

Indiana Department of Environmental Management

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Mitchell E. Daniels, Jr. Governor

Thomas W. Easterly Commissioner

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

TO: Interested Parties / Applicant

DATE: October 25, 2007

RE: Structural Composites / 113-23208-00074

FROM: Nisha Sizemore

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, 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 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) 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, Room 1049, Indianapolis, IN 46204.

For an initial Title V Operating Permit, a petition for administrative review must be submitted to the Office of Environmental Adjudication within thirty (30) days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(b).

For a Title V Operating Permit renewal, a petition for administrative review must be submitted to the Office of Environmental Adjudication within fifteen (15) days from the receipt of this notice provided under IC 13-15-5-3, pursuant to IC 13-15-6-1(a).

The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of an initial Title V operating permit, permit renewal, or modification within sixty (60) days of the end of the forty-five (45) day EPA review period. Such an objection must be based only on issues that were raised with reasonable specificity during the public comment period, unless the petitioner demonstrates that it was impractible to raise such issues, or if the grounds for such objection arose after the comment period.

To petition the U.S. EPA to object to the issuance of a Title V operating permit, contact:

U.S. Environmental Protection Agency 401 M Street Washington, D.C. 20406

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



Indiana Department of Environmental Management

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100 North Senate Avenue MC 61-53 IGCN 1003 Indianapolis, Indiana 46204-2251 (317) 232-8603 (800) 451-6027 www.in.gov/idem

Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

Structural Composites of Indiana, Inc. 1118 Gerber Street Ligonier, Indiana 46767

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

The Permittee must comply with all conditions of this permit. Noncompliance with any provisions of this permit is grounds for enforcement action; permit termination, revocation and reissuance, or modification; or denial of a permit renewal application. Noncompliance with any provision of this permit, except any provision specifically designated as not federally enforceable, constitutes a violation of the Clean Air Act. It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit. An emergency does constitute an affirmative defense in an enforcement action provided the Permittee complies with the applicable requirements set forth in Section B, Emergency Provisions.

This permit is issued in accordance with 326 IAC 2 and 40 CFR Part 70 Appendix A and contains the conditions and provisions specified in 326 IAC 2-7 as required by 42 U.S.C. 7401, et. seq. (Clean Air Act as amended by the 1990 Clean Air Act Amendments), 40 CFR Part 70.6, IC 13-15 and IC 13-17.

Operation Permit No.: T 113-23208-00074			
Original signed by:	Issuance Date: October 25, 2007		
Nisha Sizemore, Chief Permits Branch Office of Air Quality	Expiration Date: October 25, 2012		



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Permit Reviewer:	Kyle	Gregory/MES
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Structural Composites of Indiana, Inc. Ligonier, Indiana

Permit Reviewer: Kyle Gregory/MES

SECTION A

SOURCE SUMMARY

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

A.1 General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]

The Permittee owns and operates a fiber reinforced plastic composites manufacturing source.

Source Address: 1118 Gerber Street, Ligonier, Indiana 46767 Mailing Address: 1118 Gerber Street, Ligonier, Indiana 46767

General Source Phone Number: 260-894-4083

SIC Code: 3089 County Location: Noble

Source Location Status: Attainment for all criteria pollutants
Source Status: Part 70 Operating Permit Program

Minor Source, under PSD

Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]

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

- (a) One (1) gel and lamination area, identified as GL1, constructed in 2000, with three (3) exhaust fans with a flow rate of 10,000 cubic feet per minute consisting of the following:
 - (1) One (1) gel coating process, identified as G1, equipped with air-assisted airless spray guns, utilizing dry filters for particulate control, approximate capacity: 184 pounds of resin per hour. This is an open molding process under 40 CFR 63, Subpart WWWW.
 - (2) One (1) lamination process, identified as L1, equipped with flow coater equipment, utilizing dry filters for particulate control, approximate capacity: 720 pounds of resin per hour. This is an open molding process under 40 CFR 63, Subpart WWWW.
- (b) One (1) mold preparation and final finish area, identified as PF1, constructed in 2000, equipped with spray applicators, utilizing dry filters for particulate control. This is an open molding process under 40 CFR 63, Subpart WWWW.
- (c) One (1) gelcoat station, identified as G2, constructed in 2003, equipped with air-assisted airless spray applicators, utilizing dry filters for particulate control, exhausting to Stack SV-4, capacity: 44.43 pounds of gelcoat per hour. This is an open molding process under 40 CFR 63, Subpart WWWW.
- (d) One (1) gelcoat station, identified as G3, constructed in 2003, equipped with air-assisted airless spray applicators, utilizing dry filters for particulate control, exhausting to Stack SV-5, capacity: 6.92 pounds of gelcoat per hour. This is an open molding process under 40 CFR 63, Subpart WWWW.
- (e) One (1) lamination station, identified as L2, constructed in 2003, equipped with flow coaters, utilizing dry filters for particulate control, exhausting to Stack SV-6, capacity: 199.63 pounds of resin per hour. This is an open molding process under 40 CFR 63, Subpart WWWW.

- (f) One (1) closed molding process, identified as CM1, constructed in 2003, capacity: 47.09 pounds of resin per hour. This is a closed molding process under 40 CFR 63, Subpart WWWW.
- (g) One (1) grinding booth, identified as GR1, constructed in 2000, consisting of grinders, diamond cutters, and various hand tools, utilizing dry filters for particulate control, exhausting to Stack GRD 08-11, capacity: 1,210 pounds per hour.
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]

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

(e) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]

A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

This stationary source is required to have a Part 70 Permit by 326 IAC 2-7-2 (Applicability) because:

- (a) It is a major source, as defined in 326 IAC 2-7-1(22);
- (b) It is a source in a source category designated by the United States Environmental Protection Agency (U.S. EPA) under 40 CFR 70.3 (Part 70 Applicability).

Permit Reviewer: Kyle Gregory/MES

SECTION B

GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-7-1]

Terms in this permit shall have the definition assigned to such terms in the referenced regulation. In the absence of definitions in the referenced regulation, the applicable definitions found in the statutes or regulations (IC 13-11, 326 IAC 1-2 and 326 IAC 2-7) shall prevail.

B.2 Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5] [326 IAC 2-7-4(a)(1)(D)] [IC 13-15-3-6(a)]

- (a) This permit, T 113-23208-00074, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

B.3 Term of Conditions [326 IAC 2-1.1-9.5]

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

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

B.4 Enforceability [326 IAC 2-7-7]

Unless otherwise stated, all terms and conditions in this permit, including any provisions designed to limit the source's potential to emit, are enforceable by IDEM, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.

B.5 Severability [326 IAC 2-7-5(5)]

The provisions of this permit are severable; a determination that any portion of this permit is invalid shall not affect the validity of the remainder of the permit.

B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]

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

B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]

- (a) The Permittee shall furnish to IDEM, OAQ, within a reasonable time, any information that IDEM, OAQ may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34). Upon request, the Permittee shall also furnish to IDEM, OAQ copies of records required to be kept by this permit.
- (b) For information furnished by the Permittee to IDEM, OAQ, the Permittee may include a claim of confidentiality in accordance with 326 IAC 17.1. When furnishing copies of requested records directly to U.S. EPA, the Permittee may assert a claim of confidentiality in accordance with 40 CFR 2, Subpart B.

B.8 Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]

(a) Where specifically designated by this permit or required by an applicable requirement, any

application form, report, or compliance certification submitted shall contain certification by the "responsible official" 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) The "responsible official" is defined at 326 IAC 2-7-1(34).

B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]

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

and

United States Environmental Protection Agency, Region V Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J) 77 West Jackson Boulevard Chicago, Illinois 60604-3590

- (b) The annual compliance certification report required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (c) The annual compliance certification report shall include the following:
 - (1) The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - (2) The compliance status;
 - (3) Whether compliance was continuous or intermittent;
 - (4) The methods used for determining the compliance status of the source, currently and over the reporting period consistent with 326 IAC 2-7-5(3); and
 - (5) Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

The submittal by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

B.10 Preventive Maintenance Plan [326 IAC 2-7-5(1),(3) and (13)] [326 IAC 2-7-6(1) and (6)] [326 IAC 1-6-3]

- (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 the "responsible official" as defined by 326 IAC 2-7-1(34).
- (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.11 Emergency Provisions [326 IAC 2-7-16]

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:
 - (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
 - (2) The permitted facility was at the time being properly operated;
 - (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
 - (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ 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 2-7-5(3)(C)(ii) and must contain the following:

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

The notification which shall be submitted by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (6) The Permittee immediately took all reasonable steps to correct the emergency.
- (c) In any enforcement proceeding, the Permittee seeking to establish the occurrence of an emergency has the burden of proof.
- (d) This emergency provision supersedes 326 IAC 1-6 (Malfunctions). This permit condition is in addition to any emergency or upset provision contained in any applicable requirement.
- (e) The Permittee seeking to establish the occurrence of an emergency shall make records available upon request to ensure that failure to implement a PMP did not cause or contribute to an exceedance of any limitations on emissions. However, IDEM, OAQ may require that the Preventive Maintenance Plans required under 326 IAC 2-7-4(c)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.
- (h) The Permittee shall include all emergencies in the Quarterly Deviation and Compliance Monitoring Report.

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

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compli-

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

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

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

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

(a) All terms and conditions of permits established prior to T 113-23208-00074 and issued pursuant to permitting programs approved into the state implementation plan have been either:

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- (1) incorporated as originally stated,
- (2) revised under 326 IAC 2-7-10.5, or
- (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

B.14 Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]

The Permittee's right to operate this source terminates with the expiration of this permit unless a timely and complete renewal application is submitted at least nine (9) months prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-7-3 and 326 IAC 2-7-4(a).

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(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 the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable

requirement. [326 IAC 2-7-9(a)(3)]

- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

B.17 Permit Renewal [326 IAC 2-7-3] [326 IAC 2-7-4] [326 IAC 2-7-8(e)]

(a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-7-4. Such information shall be included in the application for each emission unit at this source, except those emission units included on the trivial or insignificant activities list contained in 326 IAC 2-7-1(21) and 326 IAC 2-7-1(40). The renewal application does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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 2-7 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 Modification [326 IAC 2-7-11] [326 IAC 2-7-12] [40 CFR 72]

- (a) Permit amendments and modifications are governed by the requirements of 326 IAC 2-7-11 or 326 IAC 2-7-12 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management 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 the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]
- B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]
 - (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
 - (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

B.20 Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]

- (a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions):
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management 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 2-7-20(b),(c),

or (e). The Permittee shall make such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).

- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) Emission Trades [326 IAC 2-7-20(c)]

 The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]

 The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

B.21 Source Modification Requirement [326 IAC 2-7-10.5]

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.

B.22 Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2] [IC 13-30-3-1] [IC 13-17-3-2]

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or

operations regulated or required under this permit;

- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]

- (a) The Permittee must comply with the requirements of 326 IAC 2-7-11 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

Indiana Department of Environmental Management 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 the "responsible official" as defined by 326 IAC 2-7-1(34).

(c) The Permittee may implement administrative amendment changes addressed in the request for an administrative amendment immediately upon submittal of the request. [326 IAC 2-7-11(c)(3)]

B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]

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

B.25 Credible Evidence [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [62 FR 8314] [326 IAC 1-1-6]

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

SECTION C

SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards [326 IAC 2-7-5(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 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.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

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

The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.

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

- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
- (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:
 - (1) When the amount of affected asbestos containing material increases or decreases

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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.
- The Permittee shall ensure that the notice is postmarked or delivered according to the (c) guidelines set forth in 326 IAC 14-10-3(2).
- The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3). (d)

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 the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-7-6(1)]

C.7 Performance Testing [326 IAC 3-6]

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 the "responsible official" as defined by 326 IAC 2-7-1(34).

- (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 the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.8 Compliance Requirements [326 IAC 2-1.1-11]

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

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

C.9 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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 the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63] C.10

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.

Corrective Actions and Response Steps [326 IAC 2-7-5] [326 IAC 2-7-6]

Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans: Submission):

- The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent (a) with safe operating procedures on May 23, 2002.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.12 Risk Management Plan [326 IAC 2-7-5(12)] [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.

Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6] C.13

- Upon detecting an excursion or exceedance, the Permittee shall restore operation of the (a) 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;
 - inspection of the control device, associated capture system, and the process. (3)
- Failure to take reasonable response steps shall be considered a deviation from the permit. (d)
- (e) The Permittee shall maintain the following records:

- (1) monitoring data;
- (2) monitor performance data, if applicable; and
- (3) corrective actions taken.

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

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall 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 the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)] [326 IAC 2-7-5(7)] [326 IAC 2-7-19(c)] [326 IAC 2-6]

- (a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2004 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

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

The emission statement does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

(b) The emission statement 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.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6] [326 IAC 2-2]

- (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) If there is a "project" (as defined in 326 IAC 2-2-1(qq)) affecting an existing emissions unit other than a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee)) and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr)), the Permittee shall comply with following:
 - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions:
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2) (A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
 - (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

C.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [326 IAC 2-2]

(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 the "responsible official" as defined by 326 IAC 2-7-1(34).

(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 the "responsible official" as defined by 326 IAC 2-7-1(34).
- (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.
- (f) The Permittee shall make the information required to be documented and maintained in accordance with (c) in Section C General Record Keeping Requirements available for review upon a request for inspection by IDEM, OAQ. The general public may request this information from the IDEM, OAQ under 326 IAC 17.1.

Stratospheric Ozone Protection

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

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

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Molding Operations

- (a) One (1) gel and lamination area, identified as GL1, constructed in 2000, with three (3) exhaust fans with a flow rate of 10,000 cubic feet per minute consisting of the following:
 - (1) One (1) gel coating process, identified as G1, equipped with air-assisted airless spray guns, utilizing dry filters for particulate control, approximate capacity: 184 pounds of resin per hour. This is an open molding process under 40 CFR 63, Subpart WWWW.
 - One (1) lamination process, identified as L1, equipped with flow coater equipment, utilizing dry filters for particulate control, approximate capacity: 720 pounds of resin per hour. This is an open molding process under 40 CFR 63, Subpart WWWW.
- (b) One (1) mold preparation and final finish area, identified as PF1, constructed in 2000, equipped with spray applicators, utilizing dry filters for particulate control. This is an open molding process under 40 CFR 63, Subpart WWWW.
- (c) One (1) gelcoat station, identified as G2, constructed in 2003, equipped with air-assisted airless spray applicators, utilizing dry filters for particulate control, exhausting to Stack SV-4, capacity: 44.43 pounds of gelcoat per hour. This is an open molding process under 40 CFR 63, Subpart WWWW.
- (d) One (1) gelcoat station, identified as G3, constructed in 2003, equipped with air-assisted airless spray applicators, utilizing dry filters for particulate control, exhausting to Stack SV-5, capacity: 6.92 pounds of gelcoat per hour. This is an open molding process under 40 CFR 63, Subpart WWWW.
- (e) One (1) lamination station, identified as L2, constructed in 2003, equipped with flow coaters, utilizing dry filters for particulate control, exhausting to Stack SV-6, capacity: 199.63 pounds of resin per hour. This is an open molding process under 40 CFR 63, Subpart WWWW.
- (f) One (1) closed molding process, identified as CM1, constructed in 2003, capacity: 47.09 pounds of resin per hour. This is a closed molding process under 40 CFR 63, Subpart WWWW.

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

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

D.1.1 PSD Minor Limit [326 IAC 2-2]

The total VOC usage from the reinforced plastics composites fabricating manufacturing processes (G1, L1, PF1, G2, G3, L2 and CM1) shall be less than two hundred forty-nine (249) tons per twelve (12) consecutive month period, with compliance determined at the end of each month. This limit is required to limit the source-wide potential to emit of VOC to less than 250 tons per twelve (12) consecutive month period. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

D.1.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

Pursuant to MSOP 113-11385-00074, issued on March 3, 2000, and 326 IAC 8-1-6, BACT, operating conditions for this customized fiberglass part manufacturing source shall be the following:

(a) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit (PTE) volatile organic compounds (VOC) from use of such resins

and gel coats only shall be less than one hundred (100) tons per twelve (12) consecutive month period.

(b) The HAP monomer content of resins and gel coats used shall be limited to the following or their equivalent on an emissions mass basis:

Type of Gel Coat or Resin	Content, % by weight
Production ¹ Gel Coat	37
Tooling Gel ² Coat	38
Production Resin	35
Tooling Resin	43

¹Production refers to the manufacture of parts

HAP monomer contents shall be calculated on a neat basis, which means excluding any filler. Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis.

(c) Non-atomized spray application technology shall be used to apply unfilled production resins. Non-atomized spray application technology includes flow coaters, flow choppers, pressure-fed rollers, or other non-spray applications of a design and specifications approved by IDEM, OAQ.

If it is not possible to apply a portion of unfilled resins with non-atomized spray application technology, equivalent emissions reductions must be obtained via use of other emission reduction techniques. Examples of other emission reduction techniques include, but are not limited to, lower HAP monomer content resins and gel coats, closed molding, vapor suppression, vacuum bagging/bonding, or installing a control device.

(d) Optimized spray techniques according to a manner approved by IDEM, OAQ shall be used for gel coats and filled resins (where fillers are required for corrosion or fire retardant purposes) at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAQ, to be equivalent to the spray applicators listed above.

HVLP spray is the technology used to apply material to substrate by means of application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (e) The listed work practices shall be followed:
 - (1) To the extent possible, a non-VOC, non-HAP solvent shall be used for cleanup.
 - (2) For VOC- and/or HAP-containing materials:
 - Cleanup solvent containers shall be used to transport solvent from drums to work.
 - (ii) Cleanup stations shall be closed containers having soft-gasketed, spring-loaded closures and shall be kept completely closed when not in use.
 - (iii) Cleanup rags saturated with solvent shall be stored, transported, and

²Tooling refers to the manufacture of the molds from which parts are manufactured.

disposed of in containers that are closed tightly.

- (iv) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
- (v) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (3) All material storage containers shall be kept covered when not in use.

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

Pursuant to 326 IAC 6-3-2(d), particulate from the following reinforced plastics composites fabricating manufacturing processes (G1, L1, PF1, G2, G3, and L2), shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

D.1.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for the following reinforced plastics composites fabricating manufacturing processes (G1, L1, PF1, G2, G3, and L2) and their control devices.

Compliance Determination Requirements

D.1.5 Volatile Organic Compounds (VOC) [326 IAC 8-1-4] [326 IAC 8-1-2(a)]

Compliance with the VOC and VHAP content and usage limitations contained in Conditions D.1.1 and D.1.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

- (a) Compliance with Condition D.1.2 shall be determined based upon the following criteria:
 - (1) Monthly usage by weight, content of monomer that is HAP, method of application, and other emission reduction techniques used for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the HAP monomer content, method of application, and other emission reduction techniques used for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAQ.
 - (2) Emission factors shall be taken from the following reference approved by IDEM, OAQ: American Composites Manufacturers Association (ACMA) Emission Models for the Reinforced Plastics Industries, Unified Emission Factors dated 7/23/2001, or its updates.
- (b) Gel coats or resins with HAP monomer contents lower than those specified in the table in Condition D.1.2(b) or additional emission reduction techniques approved by IDEM, OAQ may be used to offset the use of gel coats or resins with HAP monomer contents higher than those specified in the table in this subsection. This is allowed to meet the HAP monomer content limits for resins and gel coats and shall be calculated on an equivalent emissions mass basis as shown below:

(Emissions from higher than compliant HAP monomer content resin or gel coat) - (Emissions from compliant resin or gel coat) ≤ (Emissions from compliant resin or gel coat) - (Emissions from lower than compliant HAP monomer content resin or gel coat and/or using other emission reduction techniques).

Where: Emissions, lb or ton = M (mass of resin or gel coat used, lb or ton) * EF (HAP monomer emission factor for resin or gel coat used, %);

EF, HAP monomer emission factor = emission factor, expressed as pounds (lbs) HAP emitted per ton of resin/gel coat processed, which is indicated by the HAP monomer content, method of application, and other emission reduction techniques for each gel coat and resin used.

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

D.1.7 Monitoring [40 CFR 64, Compliance Assurance Monitoring (CAM)]

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the reinforced plastics composites fabricating manufacturing processes (G1, L1, PF1, G2, G3, and L2) stacks (GB 01-03, LB 04-07, GRD 08-11, MR 12-13, SV-4, SV-5,SV-6) 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 stacks 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.

