



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: April 25, 2008

RE: Polygon Company / 141-25464-00062

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

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 enclosed matter. 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.

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.

Enclosures
FNPER.dot12/03/07



Mitchell E. Daniels, Jr.
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Indianapolis, Indiana 46204-2251
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Federally Enforceable State Operating Permit Renewal OFFICE OF AIR QUALITY

**Polygon Company
103 Industrial Park Drive
Walkerton, Indiana 46574**

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

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

Operation Permit No.: F141-25464-00062	
Issued by:	Issuance Date: April 25, 2008
<i>Original document signed by</i>	Expiration Date: April 25, 2018
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). 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 stationary fiberglass reinforced plastic tubing manufacturing facility.

Source Address:	103 Industrial Park Drive, Walkerton, Indiana 46574
Mailing Address:	P.O. Box 176, Walkerton, Indiana 46574
General Source Phone Number:	219-586-3145
SIC Code:	3082, 3089
County Location:	St. Joseph
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Federally Enforceable State Operating Permit Program Minor Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

- (a) Seven (7) pultrusion lines, identified as PL1 through PL7, constructed in 1994, with a maximum capacity of eighty-three and eight-tenths (83.8) pounds per hour, using no controls, and exhausting to stacks V2 and V3.
- (b) One (1) spray booth, identified as B1, constructed in 1998, for the surface coating of fiberglass reinforced plastic tubing, with a maximum capacity to coat fifty (50) tubes per hour, with dry filters for particulate control, and exhausting to stacks V4 and V5.
- (c) One (1) gel coat spray booth, identified as B2, constructed in 1998, for the surface coating of fiberglass reinforced plastic tubing, with a maximum capacity of fifty-three and five-tenths (53.5) pounds per hour, with dry filters for particulate control, and exhausting to stacks V7 and V8.
- (d) One (1) filament winding area, identified as F2, constructed in 1998, with a maximum capacity of forty-seven (47.0) pounds per hour, using no controls, and exhausting to stacks V9 and V10.
- (e) Nine (9) resin dip tanks, identified as RD1 through RD9, constructed in 1997, with a maximum capacity of 95.0 pounds per hour, using no controls, and exhausting to stack V6.

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

This stationary source also includes the following insignificant activities:

- (a) Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve (12) months, and that are not subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]
- (b) Research and Development operations, producing parts for new product testing and

- marketing research samples for a product designated as continuous fiber thermoplastic (CFT).
- (c) Eight (8) rubber encapsulated fiberglass strand manufacturing lines, with emissions below exemption levels as defined in 326 IAC 2-1.1-3.
 - (d) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British Thermal Units per hour
 - (1) One (1) natural gas-fired water heater, identified as SWH-1, with heat input capacity of 0.04 MMBtu per hour.
 - (2) Ten (10) natural gas fired curing ovens, four (4) radiant heaters, fifteen (15) space heaters, and three (3) air make-up units, with a combined total heat input capacity of 9.0 MMBtu per hour.
 - (3) One (1) natural gas-fired make-up air heater, identified as SMU-1, with heat input of 1.00 MMBtu per hour.
 - (4) Two (2) natural gas-fired indirect process heaters with heat input of 0.01 and 0.03 MMBtu per hour. [326 IAC 6-2-4]
 - (5) One (1) natural gas-fired furnace, identified as SF-1, with heat input capacity of 0.125 MMBtu per hour.
 - (6) One (1) natural gas-fired furnace, identified as SF-2, with heat input capacity of 0.037 MMBtu per hour.
 - (e) Various machining operations where aqueous cutting coolant continuously floods the machining interface; seventeen (17) grinders, one (1) filter press, five (5) auto saws, nine (9) chop saws, eight (8) small grinding machines, seven (7) lathes, three (3) bandsaws, eleven (11) dielectric testers, twelve (12) drill presses, five (5) computerized mills, one (1) air rotation unit, two (2) fiberglass winding lines, two (2) wet cutting/grinding lines and one (1) auto deburr.
 - (f) Three (3) spindle winder attachment and one (1) 6-spindle winder, one (1) fiberglass trimming and grinding area known as the Large Filament Wind Grinding Area, with a maximum process weight rate of 17 pounds per hour, with particulate emissions controlled with a Torit Donaldson dust collector. [326 IAC 6-3-2]
 - (g) One (1) fiberglass trimming and grinding area, known as the US6, with a maximum process weight rate of 254 pounds per hour, with particulate emissions controlled with a Torit Donaldson dust collector. [326 IAC 6-3-2]
 - (h) Six (6) electric ovens for fiberglass curing and drying, emitting less than twelve and five-tenths (12.5) pounds per day of any combination of HAPs.
 - (i) One (1) 6-spindle winder and two (2) fiberglass winding lines with trimmers and grinders, where aqueous cutting coolant continuously floods the machining interface, identified as the Stephens Filament Winding Area (F3), with a maximum capacity of 3,500 pounds per hour, exhausting to stacks SEF1 through SEF4.
 - (j) Two (2) stationary air compressors, identified as AC1 and AC2, with a horse power rating of 100 and 50, respectively.
 - (k) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

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

This stationary source, otherwise required to have a Part 70 permit as described in 326 IAC 2-7-2(a), has applied to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) 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, F141-25464-00062, 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]

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. The submittal by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1). 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) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by an "authorized individual" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, 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 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 the certification 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)][326 IAC 2-8-5(a)(1)]

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

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

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

Telephone Number: 317-233-0178 (ask for Compliance Section)

Facsimile Number: 317-233-6865

Northern Regional Office phone: (574) 245-4870; fax: (574) 245-4877.

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

Indiana Department of Environmental Management
Compliance 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 the certification 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.

- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

- (a) All terms and conditions of permits established prior to F141-25464-00062 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 Deviations from Permit Requirements and Conditions [326 IAC 2-8-4(3)(C)(ii)]

- (a) Deviations from any permit requirements (for emergencies see Section B - Emergency Provisions), the probable cause of such deviations, and any response steps or preventive measures taken shall be reported to:

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

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. 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.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (b) A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

B.16 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 the certification 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.17 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 the certification 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
Permits Branch, 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 in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application shall be certified 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.19 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) 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, 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) 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).

- (b) Emission Trades [326 IAC 2-8-15(c)]
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-8-15(c).
- (c) Alternative Operating Scenarios [326 IAC 2-8-15(d)]
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-8-4(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.20 Source Modification Requirement [326 IAC 2-8-11.1]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-8-11.1.

B.21 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.22 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

The application which shall be submitted by the Permittee does require the certification 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.23 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 within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Failure to pay may result in administrative enforcement action or revocation of this permit.
- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

B.24 Credible Evidence [326 IAC 2-8-4(3)][326 IAC 2-8-5][62 FR 8314] [326 IAC 1-1-6]

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

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

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

(a) Pursuant to 326 IAC 2-8:

- (1) The potential to emit any regulated pollutant, except particulate matter (PM), 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.

(b) The 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. This limitation shall make the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration (PSD) not applicable.

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

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

C.3 Opacity [326 IAC 5-1]

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

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

(b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A,

Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

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

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

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

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

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

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

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

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 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 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 Accredited 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 Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos.

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

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

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

A test protocol, except as provided elsewhere in this permit, shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, 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 certification 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 certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, 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 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 the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

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.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

Any monitoring or testing required by Section D of this permit shall be performed according to the provisions of 326 IAC 3, 40 CFR 60, Appendix A, 40 CFR 60, Appendix B, 40 CFR 63, or other approved methods as specified in this permit.

