichever is later~~, 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 ~~or the date of initial startup, whichever is later~~, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

...

~~Unless otherwise specified in the approval for the new emission unit(s), compliance monitoring for new emission units or emission units added through a permit revision shall be implemented when operation begins.~~

C.10 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.**

...

C.14 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.**

...

C.15 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.

...

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

...

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".

...

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 6, 2014. Additional information was received on February 26, 2014, and June 11, 2014.

The construction and operation of this proposed revision shall be subject to the conditions of the attached proposed FESOP Significant Permit Revision No. 163-34154-00120. The staff recommends to the Commissioner that this FESOP Significant Permit Revision be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Brandon Miller 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) 234-5373 or toll free at 1-800-451-6027 extension 4-5373.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizen's Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

**Appendix A: Emission Calculations
Summary**

Company Name: Ferro Corporation, Filled and Reinforced Plastics Division
Address City IN Zip: 5001 O'Hara Drive, Evansville, Indiana 47711
 4400 Hitch Peters Road, Evansville, Indiana 47711
Permit Number: F163-34514-00120
Reviewer: Brandon Miller
Date: 6/13/2014

Pollutant	Unrestricted Potential Emissions (tons/yr)
PM	627.40
PM10	627.40
PM2.5	627.40
SO ₂	0
VOC	76.93
CO	0
GHGs as CO ₂ e	0
NO _x	0
HAPs	negl.

Process/emission unit	Potential to Emit After Issuance (tons/year)							HAPs
	PM	PM10/PM2.5	SO ₂	VOC	CO	NO _x	GHGs as CO ₂ e	
Blenders in Building 1**	29.26	29.26	--	--	--	--	--	negl.
Extruders in Building 1**	14.63	14.63	--	45.11	--	--	--	negl.
Material Handling in Building 1**	2.01	2.01	--	--	--	--	--	negl.
Blenders and Extruders in Building 2**	15.20	15.20	--	27.86	--	--	--	negl.
Insignificant Activities*	3.47	3.47	--	2.86	--	--	--	negl.
Blenders and Extruders in Building 3***	48.81	0.05	--	1.10	--	--	--	negl.
Silos in Building 3	1.75	1.75	---	--	--	--	--	negl.
Total Emissions	115.13	66.38	--	76.93	--	--	--	negl.

*Insignificant Activities include the emission units located in Building 5 and the twenty (20) pellets silos, two (2) weigh hoppers, pellet conveyor elevators, pellet conveyor augers and cooling towers, and the Jet Cleaner in Building 1

**Maximum allowable PM emissions in order to comply with 326 IAC 6.5-1-2 and limited to render 326 IAC 2-7 and 326 IAC 2-2 not applicable.

***The source requested to take a more stringent limit than as required for PM10 and PM2.5.

**Appendix A: Emission Calculations
Particulate Limits**

Company Name: Ferro Corporation, Filled and Reinforced Plastics Division
Address City IN Zip: 5001 O'Hara Drive, Evansville, Indiana 47711
4400 Hitch Peters Road, Evansville, Indiana 47711
Permit Number: F163-34514-00120
Reviewer: Brandon Miller
Date: 6/13/2014

Facilities	Baghouse ID	Air Flow Rate (cfm)	326 IAC 6.5-1-2 PM Allowable Emissions (lb/hr)	Allowable Emissions (tons/yr)
Building 1: Blenders C04, C06, C15, C16, C18, C31, C32, and C51	EX1	26,000	6.68	29.26
Building 1: Extruders C04, C06, C15, C16, C18, C31, C32, and C51	EX2	13,000	3.34	14.63
Building 1: Rail Unloading	EX3	900	0.23	1.01
Building 1: Rail Unloading	EX4	900	0.23	1.01
Building 2: Raw Material Handling-Truck Unloading; Blenders C22, C23, C24, C25 and C45	EX30	13,500	3.47	15.20
Building 5: Blender C03 and Extruder C03	-	-	3.12	13.67
Building 3: Extruder C33, C34, and C36 and Blenders B33, B-34, B-35A, B-35B, and B36	E3	26,000	6.69	29.28

Methodology:

PM (lb/hr) = Air Flow Rate (cfm) * 326 IAC 6.5-1-2 limit (0.03 gr/dcfm) * 1 lb/7,000 gr * 60 min/hr
 Allowable Emissions (tons/yr) = Allowable PM (lb/hr) * 8,760 hr/year * 1 ton/2,000lbs

**Appendix A: Emission Calculations
Building 1**

Company Name: Ferro Corporation, Filled and Reinforced Plastics Division
Address City IN Zip: 5001 O'Hara Drive, Evansville, Indiana 47711
 4400 Hitch Peters Road, Evansville, Indiana 47711
Permit Number: F163-34514-00120
Reviewer: Brandon Miller
Date: 6/13/2014

Building 1 VOC Emissions

Extruder Lines ID	Maximum Capacity of final product (lb/hr)	VOC Emissions (tons/yr)
C04	1,400	3.07
C06	3,000	6.57
C15	1,200	2.63
C16	2,300	5.04
C18	600	1.31
C31	2,300	5.04
C32	2,300	5.04
C51	7,500	16.43
TOTAL		45.11

maximum resin capacity = 20,773 lb/hr, 25% is filler

The extruder lines VOC emissions include the potential VOC emissions from the blenders dedicated to these lines.