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

D.1.8 Record Keeping Requirements

- (a) To document compliance with Conditions D.1.1 and D.1.2, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and the VOC emission limits established in Condition D.1.1 and D.1.2. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
 - (1) The amount and VOC content of each resin, gelcoat and solvent used.
 - (2) The amount of coating material and solvent less water used on monthly basis.
 - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
 - (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents.
 - (3) Method of application and other emission reduction techniques for each resin and gel

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coat used;

- (4) The volume weighted VOC content of the coatings used for each month:
- (5) The cleanup solvent usage for each month;
- The total VOC usage and volatile organic HAP usage for each month; and (6)
- (7) The weight of VOCs and volatile organic HAPs emitted for each compliance period.
- (b) To document compliance with Conditions D.1.13, the Permittee shall maintain the following training records:
 - A copy of the current training program. (1)
 - (2) A list of all current personnel, by name, that are required to be trained and the dates they were trained and the date of the most recent refresher training. Records of prior training programs and former personnel are not required to be maintained.
- To document compliance with Condition D.1.6, the Permittee shall maintain a log of weekly (c) overspray observations, and daily and monthly inspections.
- All records shall be maintained in accordance with Section C General Record Keeping (d) Requirements, of this permit.

Reporting Requirements

A guarterly summary of the information to document compliance with Condition 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 the "responsible official" as defined by 326 IAC 2-7-1(34).

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

D.1.10 General Provisions Relating to NESHAP WWWW [326 IAC 20-1] [40 CFR Part 63, Subpart A] Pursuant to 40 CFR 63.5925, the Permittee shall comply with the provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated by reference as 326 IAC 20-1-1, as specified in Table 15 of 40 CFR Part 63, Subpart WWWW in accordance with schedule in 40 CFR 63, Subpart WWWW.

D.1.11 NESHAP WWWW Requirements [40 CFR Part 63, Subpart WWWW] [326 IAC 20-56]

Pursuant to CFR Part 63, Subpart WWWW, the Permittee shall comply with the provisions of 40 CFR Part 63.5780, with a compliance date of April 21, 2006, for the one (1) gel and lamination area, the one (1) mold preparation and final finish area, the two (2) gelcoat stations, the one (1) lamination station, the one (1) closed molding process, and equipment cleaning, cleaning of materials used in reinforced plastic composites manufacture and HAP-containing material storage, as specified as follows:

§ 63.5780 What is the purpose of this subpart?

This subpart establishes national emissions standards for hazardous air pollutants (NESHAP) for reinforced plastic composites production. This subpart also establishes requirements to demonstrate initial and continuous compliance with the hazardous air pollutants (HAP) emissions standards.

(a) You are subject to this subpart if you own or operate a reinforced plastic composites production facility that is located at a major source of HAP emissions. Reinforced plastic composites production is limited to operations in which reinforced and/or nonreinforced plastic composites or plastic molding compounds are manufactured using thermoset resins and/or gel coats that contain styrene to produce plastic composites. The resins and gel coats may also contain materials designed to enhance the chemical, physical, and/or thermal properties of the product. Reinforced plastic composites production also includes cleaning, mixing, HAP-containing materials storage, and repair operations associated with the production of plastic composites.

§ 63.5790 What parts of my plant does this subpart cover?

- (a) This subpart applies to each new or existing affected source at reinforced plastic composites production facilities.
- (b) The affected source consists of all parts of your facility engaged in the following operations: Open molding, closed molding, centrifugal casting, continuous lamination, continuous casting, polymer casting, pultrusion, sheet molding compound (SMC) manufacturing, bulk molding compound (BMC) manufacturing, mixing, cleaning of equipment used in reinforced plastic composites manufacture, HAP-containing materials storage, and repair operations on parts you also manufacture.
- (c) The following operations are specifically excluded from any requirements in this subpart: application of mold sealing and release agents; mold stripping and cleaning; repair of parts that you did not manufacture, including non-routine manufacturing of parts; personal activities that are not part of the manufacturing operations (such as hobby shops on military bases); prepreg materials as defined in §63.5935; non-gel coat surface coatings; application of putties, polyputties, and adhesives; repair or production materials that do not contain resin or gel coat; research and development operations as defined in section 112(c)(7) of the CAA; polymer casting; and closed molding operations (except for compression/injection molding). Note that the exclusion of certain operations from any requirements applies only to operations specifically listed in this paragraph. The requirements for any co-located operations still apply.

§ 63.5795 How do I know if my reinforced plastic composites production facility is a new affected source or an existing affected source?

(b) For the purposes of this subpart, an existing affected source is any affected source that is not a new affected source.

Calculating Organic HAP Emissions Factors for Open Molding and Centrifugal Casting

§ 63.5796 What are the organic HAP emissions factor equations in Table 1 to this subpart, and how are they used in this subpart?

Emissions factors are used in this subpart to determine compliance with certain organic HAP emissions limits in Tables 3 and 5 to this subpart. You may use the equations in Table 1 to this subpart to calculate your emissions factors. Equations are available for each open molding operation and centrifugal casting operation and have units of pounds of organic HAP emitted per ton (lb/ton) of resin or gel coat applied. These equations are intended to provide a method for you to demonstrate compliance without the need to conduct for a HAP emissions test. In lieu of these equations, you can elect to use site-specific organic HAP emissions factors to demonstrate compliance provided your site-specific organic HAP emissions factors are incorporated in the facility's air emissions permit and are based on actual facility HAP emissions test data. You may also use the organic HAP emissions factors calculated using the equations in Table 1 to this subpart, combined with resin and gel coat use data, to calculate your organic HAP emissions.

§ 63.5797 How do I determine the organic HAP content of my resins and gel coats?

In order to determine the organic HAP content of resins and gel coats, you may rely on information provided by the material manufacturer, such as manufacturer's formulation data and material safety data

sheets (MSDS), using the procedures specified in paragraphs (a) through (c) of this section, as applicable.

- (a) Include in the organic HAP total each organic HAP that is present at 0.1 percent by mass or more for Occupational Safety and Health Administration-defined carcinogens, as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other organic HAP compounds.
- (b) If the organic HAP content is provided by the material supplier or manufacturer as a range, you must use the upper limit of the range for determining compliance. If a separate measurement of the total organic HAP content, such as an analysis of the material by EPA Method 311 of appendix A to 40 CFR part 63, exceeds the upper limit of the range of the total organic HAP content provided by the material supplier or manufacturer, then you must use the measured organic HAP content to determine compliance.
- (c) If the organic HAP content is provided as a single value, you may use that value to determine compliance. If a separate measurement of the total organic HAP content is made and is less than 2 percentage points higher than the value for total organic HAP content provided by the material supplier or manufacturer, then you still may use the provided value to demonstrate compliance. If the measured total organic HAP content exceeds the provided value by 2 percentage points or more, then you must use the measured organic HAP content to determine compliance.

§ 63.5798 What if I want to use, or I manufacture, an application technology (new or existing) whose organic HAP emissions characteristics are not represented by the equations in Table 1 to this subpart?

If you wish to use a resin or gel coat application technology (new or existing), whose emission characteristics are not represented by the equations in Table 1 to this subpart, you may use the procedures in paragraphs (a) or (b) of this section to establish an organic HAP emissions factor. This organic HAP emissions factor may then be used to determine compliance with the emission limits in this subpart, and to calculate facility organic HAP emissions.

- (a) Perform an organic HAP emissions test to determine a site-specific organic HAP emissions factor using the test procedures in §63.5850.
- (b) Submit a petition to the Administrator for administrative review of this subpart. This petition must contain a description of the resin or gel coat application technology and supporting organic HAP emissions test data obtained using EPA test methods or their equivalent. The emission test data should be obtained using a range of resin or gel coat HAP contents to demonstrate the effectiveness of the technology under the different conditions, and to demonstrate that the technology will be effective at different sites. We will review the submitted data, and, if appropriate, update the equations in Table 1 to this subpart.

Compliance Dates and Standards

§ 63.5800 When do I have to comply with this subpart?

You must comply with the standards in this subpart by the dates specified in Table 2 to this subpart. Facilities meeting an organic HAP emissions standard based on a 12-month rolling average must begin collecting data on the compliance date in order to demonstrate compliance.

§ 63.5805 What standards must I meet to comply with this subpart?

You must meet the requirements of paragraphs (a) through (h) of this section that apply to you. You may elect to comply using any options to meet the standards described in §§63.5810 through 63.5830. Use the procedures in §63.5799 to determine if you meet or exceed the 100 tpy threshold.

(b) All operations at existing facilities not listed in paragraph (a) of this section must meet the organic HAP emissions limits in Table 3 to this subpart and the work practice standards in Table 4 to this subpart that apply, regardless of the quantity of HAP emitted.

(g) If you have repair operations subject to this subpart as defined in §63.5785, these repair operations must meet the requirements in Tables 3 and 4 to this subpart and are not required to meet the 95 percent organic HAP emissions reduction requirements in paragraph (a)(1) or (d) of this section.

Options for Meeting Standards

§ 63.5810 What are my options for meeting the standards for open molding and centrifugal casting operations at new and existing sources?

You must use one of the following methods in paragraphs (a) through (d) of this section to meet the standards for open molding or centrifugal casting operations in Table 3 or 5 to this subpart. You may use any control method that reduces organic HAP emissions, including reducing resin and gel coat organic HAP content, changing to nonatomized mechanical application, using covered curing techniques, and routing part or all of your emissions to an add-on control. You may use different compliance options for the different operations listed in Table 3 or 5 to this subpart. The necessary calculations must be completed within 30 days after the end of each month. You may switch between the compliance options in paragraphs (a) through (d) of this section. When you change to an option based on a 12-month rolling average, you must base the average on the previous 12 months of data calculated using the compliance option you are changing to, unless you were previously using an option that did not require you to maintain records of resin and gel coat use. In this case, you must immediately begin collecting resin and gel coat use data and demonstrate compliance 12 months after changing options.

- (a) Demonstrate that an individual resin or gel coat, as applied, meets the applicable emission limit in Table 3 or 5 to this subpart.
- (1) Calculate your actual organic HAP emissions factor for each different process stream within each operation type. A process stream is defined as each individual combination of resin or gel coat, application technique, and control technique. Process streams within operations types are considered different from each other if any of the following four characteristics vary: the neat resin plus or neat gel coat plus organic HAP content, the gel coat type, the application technique, or the control technique. You must calculate organic HAP emissions factors for each different process stream by using the appropriate equations in Table 1 to this subpart for open molding and for centrifugal casting, or site-specific organic HAP emissions factors discussed in §63.5796. The emission factor calculation should include any and all emission reduction techniques used including any add-on controls. If you are using vapor suppressants to reduce HAP emissions, you must determine the vapor suppressant effectiveness (VSE) by conducting testing according to the procedures specified in appendix A to subpart WWWW of 40 CFR part 63. If you are using an add-on control device to reduce HAP emissions, you must determine the add-on control factor by conducting capture and control efficiency testing using the procedures specified in §63.5850. The organic HAP emissions factor calculated from the equations in Table 1 to this subpart, or a site-specific emissions factor, is multiplied by the add-on control factor to calculate the organic HAP emissions factor after control. Use Equation 1 of this section to calculate the add-on control factor used in the organic HAP emissions factor equations.