C.12 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.
- (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.13 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.14 Response to Excursions or Exceedances [326 IAC 2-8-4] [326 IAC 2-8-5]

- (a) Upon detecting an excursion or exceedance, the Permittee shall 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 emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned 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 within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (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 maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.15 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 take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) 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 the certification 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.16 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. 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, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

C.17 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. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance Data Section, 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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).
- (e) 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.18 Compliance with 40 CFR 82 and 326 IAC 22-1

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

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- (c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) Seven (7) pultrusion lines, identified as PL1 through PL7, constructed in 1994, with a maximum capacity of eighty-three and eight-tenths (83.8) pounds per hour, using no controls, and exhausting to stacks V2 and V3.
- (b) One (1) spray booth, identified as B1, constructed in 1998, for the surface coating of fiberglass reinforced plastic tubing, with a maximum capacity to coat fifty (50) tubes per hour, with dry filters for particulate control, and exhausting to stacks V4 and V5.
- (c) One (1) gel coat spray booth, identified as B2, constructed in 1998, for the surface coating of fiberglass reinforced plastic tubing, with a maximum capacity of fifty-three and five-tenths (53.5) pounds per hour, with dry filters for particulate control, and exhausting to stacks V7 and V8.
- (d) One (1) filament winding area, identified as F2, constructed in 1998, with a maximum capacity of forty-seven (47.0) pounds per hour, using no controls, and exhausting to stacks V9 and V10.
- (e) Nine (9) resin dip tanks, identified as RD1 through RD9, constructed in 1997, with a maximum capacity of 95.0 pounds per hour, using no controls, and exhausting to stack V6.

Insignificant Activities

- (a) Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve (12) months, except if subject to 326 IAC 20-6.
- (b) Research and Development operations – which will produce parts for new product testing and marketing research samples for a potential new product designated as continuous fiber thermoplastic (CFT).
- (c) Eight (8) rubber encapsulated fiberglass strand manufacturing lines, with emissions below exemption levels as defined in 326 IAC 2-1.1-3.

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

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

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

- (a) Pultrusion Lines (PL1 through PL7)

The input of resins, catalysts, and solvents for each pultrusion line shall be limited such that the total potential to emit (PTE) of Volatile Organic Compounds (VOC) for all seven pultrusion lines (PL1 through PL7) is less than twenty-five (25) tons per consecutive 12 month period, with compliance determined at the end of each month. Compliance with this limit shall be determined based upon the following criteria:

 - (1) Monthly usage by weight, percentage of volatile organic compounds, and method of application shall be recorded for each resin, catalyst, and solvent. Volatile organic compound emissions shall be calculated by multiplying the usage of each resin, catalyst, and solvent by the emission factor that is appropriate for the percentage of volatile organic compounds or styrene monomer content, and the method of application, and summing the emissions for all resins, catalysts, and solvents. Emission factors shall be obtained from a reference approved by

IDEM, OAQ.

- (2) The emission factors approved for use by IDEM, OAQ for polyester and vinyl resin shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, July 23, 2001, for open molding and filament winding, with the exception of the emission factors for controlled spray application. This reference is included with this permit. The emission factors for all other VOC emitting compounds shall be 100% of the input volatile organic compounds.

- (b) Resin Dip Tanks (RD1 through RD9)
The total usage of volatile organic compound (VOC) in the nine (9) resin dip tanks, identified as RD1 through RD9, shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with these limits renders the requirements of 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) not applicable.

D.1.2 FESOP and New Source Toxics Control [326 IAC 2-8] [326 IAC 2-4.1-1]

Pursuant to FESOP 141-17842-00062, issued on November 5, 2003, the total input of resins, gelcoats, catalysts, and solvents at this source shall be limited such that the potential to emit (PTE) of a single Hazardous Air Pollutant (HAP) shall be less than 9.9 tons per twelve (12) consecutive month period, and the potential to emit of any combination of HAPs shall be less than 24.9 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Compliance with this limit shall be determined based upon the following criteria:

- (1) Monthly usage by weight, percentage of hazardous air pollutants (HAPs), and method of application shall be recorded for each gelcoat, resin, catalyst, and solvent. Volatile organic compound emissions shall be calculated by multiplying the usage of each gelcoat, resin, catalyst, and solvent by the emission factor that is appropriate for the percentage of volatile organic compounds or styrene monomer content, and the method of application, and summing the emissions. Emission factors shall be obtained from a reference approved by IDEM, OAQ.
- (2) The emission factors approved for use by IDEM, OAQ for polyester and vinyl resin shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, July 23, 2001, for open molding and filament winding, with the exception of the emission factors for controlled spray application. This reference is included with this permit. The emission factors for all other HAP emitting compounds shall be 100% of the input volatile organic compounds.

Combined with the HAP emissions from combustion facilities and the insignificant activities not listed in this section, the emissions from the source are limited to less than 10 tons per year for a single HAP and less than 25 tons per year for a combination of HAPs. Compliance with these limits renders the requirements of 40 CFR 63, Subpart WWWW, 40 CFR 63, Subpart PPPP, 326 IAC 2-4.1-1 (MACT), and 326 IAC 2-7 (Part 70 Program) not applicable.

D.1.3 Particulate [326 IAC 6-3-2(d)]

- (a) Pursuant to 326 IAC 6-3-2(d), particulate from the surface coating process identified as B1 shall be controlled by a dry particulate filter and the Permittee shall operate the control device in accordance with manufacturer's specifications.
- (b) Pursuant to 326 IAC 6-3-2(d), particulate from the surface coating process identified as B2 shall be controlled by a dry particulate filter and the Permittee shall operate the control device in accordance with manufacturer's specifications.

D.1.4 Preventive Maintenance Plan [326 IAC 2-8-4(9)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.1.5 Volatile Organic Compounds (VOC) and Hazardous Air pollutants (HAPs) [326 IAC 8-1-2][326 IAC 8-1-4]

Compliance with the VOC and HAP usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined as follows:

- (a) The Permittee shall prepare or obtain from the manufacturer the copies of the "as supplied" and "as applied" VOC and HAP data sheets or Material Safety Data Sheets (MSDS) for each gelcoat, resin, catalyst, and solvent used in the reinforced plastics composites manufacturing operations.
- (b) The VOC and HAP emissions for gel coats, resins, catalysts, and solvents shall be calculated by multiplying the usage of each gel coat, resin, catalyst, and solvent by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for each gel coat, resin, and catalyst using the emission factors approved by IDEM, OAQ in "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, July 23, 2001, or its updates, as follows:

- (1) VOC/HAP emissions from resins and gelcoats:

$$E_R = (F_1 * R * 1 \text{ ton}/2,000 \text{ lbs}), \text{ where:}$$

$$E_R = \text{VOC/HAP emissions from resins and gelcoats (tons)}$$

$$F_1 = \text{Emission factor (lbs emitted per ton of resin or gelcoat used) *}$$

$$R = \text{Total amount of resin and gelcoat used (tons)}$$

- (2) VOC/HAP from catalysts, solvents, and other VOC/HAP:

$$E_O = (F_3 * V * K * 1 \text{ ton}/2,000 \text{ lbs}), \text{ where:}$$

$$E_O = \text{VOC/HAP emissions (tons)}$$

$$F_3 = \text{Emission factor of 1.0 (in absence of other data, assume all VOC/HAP is emitted)}$$

$$V = \text{VOC/HAP content (weight percent or lb/gal, from applicable MSDS sheet)}$$

$$K = \text{Total amount of catalyst, solvents, mold release agents and other VOC/HAP (lbs or gallons)}$$

- (3) Total VOC/HAP emissions in tons = $E_R + E_O$

* Emission factor shall be specific to material type, application method and % styrene content.

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

D.1.6 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters controlling particulate emissions from spray booths B1 and B2. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks V4, V5, V7, and V8 while one or more of the booths are in operation. Section C - Response to Excursions and Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.

- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Response to Excursions and Exceedances for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emission, or evidence of overspray emission is observed. The Section C - Response to Excursions and Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Response to Excursions and Exceedances, shall be considered a deviation from this permit.