The calculations submitted by the applicant have been verified and found to be accurate and correct.

Based on F163-13771-00120

Methodology:

VOC Emissions = Throughput(lb/hr) * ton/2000 lb * EF * 1 ton-VOC/2000 lb-VOC * 8760 hr/yr

Emission Factor, EF = 1 pound VOC emitted per ton of product, reflective of the worse case plastic, polyethylene, pursuant to SMF 163-10422-00120, issued March 11, 1999.

Building 1 Particulate Emissions

Extruder Lines ID	Maximum Capacity of final product (lb/hr)	Uncontrolled PM/PM10 Emissions (ton/yr)	Controlled PM/PM10 Emissions (ton/yr)
C04	1,867	24.08	0.02
C06	4,000	51.60	0.05
C15	1,600	20.64	0.02
C16	3,067	39.56	0.04
C18	800	10.32	0.01
C31	3,067	39.56	0.04
C32	3,067	39.56	0.04
C51	10,000	128.99	0.13
TOTAL		354.31	0.35

maximum capacity = 27,697.00 lb/hr

Methodology:

Uncontrolled PM/PM10 Emissions = Throughput(lb/hr) * ton/2000 lb * EF * 1 ton-PM/PM10/2000 lb-PM/PM10 * 8760 hr/yr

Controlled PM/PM10 Emissions = Uncontrolled PM/PM10 Emissions * (1-99.9 % control efficiency)

Emission Factor, EF = 5.89 pound PM/PM10 emitted per ton of product and 0.373 pound PM/PM10 emitted per ton of product for Building 1 & Building 2 and Building 5, respectively, based on data supplied by the source.

Assumed: PM = PM10 = PM2.5

**Appendix A: Emission Calculations
Building 2**

Company Name: Ferro Corporation, Filled and Reinforced Plastics Division
Address City IN Zip: 5001 O'Hara Drive, Evansville, Indiana 47711
 4400 Hitch Peters Road, Evansville, Indiana 47711
Permit Number: F163-34514-00120
Reviewer: Brandon Miller
Date: 6/13/2014

Building 2 VOC Emissions

Extruder Lines ID	Maximum Capacity of final product (lb/hr)	VOC Emissions (ton/yr)
C22	1,440	3.15
C23	3,360	7.36
C24	3,360	7.36
C25	3,360	7.36
C45*	1,200	2.63
TOTAL		27.86

* No fillers are used on Extruder C45

The calculations submitted by the applicant have been verified and found to be accurate and correct.

Based on F163-13771-00120

Methodology:

VOC Emissions = Throughput(lb/hr) * ton/2000 lb * EF * 1 ton-VOC/2000 lb-VOC * 8760 hr/yr

Emission Factor, EF = 1 pound VOC emitted per ton of product, reflective of the worse case plastic, polyethylene, pursuant to SMF 163-10422-00120, issued March 11, 1999.

Building 2 Particulate Emissions

Extruder Lines ID	Maximum Capacity of final product (lb/hr)	Uncontrolled PM/PM10 Emissions (ton/yr)	Controlled PM/PM10 Emissions (ton/yr)
C22	2,000	25.80	0.03
C23	4,667	60.20	0.06
C24	4,667	60.20	0.06
C25	4,667	60.20	0.06
C45	1,200	15.48	0.02
TOTAL		221.86	0.22

maximum capacity = 17,200.00 lb/hr

Methodology:

Uncontrolled PM/PM10 Emissions = Throughput(lb/hr) * ton/2000 lb * EF * 1 ton-PM/PM10/2000 lb-PM/PM10 * 8760 hr/yr

Controlled PM/PM10 Emissions = Uncontrolled PM/PM10 Emissions * (1-99.9 % control efficiency)

Emission Factor, EF = 5.89 pound PM/PM10 emitted per ton of product and 0.373 pound PM/PM10 emitted per ton of product for Building 1 & Building 2 and Building 5, respectively, based on data supplied by the source.