Add-on Control Factor =
$$1 - \frac{\% \text{ Control Efficiency}}{100}$$
 (Eq. 1)

Where:

Percent Control Efficiency=a value calculated from organic HAP emissions test measurements made according to the requirements of §63.5850 to this subpart.

(2) If the calculated emission factor is less than or equal to the appropriate emission limit, you have demonstrated that this process stream complies with the emission limit in Table 3 to this subpart. It is not necessary that all your process streams, considered individually, demonstrate compliance to use this option for some process streams. However, for any individual resin or gel coat you use, if any of the process streams that include that resin or gel coat are to be used in any averaging calculations described in paragraphs (b) through (d) of this section, then all process streams using that individual resin or gel coat

must be included in the averaging calculations.

- (b) Demonstrate that, on average, you meet the individual organic HAP emissions limits for each combination of operation type and resin application method or gel coat type. Demonstrate that on average you meet the individual organic HAP emissions limits for each unique combination of operation type and resin application method or gel coat type shown in Table 3 to this subpart that applies to you.
- (1)(i) Group the process streams described in paragraph (a) to this section by operation type and resin application method or gel coat type listed in Table 3 to this subpart and then calculate a weighted average emission factor based on the amounts of each individual resin or gel coat used for the last 12 months. To do this, sum the product of each individual organic HAP emissions factor calculated in paragraph (a)(1) of this section and the amount of neat resin plus and neat gel coat plus usage that corresponds to the individual factors and divide the numerator by the total amount of neat resin plus and neat gel coat plus used in that operation type as shown in Equation 2 of this section.

Average organic
$$\sum_{i=1}^{n} (Actual \text{ Process Stream } EF_i * Material_i)$$

 $Factor$ $\sum_{i=1}^{n} Material_i$ (Eq. 2)

Where:

Actual Process Stream EF;=actual organic HAP emissions factor for process stream i, lbs/ton;

Material_i=neat resin plus or neat gel coat plus used during the last 12 calendar months for process stream i, tons;

n=number of process streams where you calculated an organic HAP emissions factor.

- (ii) You may, but are not required to, include process streams where you have demonstrated compliance as described in paragraph (a) of this section, subject to the limitations described in paragraph (a)(2) of this section, and you are not required to and should not include process streams for which you will demonstrate compliance using the procedures in paragraph (d) of this section.
- (2) Compare each organic HAP emissions factor calculated in paragraph (b)(1) of this section with its corresponding organic HAP emissions limit in Table 3 or 5 to this subpart. If all emissions factors are equal to or less than their corresponding emission limits, then you are in compliance.
- (c) Demonstrate compliance with a weighted average emission limit.

Demonstrate each month that you meet each weighted average of the organic HAP emissions limits in Table 3 or 5 to this subpart that apply to you. When using this option, you must demonstrate compliance with the weighted average organic HAP emissions limit for all your open molding operations, and then separately demonstrate compliance with the weighted average organic HAP emissions limit for all your centrifugal casting operations. Open molding operations and centrifugal casting operations may not be averaged with each other.

(1) Each month calculate the weighted average organic HAP emissions limit for all open molding operations and the weighted average organic HAP emissions limit for all centrifugal casting operations for your facility for the last 12-month period to determine the organic HAP emissions limit you must meet. To do this, multiply the individual organic HAP emissions limits in Table 3 or 5 to this subpart for each open molding (centrifugal casting) operation type by the amount of neat resin plus or neat gel coat plus used in the last 12 months for each open molding (centrifugal casting) operation type, sum these results, and then divide this sum by the total amount of neat resin plus and neat gel coat plus used in open molding (centrifugal casting) over the last 12 months as shown in Equation 3 of this section.

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Weighted Average Emission Limit=
$$\frac{\sum_{i=1}^{n} (EL_{i} * Material_{i})}{\sum_{i=1}^{n} Material_{i}}$$
 (Eq. 3)

Where:

EL_i=organic HAP emissions limit for operation type i, lbs/ton from Tables 3 or 5 to this subpart;

Material_i=neat resin plus or neat gel coat plus used during the last 12-month period for operation type i, tons;

n=number of operations.

(2) Each month calculate your weighted average organic HAP emissions factor for open molding and centrifugal casting. To do this, multiply your actual open molding (centrifugal casting) operation organic HAP emissions factors calculated in paragraph (b)(1) of this section and the amount of neat resin plus and neat gel coat plus used in each open molding (centrifugal casting) operation type, sum the results, and divide this sum by the total amount of neat resin plus and neat gel coat plus used in open molding (centrifugal casting) operations as shown in Equation 4 of this section.

Actual Weighted

Average organic

HAP Emissions

Factor

$$\frac{\sum_{i=1}^{n} (Actual \ Operation \ EF_i * Material_i)}{\sum_{i=1}^{n} Material_i} \qquad (Eq. 4)$$

Where:

Actual Individual EF_i=Actual organic HAP emissions factor for operation type i, lbs/ton;

Material_i=neat resin plus or neat gel coat plus used during the last 12 calendar months for operation type i, tons;

n=number of operations.

- (3) Compare the values calculated in paragraphs (c)(1) and (2) of this section. If each 12-month rolling average organic HAP emissions factor is less than or equal to the corresponding 12-month rolling average organic HAP emissions limit, then you are in compliance.
- (d) Meet the organic HAP emissions limit for one application method and use the same resin(s) for all application methods of that resin type. This option is limited to resins of the same type. The resin types for which this option may be used are noncorrosion-resistant, corrosion-resistant and/or high strength, and tooling.
- (1) For any combination of manual resin application, mechanical resin application, filament application, or centrifugal casting, you may elect to meet the organic HAP emissions limit for any one of these application methods and use the same resin in all of the resin application methods listed in this paragraph (d)(1). Table 7 to this subpart presents the possible combinations based on a facility selecting the application process that results in the highest allowable organic HAP content resin. If the resin organic HAP content is below the applicable value shown in Table 7 to this subpart, the resin is in compliance.
- (2) You may also use a weighted average organic HAP content for each application method described in paragraph (d)(1) of this section. Calculate the weighted average organic HAP content monthly. Use Equation 2 in paragraph (b)(1) of this section except substitute organic HAP content for organic HAP

emissions factor. You are in compliance if the weighted average organic HAP content based on the last 12 months of resin use is less than or equal to the applicable organic HAP contents in Table 7 to this subpart.

- (3) You may simultaneously use the averaging provisions in paragraph (b) or (c) of this section to demonstrate compliance for any operations and/or resins you do not include in your compliance demonstrations in paragraphs (d)(1) and (2) of this section. However, any resins for which you claim compliance under the option in paragraphs (d)(1) and (2) of this section may not be included in any of the averaging calculations described in paragraph (b) or (c) of this section.
- (4) You do not have to keep records of resin use for any of the individual resins where you demonstrate compliance under the option in paragraph (d)(1) of this section unless you elect to include that resin in the averaging calculations described in paragraph (d)(2) of this section.

General Compliance Requirements

§ 63.5835 What are my general requirements for complying with this subpart?

- (a) You must be in compliance at all times with the work practice standards in Table 4 to this subpart, as well as the organic HAP emissions limits in Tables 3, or 5, or the organic HAP content limits in Table 7 to this subpart, as applicable, that you are meeting without the use of add-on controls.
- (c) You must always operate and maintain your affected source, including air pollution control and monitoring equipment, according to the provisions in §63.6(e)(1)(i).

Testing and Initial Compliance Requirements

§ 63.5840 By what date must I conduct a performance test or other initial compliance demonstration?

You must conduct performance tests, performance evaluations, design evaluations, capture efficiency testing, and other initial compliance demonstrations by the compliance date specified in Table 2 to this subpart, with three exceptions. Open molding and centrifugal casting operations that elect to meet an organic HAP emissions limit on a 12-month rolling average must initiate collection of the required data on the compliance date, and demonstrate compliance 1 year after the compliance date. New sources that use add-on controls to initially meet compliance must demonstrate compliance within 180 days after their compliance date.

§ 63.5860 How do I demonstrate initial compliance with the standards?

(a) You demonstrate initial compliance with each organic HAP emissions standard in paragraphs (a) through (h) of §63.5805 that applies to you by using the procedures shown in Tables 8 and 9 to this subpart.

Continuous Compliance Requirements

§ 63.5895 How do I monitor and collect data to demonstrate continuous compliance?

- (c) You must collect and keep records of resin and gel coat use, organic HAP content, and operation where the resin is used if you are meeting any organic HAP emissions limits based on an organic HAP emissions limit in Tables 3 or 5 to this subpart. You must collect and keep records of resin and gel coat use, organic HAP content, and operation where the resin is used if you are meeting any organic HAP content limits in Table 7 to this subpart if you are averaging organic HAP contents. Resin use records may be based on purchase records if you can reasonably estimate how the resin is applied. The organic HAP content records may be based on MSDS or on resin specifications supplied by the resin supplier.
- (d) Resin and gel coat use records are not required for the individual resins and gel coats that are demonstrated, as applied, to meet their applicable emission as defined in §63.5810(a). However, you must

retain the records of resin and gel coat organic HAP content, and you must include the list of these resins and gel coats and identify their application methods in your semiannual compliance reports. If after you have initially demonstrated that a specific combination of an individual resin or gel coat, application method, and controls meets its applicable emission limit, and the resin or gel coat changes or the organic HAP content increases, or you change the application method or controls, then you again must demonstrate that the individual resin or gel coat meets its emission limit as specified in paragraph (a) of §63.5810. If any of the previously mentioned changes results in a situation where an individual resin or gel coat now exceeds its applicable emission limit in Table 3 or 5 of this subpart, you must begin collecting resin and gel coat use records and calculate compliance using one of the averaging options on a 12-month rolling average.

[68 FR 19402, Apr. 21, 2003, as amended at 70 FR 50128, Aug. 25, 2005]

§ 63.5900 How do I demonstrate continuous compliance with the standards?