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

D.1.7 Record Keeping Requirement

- (a) To document compliance with Conditions D.1.1 and D.1.5, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limits and the VOC content limits established in Conditions D.1.1 and D.1.5. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
- (1) The amount, VOC content, and monomer content of each gelcoat, resin, catalyst, and solvent used. Records shall include purchase orders, invoices, material safety data sheets (MSDS), waste manifests, and calculations necessary to verify the type and amount used.
 - (2) The method of application and other emission reduction techniques for each resin and gel coat used.
 - (3) The total VOC usage for each month.
 - (4) The calculated total weight of VOC emissions from resin, gel coat, catalyst, and solvent used for each compliance period.
- (b) To document compliance with Conditions D.1.2 and D.1.5, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the HAP emission limitations established in Conditions D.1.2 and D.1.5.
- (1) The amount, monomer content, and HAP content of each gelcoat, resin, catalyst, and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used;
 - (2) The method of application and other emission reduction techniques for each resin and gel coat used.
 - (3) The total HAP usage for each month;
 - (4) The total amount of all single HAPs emitted for each compliance period; and
 - (5) The total amount of a combination of HAPs emitted for each compliance period.
- (c) To document compliance with Condition D.1.6, the Permittee shall maintain a log of weekly overspray observations, and daily inspections of the filters. The Permittee shall include in its daily record when an inspection is not performed and the reason for the lack of inspection, (e.g. the process did not operate that day).

- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.1.8 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.1.1 and D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities

- (d) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British Thermal Units per hour
 - (1) One (1) natural gas-fired water heater, identified as SWH-1, with heat input capacity of 0.04 MMBtu per hour.
 - (2) Ten (10) natural gas fired curing ovens, four (4) radiant heaters, fifteen (15) space heaters, and three (3) air make-up units, with a combined total heat input capacity of 9.0 MMBtu per hour.
 - (3) One (1) natural gas-fired make-up air heater, identified as SMU-1, with heat input of 1.00 MMBtu per hour.
 - (4) Two (2) natural gas-fired indirect process heaters with heat input of 0.01 and 0.03 MMBtu per hour.
 - (5) One (1) natural gas-fired furnace, identified as SF-1, with heat input capacity of 0.125 MMBtu per hour.
 - (6) One (1) natural gas-fired furnace, identified as SF-2, with heat input capacity of 0.037 MMBtu per hour.
- (e) Various machining operations where aqueous cutting coolant continuously floods the machining interface; seventeen (17) grinders, one (1) filter press, five (5) auto saws, nine (9) chop saws, eight (8) small grinding machines, seven (7) lathes, three (3) bandsaws, eleven (11) dielectric testers, twelve (12) drill presses, five (5) computerized mills, one (1) air rotation unit, two (2) fiberglass winding lines, two (2) wet cutting/grinding lines and one (1) auto deburr.
- (f) Three (3) spindle winder attachment and one (1) 6-spindle winder, one (1) fiberglass trimming and grinding area known as the Large Filament Wind Grinding Area, with a maximum process weight rate of 17 pounds per hour, with particulate emissions controlled with a Torit Donaldson dust collector. [326 IAC 6-3-2]
- (g) One (1) fiberglass trimming and grinding area, known as the US6, with a maximum process weight rate of 254 pounds per hour, with particulate emissions controlled with a Torit Donaldson dust collector. [326 IAC 6-3-2]
- (h) Six (6) electric ovens for fiberglass curing and drying, emitting less than twelve and five-tenths (12.5) pounds per day of any combination of HAPs.
- (i) One (1) 6-spindle winder and two (2) fiberglass winding lines with trimmers and grinders, where aqueous cutting coolant continuously floods the machining interface, identified as the Stephens Filament Winding Area (F3), with a maximum capacity of 3,500 pounds per hour, exhausting to stacks SEF1 through SEF4.
- (j) Two (2) stationary air compressors, identified as AC1 and AC2, with a horse power rating of 100 and 50, respectively.

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

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

D.2.1 Particulate [326 IAC 6-3-2]

- (a) Pursuant to 326 IAC 6-3-2(c), the allowable particulate emissions rate from the Large Filament Wind Grinding Area shall not exceed 0.551 pounds per hour.
- (b) Pursuant to 326 IAC 6-3-2(e), the particulate emissions from fiberglass trimming and grinding area (US6) shall be limited to 1.03 pounds per hour when operating at a process weight rate 254 pounds per hour.

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

D.2.2 Particulate [326 IAC 6-2-4]

Pursuant to 326 IAC 6-2-4(a) (PM Emissions for Sources of Indirect Heating), the particulate emissions from indirect heating facilities (the two (2) natural gas-fired indirect process heaters) shall be limited to less than 0.6 pounds per MMBtu heat input.

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

D.2.3 Particulate Control

Pursuant to 326 IAC 6-3-2, and in order to comply with condition D.2.1, the dust collectors for particulate control shall be in operation and control emissions from the Large Filament Wind Grinding Area and the fiberglass trimming and grinding area (US6) at all times that these facilities are in operation.

SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities

- (a) Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve (12) months, except if subject to 326 IAC 20-6.

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

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

D.3.1 Cold Cleaner (Degreaser) Operations [326 IAC 8-3-2]

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the Permittee shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

D.3.2 Cold Cleaner (Degreaser) Operations [326 IAC 8-3-5]

- (a) Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the Permittee shall ensure that the following control equipment requirements are met:
- (1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));
 - (B) The solvent is agitated; or
 - (C) The solvent is heated.
 - (2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.

- (3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
 - (4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
 - (5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury) or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
 - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (B) A water cover when solvent is used is insoluble in, and heavier than, water.
 - (C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.
- (b) Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:
- (1) Close the cover whenever articles are not being handled in the degreaser.
 - (2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
 - (3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY**

**FEDERALLY ENFORCEABLE STATE OPERATING PERMIT (FESOP)
CERTIFICATION**

Source Name: Polygon Company
Source Address: 103 Industrial Park Drive, Walkerton, Indiana 46574
Mailing Address: P.O. Box 176, Walkerton, Indiana 46574
FESOP Permit No.: F141-25464-00062

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 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: Polygon Company
Source Address: 103 Industrial Park Drive, Walkerton, Indiana 46574
Mailing Address: P.O. Box 176, Walkerton, Indiana 46574
FESOP Permit No.: F141-25464-00062

This form consists of 2 pages

Page 1 of 2

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

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

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

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

Page 2 of 2

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

A certification is not required for this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Polygon Company
 Source Address: 103 Industrial Park Drive, Walkerton, Indiana 46574
 Mailing Address: P.O. Box 176, Walkerton, Indiana 46574
 FESOP Permit No.: F141-25464-00062
 Facility: Pultrusion Lines (PL1 through PL7)
 Parameter: VOC Emissions: VOC emissions for resins, catalysts, and solvents shall be calculated by multiplying the usage of each resin, catalyst, and solvent by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for each resin, catalyst, and solvent using the emission factors in "Technical Discussion of the Unified Emission Factors for Open Molding of Composites" (April, 1999) and "Unified Emission Factors for Open Molding of Composites", July 23, 2001, or its updates.
 Limit: Less than 25 tons per twelve month consecutive period, with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

Month	Tons of Material	Column 1	Column 2	Column 1 + Column 2
		This Month	Previous 11 Months	12 Month Total
Month 1	Resins			
Month 1	Catalysts			
Month 1	Solvents			
Month 2	Resins			
Month 2	Catalysts			
Month 2	Solvents			
Month 3	Resins			
Month 3	Catalysts			
Month 3	Solvents			