Assumed: PM = PM10 = PM2.5

**Appendix A: Emission Calculations
Building 5**

Company Name: Ferro Corporation, Filled and Reinforced Plastics Division
Address City IN Zip: 5001 O'Hara Drive, Evansville, Indiana 47711
 4400 Hitch Peters Road, Evansville, Indiana 47711
Permit Number: F163-34514-00120
Reviewer: Brandon Miller
Date: 6/13/2014

Building 5 VOC Emissions

Extruder Lines ID	Maximum Capacity of final product (lb/hr)	VOC Emissions (ton/yr)
C03	528	1.16
TOTAL		1.16

maximum resin capacity = 528 lb/hr, 28% is filler

The calculations submitted by the applicant have been verified and found to be accurate and correct.

Based on F163-13771-00120

Methodology:

VOC Emissions = Throughput(lb/hr) * ton/2000 lb * EF (lb-VOC/ton) * 1ton-VOC/2000 lb-VOC * 8760 hr/yr

Emission Factor, EF = 1 pound VOC emitted per ton of product, reflective of the worse case plastic, polyethylene, pursuant to SMF 163-10422-00120, issued March 11, 1999.

Building 5 Particulate Emissions

Extruder Lines ID	Maximum Capacity of final product (lb/hr)	Uncontrolled PM/PM10 Emissions (ton/yr)
C03	733	0.60
TOTAL		0.60

maximum capacity = 733lb/hr

Methodology:

Uncontrolled PM/PM10 Emissions = Throughput(lb/hr) * ton/2000 lb * EF * ton-PM/2000 lb-PM * 8760 hr/yr

Controlled PM/PM10 Emissions = Uncontrolled PM/PM10 Emissions * (1-99.9 % control efficiency)

Emission Factor, EF = 5.89 pound PM/PM10 emitted per ton of product and 0.373 pound PM/PM10 emitted per ton of product for Building 1 & Building 2 and Building 5, respectively, based on data supplied by the source.

Assumed: PM = PM10 = PM2.5

**Appendix A: Emission Calculations
Jet Cleaner**

Company Name: Ferro Corporation, Filled and Reinforced Plastics Division
Address City IN Zip: 5001 O'Hara Drive, Evansville, Indiana 47711
 4400 Hitch Peters Road, Evansville, Indiana 47711
Permit Number: F163-34514-00120
Reviewer: Brandon Miller
Date: 6/13/2014

VOC Material	Emission Rate (lb/hour)	VOC PTE (ton/yr)
Polypropylene	0.219	0.96
Polyethylene	0.034	0.15
Polystyrene	0.038	0.17
Polyethylene Terephthalate	0.058	0.25
Polyvinyl Chloride	0.04	0.18

Total VOC PTE (ton/yr) 1.70

PM Material	Emission Rate (lb/hour)	PM PTE (ton/yr)
Polypropylene	0.0034	0.01
Polyethylene	0.0016	
Polystyrene	0.0015	0.01
Polyethylene Terephthalate	0.0022	0.01
Polyvinyl Chloride	0.0074	0.03

Total PM PTE (ton/yr) 0.06

*Emission rates from results of air testing in accordance with US EPA or NIOSH test methods, as provided in the Beringer Jet Cleaner Air & Water Emission Report, for Beringer Jet Cleaner Model JCP-1724

The Beringer Jet Cleaner uses a vacuum pyrolysis process during which a part is heated in the absence of oxygen until the polystyrene falls off of the part. Because there is no oxygen in the system, there is no combustion.

Assumed PM = PM10 =PM2.5

**Appendix A: Emission Calculations
Building 3**

Company Name: Ferro Corporation, Filled and Reinforced Plastics Division
Address City IN Zip: 5001 O'Hara Drive, Evansville, Indiana 47711
 4400 Hitch Peters Road, Evansville, Indiana 47711
Permit Number: F163-34514-00120
Reviewer: Brandon Miller
Date: 6/13/2014

VOC Emissions

Extruder Line ID	Maximum Capacity of Final Product lb/hr	Emission Factor lb-VOC/ton product	VOC Emissions lb/hr	VOC Emissions tons/yr
C33	175	1	0.0875	0.383
C34	150	1	0.075	0.329
C36	175	1	0.0875	0.383
Total			0.250	1.10

Methodology:

VOC Emissions (lb/hr) = Maximum capacity (lb/hr) * Emission Factor (lb VOC/ton) * (1 ton/ 2000lb)

VOC Emissions (tons/yr) = Maximum capacity (lb/hr) * Emission Factor (lb VOC/ton) * (1 ton/2000lb) * (1 ton VOC/2000 lb VOC) * 8760 days/year

Emission Factor (lb VOC/ton) = 1 (lb VOC/ton), reflective of the worse case plastic, polyethylene, pursuant to SPR 163-10422-00120, issued March 11, 1999.

No fillers used in these Extruder Lines

The extruder lines VOC emissions include the potential VOC emissions from the blenders dedicated to these lines.