- (a) You must demonstrate continuous compliance with each standard in §63.5805 that applies to you according to the methods specified in paragraphs (a)(1) through (3) of this section.
- (2) Compliance with organic HAP emissions limits is demonstrated by maintaining an organic HAP emissions factor value less than or equal to the appropriate organic HAP emissions limit listed in Table 3 or 5 to this subpart, on a 12-month rolling average, and/or by including in each compliance report a statement that individual resins and gel coats, as applied, meet the appropriate organic HAP emissions limits, as discussed in §63.5895(d).
- (3) Compliance with organic HAP content limits in Table 7 to this subpart is demonstrated by maintaining an average organic HAP content value less than or equal to the appropriate organic HAP contents listed in Table 7 to this subpart, on a 12-month rolling average, and/or by including in each compliance report a statement that resins and gel coats individually meet the appropriate organic HAP content limits in Table 7 to this subpart, as discussed in §63.5895(d).
- (4) Compliance with the work practice standards in Table 4 to this subpart is demonstrated by performing the work practice required for your operation.
- (b) You must report each deviation from each standard in §63.5805 that applies to you. The deviations must be reported according to the requirements in §63.5910.
- (c) Except as provided in paragraph (d) of this section, during periods of startup, shutdown or malfunction, you must meet the organic HAP emissions limits and work practice standards that apply to you.

Notifications, Reports, and Records

§ 63.5905 What notifications must I submit and when?

- (a) You must submit all of the notifications in Table 13 to this subpart that apply to you by the dates specified in Table 13 to this subpart. The notifications are described more fully in 40 CFR part 63, subpart A, referenced in Table 13 to this subpart.
- (b) If you change any information submitted in any notification, you must submit the changes in writing to the Administrator within 15 calendar days after the change.

§ 63.5910 What reports must I submit and when?

- (a) You must submit each report in Table 14 to this subpart that applies to you.
- (b) Unless the Administrator has approved a different schedule for submission of reports under §63.10(a), you must submit each report by the date specified in Table 14 to this subpart and according to paragraphs (b)(1) through (5) of this section.

- (1) The first compliance report must cover the period beginning on the compliance date that is specified for your affected source in §63.5800 and ending on June 30 or December 31, whichever date is the first date following the end of the first calendar half after the compliance date that is specified for your source in §63.5800.
- (2) The first compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date follows the end of the first calendar half after the compliance date that is specified for your affected source in §63.5800.
- (3) Each subsequent compliance report must cover the semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.
- (4) Each subsequent compliance report must be postmarked or delivered no later than July 31 or January 31, whichever date is the first date following the end of the semiannual reporting period.
- (5) For each affected source that is subject to permitting requirements pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to §70.6 (a)(3)(iii)(A) or §71.6(a)(3)(iii)(A), you may submit the first and subsequent compliance reports according to the dates the permitting authority has established instead of according to the dates in paragraphs (b)(1) through (4) of this section.
- (c) The compliance report must contain the information in paragraphs (c)(1) through (6) of this section:
- (1) Company name and address.
- (2) Statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the content of the report.
- (3) Date of the report and beginning and ending dates of the reporting period.
- (5) If there are no deviations from any organic HAP emissions limitations (emissions limit and operating limit) that apply to you, and there are no deviations from the requirements for work practice standards in Table 4 to this subpart, a statement that there were no deviations from the organic HAP emissions limitations or work practice standards during the reporting period.
- (d) For each deviation from an organic HAP emissions limitation (*i.e.*, emissions limit and operating limit) and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMS to comply with the organic HAP emissions limitations or work practice standards in this subpart, the compliance report must contain the information in paragraphs (c)(1) through (4) of this section and in paragraphs (d)(1) and (2) of this section. This includes periods of startup, shutdown, and malfunction.
- (1) The total operating time of each affected source during the reporting period.
- (2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- (g) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 14 to this subpart along with, or as part of, the semiannual monitoring report required by §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any organic HAP emissions limitation (including any operating limit) or work practice requirement in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority.

- (h) Submit compliance reports and startup, shutdown, and malfunction reports based on the requirements in Table 14 to this subpart, and not based on the requirements in §63.999.
- (i) Where multiple compliance options are available, you must state in your next compliance report if you have changed compliance options since your last compliance report.

§ 63.5915 What records must I keep?

- (a) You must keep the records listed in paragraphs (a)(1) through (3) of this section.
- (1) A copy of each notification and report that you submitted to comply with this subpart, including all documentation supporting any Initial Notification or Notification of Compliance Status that you submitted, according to the requirements in §63.10(b)(2)(xiv).
- (2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.
- (3) Records of performance tests, design, and performance evaluations as required in §63.10(b)(2).
- (c) You must keep all data, assumptions, and calculations used to determine organic HAP emissions factors or average organic HAP contents for operations listed in Tables 3, 5, and 7 to this subpart.
- (d) You must keep a certified statement that you are in compliance with the work practice requirements in Table 4 to this subpart, as applicable.

§ 63.5920 In what form and how long must I keep my records?

- (a) You must maintain all applicable records in such a manner that they can be readily accessed and are suitable for inspection according to §63.10(b)(1).
- (b) As specified in §63.10(b)(1), you must keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report, or record.
- (c) You must keep each record onsite for at least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record, according to §63.10(b)(1). You can keep the records offsite for the remaining 3 years.
- (d) You may keep records in hard copy or computer readable form including, but not limited to, paper, microfilm, computer floppy disk, magnetic tape, or microfiche.

Other Requirements and Information

§ 63.5925 What parts of the General Provisions apply to me?

Table 15 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

§ 63.5930 Who implements and enforces this subpart?

- (a) This subpart can be administered by us, the EPA, or a delegated authority such as your State, local, or tribal agency. If the EPA Administrator has delegated authority to your State, local, or tribal agency, then that agency has the authority to administer and enforce this subpart. You should contact your EPA Regional Office to find out if this subpart is delegated to your State, local, or tribal agency.
- (b) In delegating implementation and enforcement authority of this subpart to a State, local, or tribal agency under 40 CFR part 63, subpart E, the authorities contained in paragraph (c) of this section are not delegated.

- (c) The authorities that will not be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (4) of this section:
- (1) Approval of alternatives to the organic HAP emissions standards in §63.5805 under §63.6(g).
- (2) Approval of major changes to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.
- (3) Approval of major changes to monitoring under §63.8(f) and as defined in §63.90.
- (4) Approval of major changes to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

§ 63.5935 What definitions apply to this subpart?

Terms used in this subpart are defined in the CAA, in 40 CFR 63.2, and in this section as follows:

Atomized mechanical application means application of resin or gel coat with spray equipment that separates the liquid into a fine mist. This fine mist may be created by forcing the liquid under high pressure through an elliptical orifice, bombarding a liquid stream with directed air jets, or a combination of these techniques.

Bulk molding compound (BMC) means a putty-like molding compound containing resin(s) in a form that is ready to mold. In addition to resins, BMC may contain catalysts, fillers, and reinforcements. Bulk molding compound can be used in compression molding and injection molding operations to manufacture reinforced plastic composites products.

BMC manufacturing means a process that involves the preparation of BMC.

Centrifugal casting means a process for fabricating cylindrical composites, such as pipes, in which composite materials are positioned inside a rotating hollow mandrel and held in place by centrifugal forces until the part is sufficiently cured to maintain its physical shape.

Charge means the amount of SMC or BMC that is placed into a compression or injection mold necessary to complete one mold cycle.

Cleaning means removal of composite materials, such as cured and uncured resin from equipment, finished surfaces, floors, hands of employees, or any other surfaces.

Clear production gel coat means an unpigmented, quick-setting resin used to improve the surface appearance and/or performance of composites. It can be used to form the surface layer of any composites other than those used for molds in tooling operations.

Closed molding means a grouping of processes for fabricating composites in a way that HAP-containing materials are not exposed to the atmosphere except during the material loading stage (e.g., compression molding, injection molding, and resin transfer molding). Processes where the mold is covered with plastic (or equivalent material) prior to resin application, and the resin is injected into the covered mold are also considered closed molding.

Composite means a shaped and cured part produced by using composite materials.

Composite materials means the raw materials used to make composites. The raw materials include styrene containing resins. They may also include gel coat, monomer, catalyst, pigment, filler, and reinforcement.

Compression molding means a closed molding process for fabricating composites in which composite materials are placed inside matched dies that are used to cure the materials under heat and pressure without exposure to the atmosphere. The addition of mold paste or in-mold coating is considered part of the closed molding process. The composite materials used in this process are generally SMC or BMC.

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Compression/injection molding means a grouping of processes that involves the use of compression molding and/or injection molding.

Continuous casting means a continuous process for fabricating composites in which composite materials are placed on an in-line conveyor belt to produce cast sheets that are cured in an oven.

Continuous lamination means a continuous process for fabricating composites in which composite materials are typically sandwiched between plastic films, pulled through compaction rollers, and cured in an oven. This process is generally used to produce flat or corrugated products on an in-line conveyor.

Continuous lamination/casting means a grouping of processes that involves the use of continuous lamination and/or continuous casting.

Controlled emissions means those organic HAP emissions that are vented from a control device to the atmosphere.

Corrosion-resistant gel coat means a gel coat used on a product made with a corrosion-resistant resin that has a corrosion-resistant end-use application.

Corrosion-resistant end-use applications means applications where the product is manufactured specifically for an application that requires a level of chemical inertness or resistance to chemical attack above that required for typical reinforced plastic composites products. These applications include, but are not limited to, chemical processing and storage; pulp and paper production; sewer and wastewater treatment; power generation; potable water transfer and storage; food and drug processing; pollution or odor control; metals production and plating; semiconductor manufacturing; petroleum production, refining, and storage; mining; textile production; nuclear materials storage; swimming pools; and cosmetic production, as well as end-use applications that require high strength resins.

Corrosion-resistant industry standard includes the following standards: ASME RTP–1 or Sect. X; ASTM D5364, D3299, D4097, D2996, D2997, D3262, D3517, D3754, D3840, D4024, D4160, D4161, D4162, D4184, D3982, or D3839; ANSI/AWWA C950; UL 215, 1316 or 1746, IAPMO PS–199, or written customer requirements for resistance to specified chemical environments.

Corrosion-resistant product means a product made with a corrosion-resistant resin and is manufactured to a corrosion-resistant industry standard, or a food contact industry standard, or is manufactured for corrosion-resistant end-use applications involving continuous or temporary chemical exposures.