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

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

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION**

FESOP Quarterly Report

Source Name: Polygon Company
Source Address: 103 Industrial Park Drive, Walkerton, Indiana 46574
Mailing Address: P.O. Box 176, Walkerton, Indiana 46574
FESOP Permit No.: F141-25464-00062
Facility: Resin Dip Tanks (RD1 through RD9)
Parameter: VOC Usage
Limit: Less than 25 tons per twelve (12) month consecutive period, with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

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

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

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

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Polygon Company
 Source Address: 103 Industrial Park Drive, Walkerton, Indiana 46574
 Mailing Address: P.O. Box 176, Walkerton, Indiana 46574
 FESOP Permit No.: F141-25464-00062
 Facility: PL1 - PL7, B1, B2, degreasing, R & D, rubber encapsulated fiberglass strand manufacturing lines
 Parameter: Single HAP Emissions: Single HAP emissions for gelcoats, resins, catalysts, and solvents shall be calculated by multiplying the usage of each gelcoat, resin, catalyst, and solvent by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for each gelcoat, resin, catalyst, and solvent using the emission factors in "Technical Discussion of the Unified Emission Factors for Open Molding of Composites" (April, 1999) and "Unified Emission Factors for Open Molding of Composites", July 23, 2001, or its updates.
 Limit: Less than 9.9 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

Month	Tons of Material	Column 1	Column 2	Column 1 + Column 2
		This Month	Previous 11 Months	12 Month Total
Month 1	Solvent, Catalysts			
Month 1	Gel Coats			
Month 1	Resins			
Month 2	Solvent, Catalysts			
Month 2	Gel Coats			
Month 2	Resins			
Month 3	Solvent, Catalysts			
Month 3	Gel Coats			
Month 3	Resins			

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

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

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION

FESOP Quarterly Report

Source Name: Polygon Company
 Source Address: 103 Industrial Park Drive, Walkerton, Indiana 46574
 Mailing Address: P.O. Box 176, Walkerton, Indiana 46574
 FESOP Permit No.: F141-25464-00062
 Facility: PL1 - PL7, B1, B2, degreasing, R & D, rubber encapsulated fiberglass strand manufacturing lines
 Parameter: Total HAP Emissions: Total HAP emissions for gelcoats, resins, catalysts, and solvents shall be calculated by multiplying the usage of each gelcoat, resin, catalyst, and solvent by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for each gelcoat, resin, catalyst, and solvent using the emission factors in "Technical Discussion of the Unified Emission Factors for Open Molding of Composites" (April, 1999) and "Unified Emission Factors for Open Molding of Composites", July 23, 2001, or its updates.
 Limit: Less than 24.9 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: _____ YEAR: _____

Month	Tons of Material	Column 1	Column 2	Column 1 + Column 2
		This Month	Previous 11 Months	12 Month Total
Month 1	Solvent, Catalysts			
Month 1	Gel Coats			
Month 1	Resins			
Month 2	Solvent, Catalysts			
Month 2	Gel Coats			
Month 2	Resins			
Month 3	Solvent, Catalysts			
Month 3	Gel Coats			
Month 3	Resins			

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

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

Attach a signed certification to complete this report.

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

Source Name: Polygon Company
 Source Address: 103 Industrial Park Drive, Walkerton, Indiana 46574
 Mailing Address: P.O. Box 176, Walkerton, Indiana 46574
 FESOP Permit No.: F141-25464-00062

Months: _____ **to** _____ **Year:** _____

<p>This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, 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 ΔNo 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: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

Technical Support Document (TSD) for a
Federally Enforceable State Operating Permit Renewal

Source Background and Description

Source Name:	Polygon Company
Source Location:	103 Industrial Park Drive, Walkerton, Indiana 46574
County:	St. Joseph
SIC Code:	3082, 3089
Operation Permit No.:	F141-17842-00062
Operation Permit Issuance Date:	November 5, 2003
Permit Renewal No.:	F141-25464-00062
Permit Reviewer:	ERG/ST

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Polygon Company relating to the operation of a stationary fiberglass reinforced plastic tubing manufacturing facility.

History

On October 29, 2007, Polygon Company submitted an application to the OAQ requesting to renew its operating permit. Polygon Company was issued a FESOP on November 5, 2003. Since Administrative Amendment 141-25107-00062 was issued on November 3, 2007, this source has added two (2) natural gas fired furnaces (SF-1 and SF-2), with heat input capacities of 0.125 MMBtu per hour and 0.037 MMBtu per hour, respectively. This addition is being made in this FESOP renewal because the units are of a type that already exists at the source and the increase in emissions is less than the thresholds in 326 IAC 2-2 and 326 IAC 2-3.

Source Definition

This fiberglass reinforced plastic tubing manufacturing company consists of three (3) plants:

- (a) Plant 1 is located at 103 Industrial Park Drive, Walkerton, Indiana 46574;
- (b) Plant 2 is located on Tennessee Street, Walkerton, Indiana 46574; and
- (c) Plant 3 is located at 646 Stephens Street, Walkerton, Indiana 46574.

Because the three (3) plants are owned by one (1) company, are adjacent (one mile apart), have the same SIC codes, and because most products manufactured at Plants 2 and 3 are transferred to Plant 1 for final fabrication, they will still be considered one (1) source, as initially determined in previous FESOP F141-17842-00062.

Permitted Emission Units and Pollution Control Equipment

- (a) Seven (7) pultrusion lines, identified as PL1 through PL7, constructed in 1994, with a maximum capacity of eighty-three and eight-tenths (83.8) pounds per hour, with particulate emissions controlled by a dust collector that exhausts inside the building, and with VOC emissions exhausting to stacks V2 and V3.

- (b) One (1) spray booth, identified as B1, constructed in 1998, for the surface coating of fiberglass reinforced plastic tubing, with a maximum capacity to coat fifty (50) tubes per hour, with dry filters for particulate control, and exhausting to stacks V4 and V5.
- (c) One (1) gel coat spray booth, identified as B2, constructed in 1998, for the surface coating of fiberglass reinforced plastic tubing, with a maximum capacity of fifty-three and five-tenths (53.5) pounds per hour, with dry filters for particulate control, and exhausting to stacks V7 and V8.
- (d) One (1) filament winding area, identified as F2, constructed in 1998, with a maximum capacity of forty-seven (47.0) pounds per hour, using no controls, and exhausting to stacks V9 and V10.
- (e) Nine (9) resin dip tanks, identified as RD1 through RD9, constructed in 1997, with a maximum capacity of 95.0 pounds per hour, using no controls, and exhausting to stack V6.

Insignificant Activities

- (a) Degreasing operations that do not exceed one hundred forty-five (145) gallons per twelve (12) months, and that are not subject to 326 IAC 20-6. [326 IAC 8-3-2] [326 IAC 8-3-5]
- (b) Research and Development operations, producing parts for new product testing and marketing research samples for a product designated as continuous fiber thermoplastic (CFT).
- (c) Eight (8) rubber encapsulated fiberglass strand manufacturing lines, with emissions below exemption levels as defined in 326 IAC 2-1.1-3.
- (d) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British Thermal Units per hour
 - (1) One (1) natural gas-fired water heater, identified as SWH-1, with heat input capacity of 0.04 MMBtu per hour.
 - (2) Ten (10) natural gas fired curing ovens, four (4) radiant heaters, fifteen (15) space heaters, and three (3) air make-up units, with a combined total heat input capacity of 9.0 MMBtu per hour.
 - (3) One (1) natural gas-fired make-up air heater, identified as SMU-1, with heat input of 1.00 MMBtu per hour.
 - (4) Two (2) natural gas-fired indirect process heaters with heat input of 0.01 and 0.03 MMBtu per hour. [326 IAC 6-2-4]
 - (5) One (1) natural gas-fired furnace, identified as SF-1, with heat input capacity of 0.125 MMBtu per hour.
 - (6) One (1) natural gas-fired furnace, identified as SF-2, with heat input capacity of 0.037 MMBtu per hour.
- (e) Various machining operations where aqueous cutting coolant continuously floods the machining interface; seventeen (17) grinders, one (1) filter press, five (5) auto saws, nine (9) chop saws, eight (8) small grinding machines, seven (7) lathes, three (3) bandsaws, eleven (11) dielectric testers, twelve (12) drill presses, five (5) computerized mills, one (1)

air rotation unit, two (2) fiberglass winding lines, two (2) wet cutting/grinding lines and one (1) auto deburr.