Particulate Emissions

Process/Emission Units	Baghouse grain loading gr/dscf	Control Efficiency	Exhaust Gas Flow Rate dscf/min	Uncontrolled PM Emissions lb/hr	Uncontrolled PM Emissions tons/yr	Controlled PM Emissions lbs/hr	Controlled PM Emissions tons/yr
Blenders and Extruders in Building #3	0.00005	99.9%	26,000	11.14	48.81	0.011	0.049

Methodology:

PM = PM10 = PM2.5

Uncontrolled PM Emissions (lb/hr) = Baghouse grain loading (gr/dscf) * Exhaust Gas Flow Rate (dscf/min) * 60 min/1 hr * 1lb /7000 gr * 1/(1 - Control Efficiency)

Uncontrolled PM Emissions (ton/yr) = Uncontrolled PM Emissions (lb/hr) * 8760 hr/ 1 yr * 1 ton/2000 lbs

Controlled PM Emissions (lb/hr) = Baghouse grain loading (gr/dscf) * Exhaust Gas Flow Rate (dscf/min) * 60 min/1 hr * 1 lb/7,000 gr

Controlled PM Emissions (ton/yr) = Controlled PM Emissions (lb/hr) * 8,760 hr/1 yr * 1 ton/2,000 lbs

The source supplied the baghouse grain loading, control efficiency, and exhaust gas flow rate.

**Appendix A: Emission Calculations
Building 3 Silos**

Company Name: Ferro Corporation, Filled and Reinforced Plastics Division
Address City IN Zip: 5001 O'Hara Drive, Evansville, Indiana 47711
 4400 Hitch Peters Road, Evansville, Indiana 47711
Permit Number: F163-34514-00120
Reviewer: Brandon Miller
Date: 6/13/2014

Emission Unit	Emission Factor (lb/ton)	Throughput (lbs/hr)	Uncontrolled PM Emissions (ton/yr)
Silo 1	0.8	500	0.876
Silo 2	0.8	500	0.876
Total			1.752

Methodology

Uncontrolled PM Emissions (ton/yr) = Emission Factor (lb-PM/ton-product) * Throughput (lb-product/hr) * (1 ton-product/2,000 lb-product) * (8,760 hr/1 yr) * (1 ton-PM/2,000 lb-PM)

PM = PM10 = PM2.5

Emission Factor from AP-42, Chapter 6.6.2, Table 6.6.2-1



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

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(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: Lisa McLaughlin
A. Schulman, Inc.
5001 O'Hara Drive
Evansville, IN 47711

DATE: July 31, 2014

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

SUBJECT: Final Decision
Federally Enforceable State Operating Permit (FESOP) Significant Permit Revision
163-34154-00120

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:
Alexander Demas, Plant Manager
Leslie J. Ashley, Air Quality Services, LLC
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 6/13/2013



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

July 31, 2014

TO: Evansville Vanderburgh Public Library

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

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

Applicant Name: A. Schulman, Inc.
Permit Number: 163-34154-00120

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 7/31/2014 A Schulman Incorporated 163-34154-00120 FINAL		Type of Mail: CERTIFICATE OF MAILING ONLY	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		

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		Lisa McLaughlin A Schulman Incorporated 5001 OHara Dr Evansville IN 47711 (Source CAATS)		CONFIRMED DELIVERY								
2		Alexander Demas Plant Mgr A Schulman Incorporated 5001 OHara Dr Evansville IN 47711 (RO CAATS)										
3		Evansville Vanderburgh Library - North Park Branch 960 Koehler Drive Evansville IN 47710 (Library)										
4		Evansville City Council and Mayors Office 1NW MLK Blvd, Rm 302 Evansville IN 47708 (Local Official)										
5		Vanderburgh County Commissioners 1 NW MLK Blvd, Rm 305 Evansville IN 47708 (Local Official)										
6		Mr. Don Mottley Save Our Rivers 6222 Yankeetown Hwy Boonville IN 47601 (Affected Party)										
7		Vanderburgh County Health Dept. 420 Milberry Street Evansville IN 47713-1888 (Health Department)										
8		Kim Sherman 3355 Woodview Drive Newburgh IN 47630 (Affected Party)										
9		Mr. Mark Wilson Evansville Courier & Press P.O. Box 268 Evansville IN 47702-0268 (Affected Party)										
10		Evansville EPA 100 E. Walnut St. Suite 100, Newsome Center Evansville IN 47713 (Local Official)										
11		Leslie J. Ashley Air Quality Services, LLC 425 Main Street Evansville IN 47708 (Consultant)										
12		David Boggs 216 Western Hills Dr Mt Vernon IN 47620 (Affected Party)										
13		John Blair 800 Adams Ave Evansville IN 47713 (Affected Party)										
14												
15												

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12			