Corrosion-resistant resin means a resin that either:

- (1) Displays substantial retention of mechanical properties when undergoing ASTM C–581 coupon testing, where the resin is exposed for 6 months or more to one of the following materials: Material with a pH ≥ 12.0 or ≤ 3.0, oxidizing or reducing agents, organic solvents, or fuels or additives as defined in 40 CFR 79.2. In the coupon testing, the exposed resin needs to demonstrate a minimum of 50 percent retention of the relevant mechanical property compared to the same resin in unexposed condition. In addition, the exposed resin needs to demonstrate an increased retention of the relevant mechanical property of at least 20 percentage points when compared to a similarly exposed general-purpose resin. For example, if the general-purpose resin retains 45 percent of the relevant property when tested as specified above, then a corrosion-resistant resin needs to retain at least 65 percent (45 percent plus 20 percent) of its property. The general-purpose resin used in the test needs to have an average molecular weight of greater than 1,000, be formulated with a 1:2 ratio of maleic anhydride to phthalic anhydride and 100 percent diethylene glycol, and a styrene content between 43 to 48 percent; or
- (2) Complies with industry standards that require specific exposure testing to corrosive media, such as UL 1316, UL 1746, or ASTM F–1216.

Doctor box means the box or trough on an SMC machine into which the liquid resin paste is delivered before it is metered onto the carrier film.

Filament application means an open molding process for fabricating composites in which reinforcements are fed through a resin bath and wound onto a rotating mandrel. The materials on the mandrel may be rolled out or worked by using nonmechanical tools prior to curing. Resin application to the reinforcement on the mandrel by means other than the resin bath, such as spray guns, pressure-fed rollers, flow coaters, or brushes is not considered filament application.

Filled Resin means that fillers have been added to a resin such that the amount of inert substances is at least 10 percent by weight of the total resin plus filler mixture. Filler putty made from a resin is considered a filled resin.

Fillers means inert substances dispersed throughout a resin, such as calcium carbonate, alumina trihydrate, hydrous aluminum silicate, mica, feldspar, wollastonite, silica, and talc. Materials that are not considered to be fillers are glass fibers or any type of reinforcement and microspheres.

Fire retardant gel coat means a gel coat used for products for which low-flame spread/low-smoke resin is used.

Fluid impingement technology means a spray gun that produces an expanding non-misting curtain of liquid by the impingement of low-pressure uninterrupted liquid streams.

Food contact industry standard means a standard related to food contact application contained in Food and Drug Administration's regulations at 21 CFR 177.2420.

Gel Coat means a quick-setting resin used to improve surface appearance and/or performance of composites. It can be used to form the surface layer of any composites other than those used for molds in tooling operations.

Gel coat application means a process where either clear production, pigmented production, white/off-white or tooling gel coat is applied.

HAP-containing materials storage means an ancillary process which involves keeping HAP-containing materials, such as resins, gel coats, catalysts, monomers, and cleaners, in containers or bulk storage tanks for any length of time. Containers may include small tanks, totes, vessels, and buckets.

High Performance gel coat means a gel coat used on products for which National Sanitation Foundation, United States Department of Agriculture, ASTM, durability, or other property testing is required.

High strength gel coat means a gel coat applied to a product that requires high strength resin.

High strength resins means polyester resins which have a casting tensile strength of 10,000 pounds per square inch or more and which are used for manufacturing products that have high strength requirements such as structural members and utility poles.

Injection molding means a closed molding process for fabricating composites in which composite materials are injected under pressure into a heated mold cavity that represents the exact shape of the product. The composite materials are cured in the heated mold cavity.

Low Flame Spread/Low Smoke Products means products that meet the following requirements. The products must meet both the applicable flame spread requirements and the applicable smoke requirements. Interior or exterior building application products must meet an ASTM E–84 Flame Spread Index of less than or equal to 25, and Smoke Developed Index of less than or equal to 450, or pass National Fire Protection Association 286 Room Corner Burn Test with no flash over and total smoke released not exceeding 1000 meters square. Mass transit application products must meet an ASTM E–162 Flame Spread Index of less than or equal to 35 and ASTM E662 Smoke Density Ds @ 1.5 minutes

less than or equal to 100 and Ds @ 4 minutes less than to equal to 200. Duct application products must meet ASTM E084 Flame Spread Index less than or equal to 25 and Smoke Developed Index less than or equal to 50 on the interior and/or exterior of the duct.

Manual resin application means an open molding process for fabricating composites in which composite materials are applied to the mold by pouring or by using hands and nonmechanical tools, such as brushes and rollers. Materials are rolled out or worked by using nonmechanical tools prior to curing. The use of pressure-fed rollers and flow coaters to apply resin is not considered manual resin application.

Mechanical resin application means an open molding process for fabricating composites in which composite materials (except gel coat) are applied to the mold by using mechanical tools such as spray guns, pressure-fed rollers, and flow coaters. Materials are rolled out or worked by using nonmechanical tools prior to curing.

Mixing means the blending or agitation of any HAP-containing materials in vessels that are 5.00 gallons (18.9 liters) or larger, and includes the mixing of putties or polyputties. Mixing may involve the blending of resin, gel coat, filler, reinforcement, pigments, catalysts, monomers, and any other additives.

Mold means a cavity or matrix into or onto which the composite materials are placed and from which the product takes its form.

Neat gel coat means the resin as purchased for the supplier, but not including any inert fillers.

Neat gel coat plus means neat gel coat plus any organic HAP-containing materials that are added to the gel coat by the supplier or the facility, excluding catalysts and promoters. Neat gel coat plus does include any additions of styrene or methyl methacrylate monomer in any form, including in catalysts and promoters.

Neat resin means the resin as purchased from the supplier, but not including any inert fillers.

Neat resin plus means neat resin plus any organic HAP-containing materials that are added to the resin by the supplier or the facility. Neat resin plus does not include any added filler, reinforcements, catalysts, or promoters. Neat resin plus does include any additions of styrene or methyl methacrylate monomer in any form, including in catalysts and promoters.

Nonatomized mechanical application means the use of application tools other than brushes to apply resin and gel coat where the application tool has documentation provided by its manufacturer or user that this design of the application tool has been organic HAP emissions tested, and the test results showed that use of this application tool results in organic HAP emissions that are no greater than the organic HAP emissions predicted by the applicable nonatomized application equation(s) in Table 1 to this subpart. In addition, the device must be operated according to the manufacturer's directions, including instructions to prevent the operation of the device at excessive spray pressures. Examples of nonatomized application include flow coaters, pressure fed rollers, and fluid impingement spray guns.

Noncorrosion-resistant resin means any resin other than a corrosion-resistant resin or a tooling resin.

Noncorrosion-resistant product means any product other than a corrosion-resistant product or a mold.

Non-routine manufacture means that you manufacture parts to replace worn or damaged parts of a reinforced plastic composites product, or a product containing reinforced plastic composite parts, that was originally manufactured in another facility. For a part to qualify as non-routine manufacture, it must be used for repair or replacement, and the manufacturing schedule must be based on the current or anticipated repair needs of the reinforced plastic composites product, or a product containing reinforced plastic composite parts.

Operation means a specific process typically found at a reinforced plastic composites facility. Examples of operations are noncorrosion-resistant manual resin application, corrosion-resistant mechanical resin

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application, pigmented gel coat application, mixing and HAP-containing materials storage.

Operation group means a grouping of individual operations based primarily on mold type. Examples are open molding, closed molding, and centrifugal casting.

Open molding means a process for fabricating composites in a way that HAP-containing materials are exposed to the atmosphere. Open molding includes processes such as manual resin application, mechanical resin application, filament application, and gel coat application. Open molding also includes application of resins and gel coats to parts that have been removed from the open mold.

Pigmented gel coat means a gel coat that has a color, but does not contain 10 percent of more titanium dioxide by weight. It can be used to form the surface layer of any composites other than those used for molds in tooling operations.

Polymer casting means a process for fabricating composites in which composite materials are ejected from a casting machine or poured into an open, partially open, or closed mold and cured. After the composite materials are poured into the mold, they are not rolled out or worked while the mold is open, except for smoothing the material and/or vibrating the mold to remove bubbles. The composite materials may or may not include reinforcements. Products produced by the polymer casting process include cultured marble products and polymer concrete.

Preform Injection means a form of pultrusion where liquid resin is injected to saturate reinforcements in an enclosed system containing one or more chambers with openings only large enough to admit reinforcements. Resin, which drips out of the chamber(s) during the process, is collected in closed piping or covered troughs and then into a covered reservoir for recycle. Resin storage vessels, reservoirs, transfer systems, and collection systems are covered or shielded from the ambient air. Preform injection differs from direct die injection in that the injection chambers are not directly attached to the die.

Prepreg materials means reinforcing fabric received precoated with resin which is usually cured through the addition of heat.

Pultrusion means a continuous process for manufacturing composites that have a uniform cross-sectional shape. The process consists of pulling a fiber-reinforcing material through a resin impregnation chamber or bath and through a shaping die, where the resin is subsequently cured. There are several types of pultrusion equipment, such as open bath, resin injection, and direct die injection equipment.

Repair means application of resin or gel coat to a part to correct a defect, where the resin or gel coat application occurs after the part has gone through all the steps of its typical production process, or the application occurs outside the normal production area. For purposes of this subpart, rerouting a part back through the normal production line, or part of the normal production line, is not considered repair.

Resin transfer molding means a process for manufacturing composites whereby catalyzed resin is transferred or injected into a closed mold in which fiberglass reinforcement has been placed.

Sheet molding compound (SMC) means a ready-to-mold putty-like molding compound that contains resin(s) processed into sheet form. The molding compound is sandwiched between a top and a bottom film. In addition to resin(s), it may also contain catalysts, fillers, chemical thickeners, mold release agents, reinforcements, and other ingredients. Sheet molding compound can be used in compression molding to manufacture reinforced plastic composites products.

Shrinkage controlled resin means a resin that when promoted, catalyzed, and filled according to the resin manufacturer's recommendations demonstrates less than 0.3 percent linear shrinkage when tested according to ASTM D2566.

SMC manufacturing means a process which involves the preparation of SMC.

Tooling gel coat means a gel coat that is used to form the surface layer of molds. Tooling gel coats

Structural Composites of Indiana, Inc. Ligonier, Indiana Permit Reviewer: Kyle Gregory/MES

generally have high heat distortion temperatures, low shrinkage, high barcol hardness, and high dimensional stability.