- (f) Three (3) spindle winder attachment and one (1) 6-spindle winder, one (1) fiberglass trimming and grinding area known as the Large Filament Wind Grinding Area, with a maximum process weight rate of 17 pounds per hour, with particulate emissions controlled with a Torit Donaldson dust collector. [326 IAC 6-3-2]
- (g) One (1) fiberglass trimming and grinding area, known as the US6, with a maximum process weight rate of 254 pounds per hour, with particulate emissions controlled with a Torit Donaldson dust collector. [326 IAC 6-3-2]
- (h) Six (6) electric ovens for fiberglass curing and drying, emitting less than twelve and five-tenths (12.5) pounds per day of any combination of HAPs.
- (i) One (1) 6-spindle winder and two (2) fiberglass winding lines with trimmers and grinders, where aqueous cutting coolant continuously floods the machining interface, identified as the Stephens Filament Winding Area (F3), with a maximum capacity of 3,500 pounds per hour, exhausting to stacks SEF1 through SEF4.
- (j) Two (2) stationary air compressors, identified as AC1 and AC2, with a horse power rating of 100 and 50, respectively.
- (k) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

New Emission Units and Pollution Control Equipment

There are no emission units that need to be permitted during this review.

Existing Approvals

Since the issuance of the FESOP 141-17842-00062 on November 5, 2003, the source has constructed or has been operating under the following approvals as well:

- (a) Administrative Amendment 141-19570-00062, issued on 09/27/2004;
- (b) Administrative Amendment 141-23480-00062, issued on 10/05/2006; and
- (c) Administrative Amendment 141-25107-00062, issued on 11/13/2007.

All terms and conditions of previous permits issued pursuant to permitting programs approved into the state implementation plan have been either incorporated as originally stated, revised, or deleted by this permit. All previous permits are superseded by this permit renewal.

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in St. Joseph County

Pollutant	Status
PM ₁₀	Unclassifiable effective November 15, 1990.
PM _{2.5}	Attainment
SO ₂	Better than national standards.
NOx	Cannot be classified or better than national standards.
8-hour Ozone	Attainment effective July 19, 2007, for the 8-hour ozone standard. ¹
CO	Unclassifiable or attainment effective November 15, 1990.
Lead	Not designated.

¹ Attainment effective October 18, 2000, for the 1-hour ozone standard for the South Bend-Elkhart area, including St. Joseph County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour standard was revoked effective June 15, 2005.

(a) Ozone Standards

- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (2) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate St. Joseph County as attainment for the 8-hour ozone standard.
- (3) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) 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 NOx emissions are considered when evaluating the rule applicability relating to ozone. St. Joseph County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM2.5

St. Joseph County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.

(c) Other Criteria Pollutants

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

(d) Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	15.7
PM ₁₀	15.9
SO ₂	0.026
VOC	68.9
CO	3.69
NO _x	4.40
Styrene	29.2
Toluene	1.13
Other HAPs	0.63
Total HAPs	30.9

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all criteria pollutants are less than 100 tons per year.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or greater than ten (10) tons per year and the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or greater than twenty-five (25) tons per year. However, the source has agreed to maintain their limit for single HAP emissions and total HAP emissions below the Title V thresholds of ten (10) tons per year of a single HAP and 25 tons per year of a combination of HAPs. Therefore, the source will be issued a FESOP Renewal.
- (c) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Potential to Emit After Issuance

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

Process/ Emission Unit	Potential To Emit (tons/year)						HAPs
	PM	PM ₁₀	SO ₂	VOC	CO	NO _x	
Pultrusion Lines PL1 - PL7	0	0	0	Less than 25 *	0	0	Single (styrene): Less than 10 Combination: Less than 24.9
Spray Booth B1	0.56	0.56	0	8.47	0	0	
Gel Coat Booth B2	0.31	0.31	0	3.14	0	0	
Filament Winding F2	0	0	0	9.55	0	0	
Resin Dip RD1 - RD9	0	0	0	Less than 25 *	0	0	
Insignificant Activities	9.33	9.33	0	0	0	0	
Combustion	0.08	0.33	0.03	0.24	3.69	4.40	0.08
Total Emissions	10.3	10.5	0.03	73.0	3.69	4.40	Single: Less than 10 Combination: Less than 25
Title V Thresholds	NA	100	100	100	100	100	Single: 10 Combination: 25
PSD Major Source Thresholds	250	250	250	250	250	250	NA

* See the State Rule Applicability section of this TSD for details on the VOC limits.

- (a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.
- (b) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, fugitive emissions are not counted toward the determination of PSD applicability.

Federal Rule Applicability

- (a) The requirements of the National Emission Standards for Hazardous Air Pollutants for Halogenated Solvent Cleaning (326 IAC 20-6, 40 CFR 63, Subpart T) are not still included in this permit for the degreasing operations. The cold solvent cleaning machine does not use a solvent containing methylene chloride, perchloroethylene, trichloroethylene, 1,1,1-trichloroethane, carbon tetrachloride, chloroform or any combination of these halogenated HAP solvents in a total concentration greater than five percent (5%) by weight as a cleaning or drying agent.
- (b) The requirements of the National Emission Standards for Hazardous Air Pollutants for Reinforced Plastic Composites Production (40 CFR 63, Subpart WWWW) are still not included in this permit for the fiberglass reinforced plastic tubing manufacturing operations because this source is a minor source of HAP, as defined in 40 CFR 63.2. The source accepted limits in their previous FESOP that limited emissions of any single HAP to less than ten (10) tons per year and any combination of HAPs to less than twenty-five (25) tons per year.
- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants for the Surface Coating of Plastic Parts and Products (40 CFR 63, Subpart PPPP) are still not included in this permit for the surface coating facilities because this source is a minor source of HAP, as defined in 40 CFR 63.2. The source accepted limits in their previous FESOP that limited emissions of any single HAP to less than ten (10) tons per year and any combination of HAPs to less than twenty-five (25) tons per year.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source is not one of the twenty-eight (28) listed source categories and the total source potential emissions of each regulated pollutant is less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) are still not applicable.

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

- (a) The seven pultrusion lines (PL1 - PL7) are not subject to the requirements of 326 IAC 2-4.1 (New Source Toxics Control) because they were constructed prior to July 27, 1997. Therefore, 326 IAC 2-4.1 does not apply.
- (b) The spray booth (B1), gel coat booth (B2), filament winding area (F2), and the resin dip tanks each have a potential to emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for any combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

The source was issued FESOP 141-17842-00062 on November 5, 2003 which limited HAP emissions to less than 10 tons per year for a single HAP and 25 tons per year for a combination of HAPs.

326 IAC 2-6 (Emission Reporting)

This source is located in St. Joseph County, is not required to operate under the Part 70 Permit program, and has actual emissions of lead less than 5 tons per year. Therefore, the emission reporting requirements under 326 IAC 2-6-1(a) still do not apply. Pursuant to 326 IAC 2-6-1(b), all sources permitted by IDEM are subject to additional information requests as specified in 326 IAC 2-6-5.

326 IAC 2-8 (Federally Enforceable State Operating Permit)

In FESOP 141-17842-00062, issued on November 5, 2003, this source accepted limits on the emission of a single HAP of less than ten (10) tons per year, and a combination of HAPs of less than twenty-five (25) tons per year. In order to demonstrate compliance with these limits, the following conditions have been included in the FESOP:

The input of resins, gelcoats, catalysts, and solvents at this source shall be limited such that the potential to emit (PTE) of a single Hazardous Air Pollutant (HAP) shall be less than 9.9 tons per twelve (12) consecutive month period, and that of any combination of HAPs shall be less than 24.9 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Compliance with these limits makes the requirements of 326 IAC 2-7 not applicable.

The Compliance Determination requirements for compliance with these HAP limits are specified in the permit and the *Compliance Determination and Monitoring Requirements* section of this TSD.

326 IAC 5-1 (Opacity Limitations)

This source is located in St. Joseph County, but it is not located in the area specified in 326 IAC 5-1-1-(c)(6). Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), opacity shall meet the following, unless otherwise stated in the permit:

- (a) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
- (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A,

Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.

326 IAC 6-4 (Fugitive Dust Emissions)

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.

326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)

- (a) The source is located in St. Joseph County, but the source is not located any of the areas listed in 326 IAC 6-5-1(a). Therefore, this source is not subject to the requirements of 326 IAC 6-5.
- (b) This source did not receive all of the necessary preconstruction approvals prior to December 13, 1985. However, the fugitive particulate emissions from the paved and unpaved roads and parking lots are negligible. Pursuant to 326 IAC 6-5-7(d), this source is not subject to the requirements of 326 IAC 6-5.

326 IAC 6.5 (Particulate Matter Limitations Except Lake County)

This source is located in St. Joseph County, but is not specifically listed in 326 IAC 6.5-7. The potential to emit of PM for the source is less than 100 tons per year, and actual PM emissions are less than 10 tons per year. Therefore, the requirements of 326 IAC 6.5 are not applicable.

State Rule Applicability – Individual Facilities

326 IAC 6-2-4 (PM Emissions for Sources of Indirect Heating)

Two (2) natural gas-fired indirect process heaters with heat input capacities of 0.01 and 0.03 MMBtu per hour were added in Administrative Amendment 141-25107-00062, issued on November 13, 2007. Although these units are a source of indirect heating, and therefore subject to the requirements of 326 IAC 6-2-4 (particulate Emissions: Indirect Heating), the requirements for these units under 326 IAC 6-2-4 were not added to the permit in Administrative Amendment 141-25107-00062. Therefore, they will be added in this FESOP Renewal. Based on AP 42 emission factors, both process heaters are able to comply with 326 IAC 6-2-4.

Pursuant to 326 IAC 6-2-4(a), indirect heating facilities (the two (2) natural gas-fired indirect process heaters with heat input of 0.01 and 0.03 MMBtu per hour) constructed after September 12, 1983, shall be limited by the following equation:

$$Pt = \frac{1.09}{Q^{0.26}}$$

Where Pt = emission rate limit (lbs/MMBtu)
Q = total source heat input capacity (MMBtu/hr)

The emission rate limit calculated from the equation above equals:

$$Pt = \frac{1.09}{(0.04 + 0.01 + 0.03)^{0.26}} = 2.1 \text{ lbs/MMBtu}$$

However, 326 IAC 6-2-4(a) also states that if Q is less than 10 MMBtu/hr, Pt shall not exceed 0.6. Therefore, the PM emission limit for each indirect heating facility is 0.6 lbs/MMBtu. According to AP 42, the natural gas-fired indirect heating facilities can comply with this limit.

326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)

- (a) The pultrusion lines (PL1 through PL7) apply material with a transfer efficiency of nearly 100%. This process has a potential to emit of particulate less than 0.551 pounds per

hour. Pursuant to 326 IAC 6-3-1(b)(14), these facilities are exempt from the requirements of 326 IAC 6-3-2.

- (b) The spray booth, identified as B1, has the potential to emit particulate and uses more than five (5) gallons of coating per day. Pursuant to 326 IAC 6-3-2(d), particulate from the surface coating process shall be controlled by a dry particulate filter and the Permittee shall operate the control device in accordance with manufacturer's specifications.
- (c) The gel coat spray booth, identified as B2, has the potential to emit particulate and uses more than five (5) gallons of coating per day. Pursuant to 326 IAC 6-3-2(d), particulate from the gel coat spray booth shall be controlled by a dry particulate filter and the Permittee shall operate the control device in accordance with manufacturer's specifications.
- (d) The filament winding area (F2) applies material with a transfer efficiency of 100%. The potential to emit of particulate from the filament winding area, identified as F2, is less than 0.551 pounds per hour. Pursuant to 326 IAC 6-3-1(b)(14), this facility is exempt from the requirements of 326 IAC 6-3-2.
- (e) The nine (9) resin dip tanks (RD1 through RD9) apply material with a dip coating process with a transfer efficiency of 100%. Pursuant to 326 IAC 6-3-1(b)(5), these facilities are exempt from the requirements of 326 IAC 6-3-2.
- (f) The insignificant machining, sawing, trimming, and grinding facilities where aqueous cutting coolant continuously floods the machine/product interface have potential to emit of particulate less than 0.551 pounds per hour. Pursuant to 326 IAC 6-3-1(b)(14), these facilities are exempt from the requirements of 326 IAC 6-3-2.
- (g) The Large Filament Wind Grinding Area has a process weight rate of 17 pounds per hour. Pursuant to 326 IAC 6-3-2(c), the allowable particulate emissions rate from any process which has a maximum process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.
- (h) The Stephens Filament Winding Area, where aqueous cutting coolant continuously floods the machine/product interface has potential to emit of particulate less than 0.551 pounds per hour. Pursuant to 326 IAC 6-3-1(b)(14), these facilities are exempt from the requirements of 326 IAC 6-3-2.
- (i) The fiberglass trimming and grinding area identified as US6 has potential to emit particulate. Pursuant to 326 IAC 6-3-2(e), the particulate emissions from fiberglass trimming and grinding area identified as US6 shall be limited to 1.03 pounds per hour when operating at a process weight rate 254 pounds per hour.

Interpolation of the data for the process weight rate up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 4.10 P^{0.67} \quad \text{where } E = \text{rate of emission in pounds per hour and} \\ P = \text{process weight rate in tons per hour}$$

The dust collectors shall be in operation at all times that the pultrusion lines (PL1 through PL7), Large Filament Wind Grinding Area, and fiberglass trimming and grinding area (US6) are in operation, in order to comply with these limits.

326 IAC 8-1-6 (VOC Rules: General Reduction Requirements)

- (a) The potential to emit of VOC from the resin dip tanks (RD1 through RD9) is greater than 25 tons per year. However, the Permittee will continue to limit the input of volatile organic compound (VOC) usage in the nine (9) resin dip tanks (RD1 through RD9), of less than twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the requirements of 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) still do not apply.
- (b) The potential to emit of VOC from the Pultrusion Lines (PL1 through PL7) is greater than 25 tons per year. However, the Permittee will continue to limit the input of volatile organic compound (VOC) in the Pultrusion Lines (PL1 through PL7) such that emissions of VOC from these facilities is less than twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the requirements of 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) still do not apply.

The Compliance Determination requirements for compliance with these VOC limits are specified in the permit and the *Compliance Determination and Monitoring Requirements* section of this TSD.

- (c) The potential to emit of VOC from the spray booth (B1) is less than 25 tons per year for and the potential to emit of VOC from the Gel Coat Booth (B2) is less than 25 tons per year. Therefore, these facilities are not subject to the requirements of 326 IAC 8-1-6 (New Facilities: General Reduction Requirements).