Tooling resin means a resin that is used to produce molds. Tooling resins generally have high heat distortion temperatures, low shrinkage, high barcol hardness, and high dimensional stability.

Uncontrolled oven organic HAP emissions means those organic HAP emissions emitted from the oven through closed vent systems to the atmosphere and not to a control device. These organic HAP emissions do not include organic HAP emissions that may escape into the workplace through the opening of panels or doors on the ovens or other similar fugitive organic HAP emissions in the workplace.

Uncontrolled wet-out area organic HAP emissions means any or all of the following: Organic HAP emissions from wet-out areas that do not have any capture and control, organic HAP emissions that escape from wet-out area enclosures, and organic HAP emissions from wet-out areas that are captured by an enclosure but are vented to the atmosphere and not to an add-on control device.

Unfilled means that there has been no addition of fillers to a resin or that less than 10 percent of fillers by weight of the total resin plus filler mixture has been added.

Vapor suppressant means an additive, typically a wax, that migrates to the surface of the resin during curing and forms a barrier to seal in the styrene and reduce styrene emissions.

Vapor-suppressed resin means a resin containing a vapor suppressant added for the purpose of reducing styrene emissions during curing.

White and off-white gel coat means a gel coat that contains 10 percent of more titanium dioxide by weight.

Table 1 to Subpart WWWW of Part 63—Equations To Calculate Organic HAP Emissions Factors for Specific Open Molding and Centrifugal Casting Process Streams

As required in §§63.5796, 63.5799(a)(1) and (b), and 63.5810(a)(1), to calculate organic HAP emissions factors for specific open molding and centrifugal casting process streams you must use the equations in the following table:

If your operation type is a new or existing	And you use	With	Use this organic HAP Emissions Factor (EF) Equation for materials with less than 33 percent organic HAP (19 percent organic HAP for nonatomized gel coat) 1 2 3	Use this organic HAP Emissions Factor (EF) Equation for materials with 33 percent or more organic HAP (19 percent for nonatomized gel coat) 1 2 3
1. Open molding operation		 i. Nonvapor- suppressed resin. 	pp = 0 126 v 9 unn	PP - //0 296 v
		suppressed resin.	EF = 0.126 x % HAP x 2000 x (1-(0.5 x VSE factor)).	EF = ((0.286 x %HAP)-0.0529) x 2000 x (1-(0.5 x VSE factor))
		roll out.	EF = 0.126 x % HAP x 2000 x 0.8.	
		iv. Vacuum bagging/ closed-mold curing without	EF = (0.126 x % HAP x 2000 x 0.5.	
	b. Atomized mechanical resin application.	suppressed resin.		%HAP)-0.18) x
	applicación.	ii. Vapor- suppressed resin.	EF = 0.169 x %HAP x 2000 x (1-(0.45 x VSE factor)).	EF = ((0.714 x %HAP)-0.18) x 2000 x (1-(0.45 x VSE factor))
		iii. Vacuum bagging/closed- mold curing with roll-out.	EF = 0.169 X %HAP x 2000 x 0.85	EF = ((0.714 x %HAP)-0.18) x 2000 x 0.85
		iv. Vacuum bagging/ closed-mold curing without	EF = 0.169 x %HAP x 2000 x 0.55.	%HAP)-0.18) x 2000 x 0.55
	c. Nonatomized mechanical resin application.	suppressed resin.	EF = 0.107 x %HAP x 2000.	%HAP)-0.0165) x
		ii. Vapor- suppressed resin.	EF = 0.107 x %HAP x 2000 x (1-(0.45 x VSE factor)).	2000 EF = ((0.157 x %HAP)-0.0165) x 2000 x (1-(0.45 x VSE factor)) EF = ((0.157 x)
		curing with roll-	x 2000 x 0.85.	%HAP)-0.0165) x
		<pre>iv. Vacuum bagging/closed- mold curing without roll-out.</pre>	EF = 0.107 x %HAP x 2000 x 0.55.	
	d. Atomized mechanical resin application with robotic or automated spray control \(\)\(\)\(\)\(\)\(\)\(\)\(\)\(suppressed resin.	EF = 0.169 x %HAP x 2000 x 0.77.	
	e. Filament application \6\.	suppressed resin.		%HAP)-0.0298) x 2000
		ii. Vapor- suppressed resin.	EF = 0.12 x %HAP x 2000.	EF = ((0.2746 x %HAP)-0.0298) x 2000 x 0.65
	f. Atomized spray gel coat application.	Nonvapor- suppressed gel coat. Nonvapor- suppressed gel coat. gel Nonvapor-	EF = 0.446 x %HAP x 2000.	EF = ((1.03646 x %HAP)-0.195) x 2000.
	g. Nonatomized spray gel coat application.	Nonvapor- suppressed gel coat.	EF = 0.185 x %HAP x 2000.	EF = ((0.4506 x %HAP)-0.0505) x 2000.
	or automated spr	ay coat.	A 2000 A 0.73	2000 x 0.73

Footnotes to Table 1
\1\ The equations in this table are intended for use in calculating emission factors to demonstrate compliance with the emission limits in subpart WWWW. These equations may not be the most appropriate method to calculate emissions estimates for other purposes. However, this does not preclude a facility from using the equations in this table to calculate emission factors for purposes other than rule compliance if these equations are the most accurate available.
\2\ To obtain the organic HAP emissions factor value for an operation with an add-on control device multiply the EF above by the add-on control factor calculated using Equation 1 of § 63.5810. The organic HAP emissions factors have units of 1bs of organic HAP per ton of resin or gel coat applied.
\3\ Percent HAP means total weight percent of organic HAP (styrene, methyl methacrylate, and any other organic HAP) in the resin or gel coat prior to the addition of fillers, catalyst, and promoters. Input the percent HAP

- as a decimal, i.e. 33 percent HAP should be input as 0.33, not 33.

 \4\ The VSE factor means the percent reduction in organic HAP emissions expressed as a decimal measured by the VSE test method of appendix A to this subpart.

 \5\ This equation is based on a organic HAP emissions factor equation developed for mechanical atomized controlled spray. It may only be used for automated or robotic spray systems with atomized spray. All spray operations using hand held spray guns must use the appropriate mechanical atomized or mechanical nonatomized organic HAP emissions factor equation. Automated or robotic spray systems using nonatomized spray should use the appropriate nonatomized mechanical resin application equation.

 \6\ Applies only to filament application using an open resin bath. If resin is applied manually or with a spray gun, use the appropriate manual or mechanical application organic HAP emissions factor equation.

 \7\ These equations are for centrifugal casting operations where the mold is vented during spinning. Centrifugal casting operations where the mold is completely sealed after resin injection are considered to be closed molding operations.

- molding operations.

 \8\ If a centrifugal casting operation uses mechanical or manual resin application techniques to apply resin to B) If a centrifugal casting operation uses mechanical or manual resin application techniques to apply resin to an open centrifugal casting mold, use the appropriate open molding equation with covered cure and no rollout to determine an emission factor for operations prior to the closing of the centrifugal casting mold. If the closed centrifugal casting mold is vented during spinning, use the appropriate centrifugal casting equation to calculate an emission factor for the portion of the process where spinning and cure occur. If a centrifugal casting operation uses mechanical or manual resin application techniques to apply resin to an open centrifugal casting mold, and the mold is then closed and is not vented, treat the entire operation as open molding with covered cure and no rollout to determine emission factors.

Table 2 to Subpart WWWW of Part 63—Compliance Dates for New and Existing Reinforced Plastic Composites Facilities

As required in §§63.5800 and 63.5840 you must demonstrate compliance with the standards by the dates in the following table:

If your facility is	And	Then you must comply by this date
1. An existing source	a. Is a major source on or before the publication date of this subpart	i. April 21, 2006, or ii. You must accept and meet an enforceable HAP emissions limit below the major source threshold prior to April 21, 2006.

Table 3 to Subpart WWWW of Part 63—Organic HAP Emissions Limits for Existing Open Molding Sources, New Open Molding Sources Emitting Less Than 100 TPY of HAP, and New and Existing Centrifugal Casting and Continuous Lamination/Casting Sources that Emit Less Than 100 TPY of HAP

As specified in §63.5805, you must meet the following organic HAP emissions limits that apply to you:

Table 3 to Subpart WWWW of Part 63—Organic HAP Emissions Limits for Specific Open Molding, Centrifugal Casting, Pultrusion and Continuous Lamination/Casting Operations

If your operation type is	And you use	¹ Your organic HAP emissions limit is
open molding—corrosion-resistant and/or high strength (CR/HS)	a. mechanical resin application b. filament application c. manual resin application	113 lb/ton. 171 lb/ton. 123 lb/ton.
2. open molding—non-CR/HS	a. mechanical resin application b. filament application c. manual resin application	88 lb/ton. 188 lb/ton. 87 lb/ton.
3. open molding—tooling	a. mechanical resin application b. manual resin application	254 lb/ton. 157 lb/ton.
4. open molding—low-flame spread/low-smoke products	a. mechanical resin application b. filament application c. manual resin application	497 lb/ton. 270 lb/ton. 238 lb/ton.
5. open molding—shrinkage controlled resins ²	a. mechanical resin application b. filament application c. manual resin application	354 lb/ton. 215 lb/ton. 180 lb/ton.
6. open molding—gel coat ³	a. tooling gel coating b. white/off white pigmented gel coating c. all other pigmented gel coating d. CR/HS or high performance gel coat e. fire retardant gel coat f. clear production gel coat	440 lb/ton. 267 lb/ton. 377 lb/ton. 605 lb/ton. 854 lb/ton. 522 lb/ton.

¹Organic HAP emissions limits for open molding and centrifugal casting are expressed as lb/ton. You must be at or below these values based on a 12-month rolling average.

²This emission limit applies regardless of whether the shrinkage controlled resin is used as a production resin or a tooling resin.

³If you only apply gel coat with manual application, for compliance purposes treat the gel coat as if it were applied using atomized spray guns to determine both emission limits and emission factors. If you use multiple application methods and any portion of a specific gel coat is applied using nonatomized spray, you may use the nonatomized spray gel coat equation to calculate an emission factor for the manually applied portion of that gel coat. Otherwise, use the atomized spray gel coat application equation to calculate emission factors.

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⁴For compliance purposes, calculate your emission factor using only the appropriate centrifugal casting equation in item 2 of Table 1 to this subpart, or a site specific emission factor for after the mold is closed as discussed in §63.5796.