326 IAC 8-3-2 (Cold Cleaner Operations)

This cold cleaner degreasing facility is located in St. Joseph County, was constructed after January 1, 1980 and is used to perform organic solvent degreasing operations. Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations), the Permittee of a cold cleaning facility shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

This cold cleaner degreasing facility is located in St. Joseph County, was constructed after January 1, 1990, is used to perform organic solvent degreasing operations and does not have a remote solvent reservoir. Pursuant to 326 IAC 8-3-5(a) (Cold Cleaner Degreaser Operation and Control), the Permittee of a cold cleaner degreaser facility shall ensure that the following control equipment requirements are met:

- (a) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
 - (1) The solvent volatility is greater than two (2) kilo Pascals (fifteen (15) millimeters of mercury or three-tenths (0.3) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));

- (2) The solvent is agitated; or
 - (3) The solvent is heated.
- (b) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three-tenths (4.3) kilo Pascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.
- (c) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).
- (d) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.
- (e) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three-tenths (4.3) kilo Pascals (thirty-two (32) millimeters of mercury or six-tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
- (1) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
 - (2) A water cover when solvent used is insoluble in, and heavier than, water.
 - (3) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.

Pursuant to 326 IAC 8-3-5(b) (Cold Cleaner Degreaser Operation and Control), the Permittee of a cold cleaning facility shall ensure that the following operating requirements are met:

- (a) Close the cover whenever articles are not being handled in the degreaser.
- (b) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.
- (c) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.

Testing Requirements

Testing is not required at this source because emissions estimates are based upon the "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Associations, July 23, 2001, and Material Safety Data Sheets (MSDS) provided by the Permittee.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-8 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal

rules contain compliance provisions, however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-8-4. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

The compliance determination requirements applicable to this source for the VOC limits (326 IAC 8-1-6) and the HAP limits (326 IAC 2-8) are as follows:

- (a) The VOC and HAP emissions for gel coats, resins, catalysts, and solvents shall be calculated by multiplying the usage of each gel coat, resin, catalyst, and solvent by the emission factor that is appropriate for the monomer content, method of application, and other emission reduction techniques for each gel coat, resin, and catalyst using the emission factors approved by IDEM, OAQ in "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, July 23, 2001, or its updates, as follows:

- (1) VOC/HAP emissions from resins and gelcoats:

$E_R = (F_1 * R * 1 \text{ ton}/2,000 \text{ lbs})$, where:

E_R = VOC/HAP emissions from resins and gelcoats (tons)

F_1 = Emission factor (lbs emitted per ton of resin or gelcoat used) *

R = Total amount of resin and gelcoat used (tons)

- (2) VOC/HAP from catalysts, solvents, and other VOC/HAP:

$E_O = (F_3 * V * K * 1 \text{ ton}/2,000 \text{ lbs})$, where:

E_O = VOC/HAP emissions (tons)

F_3 = Emission factor of 1.0 (in absence of other data, assume all VOC/HAP is emitted)

V = VOC/HAP content (weight percent or lb/gal, from applicable MSDS sheet)

K = Total amount of catalyst, solvents, mold release agents and other VOC/HAP (lbs or gallons)

- (3) Total VOC/HAP emissions in tons = $E_R + E_O$

* Emission factor shall be specific to material type, application method and % styrene content.

The compliance monitoring requirements applicable to this source are as follows:

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters controlling spray booths B1 and B2. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the surface coating booth stacks (V4, V5, V7, and V8) while one or more of the booths are in operation. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

- (b) Monthly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. When there is a noticeable change in overspray emissions, or when evidence of overspray emissions is observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

These monitoring conditions are necessary because the dry filters for the surface coating booths must operate properly to ensure compliance with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes).

Recommendation

The staff recommends to the Commissioner that the FESOP Renewal be approved. This recommendation is based on the following facts and conditions:

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 October 29, 2007.

Conclusion

The operation of this stationary fiberglass reinforced plastic tubing manufacturing facility shall be subject to the conditions of the attached FESOP Renewal No. 141-25464-00062.

**Appendix A: Emissions Calculations
VOC and Particulate From Surface Coating Operations**

Company Name: Polygon Company
 Address: 103 Industrial Park Drive, Walkerton, Indiana 46574
 Permit Number: 141-25464-00062
 Permit Reviewer: ERG/ST
 Date: March 5, 2008

Material	Density (Lb/Gal)	Weight % VOC	Weight % Solids	Usage (gal/unit)	Maximum Throughput (unit/hour)	Flash Off (Fraction)	Pounds VOC per gallon of coating	PTE VOC (ton/yr)	PTE PM/PM10 Before Control (ton/yr)	Transfer Efficiency	Control Efficiency	PTE PM/PM10 After Control (ton/yr)
PL1 - PL7 - Putrusion Lines												
Epoxy A	9.76	1.0%	99.0%	0.06148	10.0	1.00	0.10	0.26	0.00	100%	NA	0.00
Epoxy B	9.97	1.0%	99.0%	0.06018	10.0	1.00	0.10	0.26	0.00	100%	NA	0.00
Vinyl Resin	8.92	40.0%	60.0%	0.06727	10.0	0.20	0.71	0.42	0.00	100%	NA	0.00
Dion (R) Resin with added Styrene	9.05	53.4%	46.6%	0.46940	10.0	0.22	1.06	4.81	0.00	100%	NA	0.00
Peroxide	7.26	95.3%	4.7%	0.00551	10.0	1.00	6.92	1.67	0.00	100%	NA	0.00
S2488	8.88	100%	0.0%	0.01689	10.0	1.00	8.88	6.57	0.00	100%	NA	0.00
S210	8.99	100%	0.0%	0.01947	10.0	1.00	8.99	7.66	0.00	100%	NA	0.00
Total								21.7	0.00			0.00
B1 - Surface Coating Booth												
Polane Enamel	8.76	60.2%	39.8%	0.00046	800	1.00	5.27	8.44	2.79	50%	80%	0.56
Polane Reducer	7.04	100%	0.0%	0.00100	1.0	1.00	7.04	0.03	0.00	100%	80%	0.00
Total								8.47	2.79			0.56
RD1 - RD9 - Resin Dip												
Epoxy A	9.76	1.0%	99.0%	0.51230	9.0	1.00	0.10	1.97	0.00	100%	NA	0.00
Epoxy B	9.97	1.0%	99.0%	0.50150	9.0	1.00	0.10	1.97	0.00	100%	NA	0.00
IPA - Anhydrous	6.58	100%	0.0%	0.08443	9.0	1.00	6.58	21.9	0.00	100%	NA	0.00
Total								25.8	0.00			0.00
B2- Gel Coat Booth												
Gelcoat	9.18	53.2%	46.8%	0.32700	1.0	0.67	3.27	3.14	1.54	75%	80%	0.31
Total								3.14	1.54			0.31
F2 - Filament Winding												
Epoxy A	9.76	1.0%	99.0%	0.92213	1.0	1.00	0.10	0.39	0.00	100%	NA	0.00
Epoxy B	9.97	1.0%	99.0%	0.90271	1.0	1.00	0.10	0.39	0.00	100%	NA	0.00
S2488	8.88	100%	0.0%	0.22523	1.0	1.00	8.88	8.76	0.00	100%	NA	0.00
Total								9.55	0.00			0.00
Source Total (Tons per Year)								68.7	4.33			0.87

Flash Off Fraction is the amount of volatile compounds that are emitted during the composite curing process and is specific to the type of process and the percent monomer (VOC/HAP) content of the materials used. See the publication "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, July 23, 2001 for further details.

METHODOLOGY

Pounds of VOC per Gallon Coating = Density (lb/gal) x Weight % Organics

PTE VOC (lb/hr) = Pounds of VOC per Gallon coating (lb/gal) x Usage (gal/unit) x Maximum Throughput (units/hr)

PTE VOC (lb/day) = Pounds of VOC per Gallon coating (lb/gal) x Usage (gal/unit) x Maximum Throughput (units/hr) x 24 hr/day

PTE VOC (ton/yr) = Pounds of VOC per Gallon coating (lb/gal) x Usage (gal/unit) x Maximum Throughput (units/hr) x 8,760 hr/yr x 1 ton/2,000 lbs

PTE Particulate (ton/yr) = Density (lb/gal) x Weight % Solids x Usage (gal/unit) x Maximum Throughput (units/hour) x (1-Transfer efficiency) x 8,760 hrs/yr x 1 ton/2,000 lbs

**Appendix A: Emission Calculations
HAP Emission Calculations**

Company Name: Polygon Company
 Address: 103 Industrial Park Drive, Walkerton, Indiana 46574
 Permit Number: 141-25464-00062
 Permit Reviewer: ERG/ST
 Date: March 5, 2008

Material	Density (Lb/Gal)	Usage (gal/unit)	Maximum Throughput (unit/hour)	Flash-off Fraction	Weight % Styrene	Weight % Toluene	Weight % Ethyl Benzene	Weight % Xylene	Weight % MIBK
PL1 - PL7 Pultrusion Lines									
Epoxy A	9.76	0.061475	10.0	1.00	0%	0%	0%	0%	0%
Epoxy B	9.97	0.060181	10.0	1.00	0%	0%	0%	0%	0%
Vinyl Resin	8.92	0.067265	10.0	0.20	40.0%	0%	0%	0%	0%
Dion (R) Resin	9.17	0.436050	10.0	0.22	52.0%	0%	0%	0%	0%
Peroxide	7.26	0.005510	10.0	1.00	0%	0%	0%	0%	0%
Styrene	7.53	0.033201	10.0	0.22	100%	0%	0%	0%	0%
S2488	8.88	0.061892	10.0	1.00	0%	0%	0%	0%	0%
S210	8.99	0.019466	10.0	1.00	0%	0%	0%	0%	0%
B1 - Surface Coating Booth									
Polane Enamel	8.76	0.000457	800	1.00	0%	8.0%	0%	4.0%	0%
Polane Reducer	7.04	0.001000	1.0	1.00	0%	15.0%	9.0%	52.0%	24.0%
RD1 - RD9 - Resin Dip									
Epoxy A	9.76	0.512296	9.0	1.00	0%	0%	0%	0%	0%
Epoxy B	9.97	0.501504	9.0	1.00	0%	0%	0%	0%	0%
IPA - Anhydrous	6.58	0.084431	9.0	1.00	0%	0%	0%	0%	0%
B2 - Gel Coat Booth									
Gelcoat	9.18	0.327000	1.0	0.67	53.2%	0%	0%	0%	0%
F2 - Filament Winding									
Epoxy A	9.76	0.922130	1.0	1.00	0%	0%	0%	0%	0%
Epoxy B	9.97	0.902710	1.0	1.00	0%	0%	0%	0%	0%
S2488	8.88	0.225230	1.0	1.00	0%	0%	0%	0%	0%

	Density (Lb/Gal)	Usage (gal/unit)	Maximum Throughput (unit/hour)	Flash-off Fraction	PTE of Styrene (ton/yr)	PTE of Toluene (ton/yr)	PTE of Ethyl Benzene (ton/yr)	PTE of Xylene (ton/yr)	PTE of MIBK (ton/yr)
PL1 - PL7 Pultrusion Lines									
Epoxy A	same as above				0	0	0	0	0
Epoxy B					0	0	0	0	0
Vinyl Resin					2.10	0	0	0	0
Dion (R) Resin					20.0	0	0	0	0
Peroxide					0	0	0	0	0
Styrene					2.41	0	0	0	0
S2488					0	0	0	0	0
S210					0	0	0	0	0
Sub-Totals					24.5	0	0	0	0
B1 - Surface Coating Booth									
Polane Enamel	same as above				0	1.12	0	0.56	0
Polane Reducer					0	0	0	0.02	0.01
Sub-Totals					0	1.13	0	0.58	0.01
RD1 - RD9 - Resin Dip									
Epoxy A	same as above				0	0	0	0	0
Epoxy B					0	0	0	0	0
IPA - Anhydrous					0	0	0	0	0
Sub-Totals					0	0	0	0	0
B2 - Gel Coat Booth									
Gelcoat	same as above				4.69	0	0	0	0
Sub-Totals					4.69	0	0	0	0
F2 - Filament Winding									
Epoxy A	same as above				0	0	0	0	0
Epoxy B					0	0	0	0	0
S2488					0	0	0	0	0
Sub-Totals					0	0	0	0	0
Totals					29.2	1.13	0.00	0.58	0.01

Flash Off percentage is the fractional amount of volatile compounds that are emitted during the composite curing process and is specific to the type of process and the percent monomer (VOC/HAP) content of the materials used. See the publication "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, July 23, 2001 for further details.

METHODOLOGY

PTE HAP (tons/yr) = Density (lb/gal) x Usage (gal/unit) x Maximum Throughput (unit/hr) x Weight % HAP x 8,760 hrs/yr x 1 ton/2,000 lb:

**Appendix A: Emission Calculations
Particulate Emissions**

Company Name: Polygon Company
 Address: 103 Industrial Park Drive, Walkerton, Indiana 46574
 Permit Number: 141-25464-00062
 Permit Reviewer: ERG/ST
 Date: March 5, 2008

1. PTE From Winding and Grinding Operations

Unit ID	Control Device	Outlet Grain Loading (gr/dscf)	Maximum Air Flow Rate (scfm)	Capture / Control Efficiency (%)	PTE of PM/PM10 After Control (lbs/hr)	PTE of PM/PM10 After Control (tons/yr)	PTE of PM/PM10 Before Control (lbs/hr)	326 IAC 6-3-2 Allowable PM Emission Rate (lbs/hr)	PTE of PM/PM10 Before Control (tons/yr)
Pultrusion (P1 - P7)	Dust Collector	0.010	1,000	90%	0.09	0.38	0.86	0.551	3.75
Large Filament Wind Grinding Area	Dust Collector	0.010	1,000	90%	0.09	0.38	0.86	0.551	3.75
US6	Dust Collector	0.010	1,000	90%	0.09	0.38	0.86	1.03	3.75
Total					0.26	1.13	2.57		11.26

Assume all PM emissions equal PM10 emissions.

Methodology

PTE of PM/PM10 After Control (tons/yr) = Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 mins/hr x 1/7000 lb/gr x 8760 hr/yr x 1 ton/2000 lbs

PTE of PM/PM10 Before Control (tons/yr) = PTE of PM/PM10 After Control (tons/yr) / (1-Control Efficiency)

2. Allowable Emissions 326 IAC 6-3-2

The Pultrusion lines (P1 - P7) and Large Filament Wind Grinding Area have allowable emissions of 0.551 lbs/hr because their process weight rate is less than 100 pounds per hour.

For US6, the Allowable PM Emission Rate (lb/hr) = 4.1 x (process weight rate (254 lbs/hr)/2000(lb/ton))^{0.67}

The calculations show that US6 must operate the control device in order to be in compliance with 326 IAC 6-3-2.

The calculations show that the Pultrusion lines (P1 - P7) and Large Filament Wind Grinding Area are in compliance with 326 IAC 6-3-2 before the effect of the controls.

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

Company Name: Polygon Company
 Address: 103 Industrial Park Drive, Walkerton, Indiana 46574
 Permit Number: 141-25464-00062
 Permit Reviewer: ERG/ST
 Date: March 5, 2008

Total Heat Input Capacity MMBtu/hr
10.2

Potential Throughput MMCF/yr
88.0

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	SO ₂	NOx **	VOC	CO	HAPs
Potential to Emit (tons/yr)	1.9	7.6	0.6	100	5.5	84.0	1.89
	0.08	0.33	0.026	4.40	0.24	3.69	0.08

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

**Emission Factors for NOx: Uncontrolled = 100 lb/MMCF

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

Methodology

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

Potential to Emit (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)