⁵Calculate your emission factor using the appropriate open molding covered cure emission factor in item 1 of Table 1 to this subpart, or a site specific emission factor as discussed in §63.5796.

⁶Pultrusion machines that produce parts that meet the following criteria: 1,000 or more reinforcements or the glass equivalent of 1,000 ends of 113 yield roving or more; and have a cross sectional area of 60 square inches or more are not subject to this requirement. Their requirement is the work practice of air flow management which is described in Table 4 to this subpart.

Table 4 to Subpart WWWW of Part 63—Work Practice Standards

As specified in §63.5805, you must meet the work practice standards in the following table that apply to you:

Table 4 to Subpart WWWW of Part 63—Work Practice Standards

For	You must
a new or existing closed molding operation using compression/injection molding	uncover, unwrap or expose only one charge per mold cycle per compression/injection molding machine. For machines with multiple molds, one charge means sufficient material to fill all molds for one cycle. For machines with robotic loaders, no more than one charge may be exposed prior to the loader. For machines fed by hoppers, sufficient material may be uncovered to fill the hopper. Hoppers must be closed when not adding materials. Materials may be uncovered to feed to slitting machines. Materials must be recovered after slitting.
a new or existing cleaning operation	not use cleaning solvents that contain HAP, except that styrene may be used as a cleaner in closed systems, and organic HAP containing cleaners may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin.
3. a new or existing materials HAP-containing materials storage operation	keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials. Bulk HAP-containing materials storage tanks may be vented as necessary for safety.

¹Containers of 5 gallons or less may be open when active mixing is taking place, or during periods when they are in process (i.e., they are actively being used to apply resin). For polymer casting mixing operations, containers with a surface area of 500 square inches or less may be open while active mixing is taking place.

Table 7 to Subpart WWWW of Part 63—Options Allowing Use of the Same Resin Across Different Operations That Use the Same Resin Type

As specified in §63.5810(d), when electing to use the same resin(s) for multiple resin application methods, you may use any resin(s) with an organic HAP content less than or equal to the values shown in the following table, or any combination of resins whose weighted average organic HAP content based on a 12-month rolling average is less than or equal to the values shown the following table:

Table 7—to Subpart WWWW of Part 63—Options Allowing Use of the Same Resin Across Different Operations That Use the Same Resin Type

If your facility has the following resin type and application method	The highest resin weight is* * * percent organic HAP content, or weighted average weight percent organic HAP content, you can use for	is
1. CR/HS resins, centrifugal casting ^{1,2}	a. CR/HS mechanical	³ 48.0
	b. CR/HS filament application	48.0
	c. CR/HS manual	48.0
CR/HS resins, nonatomized mechanical	a. CR/HS filament application	46.4
	b. CR/HS manual	46.4
3. CR/HS resins, filament application	CR/HS manual	42.0
4. non-CR/HS resins, filament application	a. non-CR/HS mechanical	³ 45.0
	b. non-CR/HS manual	45.0
	c. non-CR/HS centrifugal casting ^{1,2}	45.0
5. non-CR/HS resins, nonatomized mechanical	a. non-CR/HS manual	38.5
	b. non-CR/HS centrifugal casting ^{1,2}	38.5
6. non-CR/HS resins, centrifugal casting ^{1,2}	non-CR/HS manual	37.5
7. tooling resins, nonatomized mechanical	tooling manual	91.4
8. tooling resins, manual	tooling atomized mechanical	45.9

¹If the centrifugal casting operation blows heated air through the molds, then 95 percent capture and control must be used if the facility wishes to use this compliance option.

[70 FR 50133, Aug. 25, 2005]

²If the centrifugal casting molds are not vented, the facility may treat the centrifugal casting operations as if they were vented if they wish to use this compliance option.

³Nonatomized mechanical application must be used.

Table 8 to Subpart WWWW of Part 63—Initial Compliance With Organic HAP Emissions Limits

As specified in §63.5860(a), you must demonstrate initial compliance with organic HAP emissions limits as specified in the following table:

Table 8 to Subpart WWWW of Part 63—Initial Compliance With Organic HAP Emissions Limits

For	That must meet the following organic HAP emissions limit	You have demonstrated initial compliance if
open molding and centrifugal casting operations	a. an organic HAP emissions limit shown in Tables 3 or 5 to this subpart, or an organic HAP content limit shown in Table 7 to this subpart	above, as applied, meet their applicable
2. open molding centrifugal casting, continuous lamination/casting, SMC and BMC manufacturing, and mixing operations	a. reduce total organic HAP emissions by at least 95 percent by weight	total organic HAP emissions, based on the results of the capture efficiency and destruction efficiency testing specified in Table 6 to this subpart, are reduced by at least 95 percent by weight.

[70 FR 50134, Aug. 25, 2005]

Table 9 to Subpart WWWW of Part 63—Initial Compliance With Work Practice Standards

As specified in §63.5860(a), you must demonstrate initial compliance with work practice standards as specified in the following table:

Table 9 To Subpart WWWW of Part 63—Initial Compliance With Work Practice Standards

For	That must meet the following standards	You have demonstrated initial compliance if
1. a new or existing closed molding operation using compression/injection molding	uncover, unwrap or expose only one charge per mold cycle per compression/injection molding machine. For machines with multiple molds, one charge means sufficient material to fill all molds for one cycle. For machines with robotic loaders, no more than one charge may be exposed prior to the loader. For machines fed by hoppers, sufficient material may be uncovered to fill the hopper. Hoppers must be closed when not adding materials. Materials may be uncovered to feed to slitting machines. Materials must be recovered after slitting	the owner or operator submits a certified statement in the notice of compliance status that only one charge is uncovered, unwrapped, or exposed per mold cycle per compression/injection molding machine, or prior to the loader, hoppers are closed except when adding materials, and materials are recovered after slitting.
2. a new or existing cleaning operation	not use cleaning solvents that contain HAP, except that styrene may be used in closed systems, and organic HAP containing materials may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin between storage and applying resin to the mold or reinforcement	the owner or operator submits a certified statement in the notice of compliance status that all cleaning materials, except styrene contained in closed systems, or materials used to clean cured resin from application equipment, contain no HAP.
3. a new or existing materials HAP-containing materials storage operation	keep containers that store HAP- containing materials closed or covered except during the addition or removal of materials. Bulk HAP-containing materials storage tanks may be vented as necessary for safety	the owner or operator submits a certified statement in the notice of compliance status that all HAP-containing storage containers are kept closed or covered except when adding or removing materials, and that any bulk storage tanks are vented only as necessary for safety.

Table 13 to Subpart WWWW of Part 63—Applicability and Timing of Notifications

As required in §63.5905(a), you must determine the applicable notifications and submit them by the dates shown in the following table:

If your facility	You must submit	By this date
Is an existing source subject to this subpart	An Initial Notification containing the information specified in §63.9(b)(2)	No later than the dates specified in §63.9(b)(2).
4. Is complying with organic HAP emissions limit averaging provisions	A Notification of Compliance Status as specified in §63.9(h)	No later than 1 year plus 30 days after your facility's compliance date.
5. Is complying with organic HAP content limits, application equipment requirements, or organic HAP emissions limit other than organic HAP emissions limit averaging	A Notification of Compliance Status as specified in §63.9(h)	No later than 30 calendar days after your facility's compliance date.

Table 14 to Subpart WWWW of Part 63—Requirements for Reports

As required in §63.5910(a), (b), (g), and (h), you must submit reports on the schedule shown in the following table:

You must submit a(n)	The report must contain	You must submit the report
1. Compliance report	a. A statement that there were no deviations during that reporting period if there were no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit) that apply to you and there were no deviations from the requirements for work practice standards in Table 4 to this subpart that apply to you. If there were no periods during which the CMS, including CEMS, and operating parameter monitoring systems, was out of control as specified in §63.8(c)(7), the report must also contain a statement that there were no periods during which the CMS was out of control during the reporting period	Semiannually according to the requirements in §63.5910(b).
	b. The information in §63.5910(d) if you have a deviation from any emission limitation (emission limit, operating limit, or work practice standard) during the reporting period. If there were periods during which the CMS, including CEMS, and operating parameter monitoring systems, was out of control, as specified in §63.8(c)(7), the report must contain the information in §63.5910(e)	Semiannually according to the requirements in §63.5910(b).
	c. The information in §63.10(d)(5)(i) if you had a startup, shutdown or malfunction during the reporting period, and you took actions consistent with your startup, shutdown, and malfunction plan	Semiannually according to the requirements in §63.5910(b).

D.1.12 Operator Training for Reinforced Plastic Composites Fabrication [326 IAC 20-56-2]

Pursuant to 326 IAC 20-56-2, as of April 21, 2006, the Permittee shall train all new and existing personnel, including contract personnel, who are involved in resin and gel coat spraying and applications that could result in excess emissions if performed improperly according to the following schedule:

- (a) All personnel hired shall be trained within thirty (30) days of hiring.
- (b) To ensure training goals listed in 326 IAC 20-56-2 (b) are maintained, all personnel shall be given refresher training annually.
- (c) Personnel who have been trained by another owner or operator subject to this rule are exempt from subdivision (1) if written documentation that the employee's training is current is provided to the new employer.
- (d) The lesson plans shall cover, for the initial and refresher training, at a minimum, all of the following topics:
 - (1) Appropriate application techniques.
 - (2) Appropriate equipment cleaning procedures.
 - (3) Appropriate equipment setup and adjustment to minimize material usage and overspray.
- (e) The owner or operator shall maintain the following training records on site and make them available for inspection and review:
 - (1) A copy of the current training program.
 - (2) A list of the following:
 - (A) All current personnel, by name, that are required to be trained.
 - (B) The date the person was trained or date of most recent refresher training, whichever is later.
- (f) Records of prior training programs and former personnel are not required to be maintained.

SECTION D.2

FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Grinding Operations

(g) One (1) grinding booth, identified as GR1, constructed in 2000, consisting of grinders, diamond cutters, and various hand tools, utilizing dry filters for particulate control, exhausting to Stack GRD 08-11, capacity: 1,210 pounds per hour.

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

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

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the particulate emission rate from the grinding booth shall not exceed 2.93 pounds per hour when operating at a process weight rate of 1210 pounds per hour.

The pounds per hour limitation was calculated with the following equation:

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

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

Compliance Determination Requirements

D.2.2 Particulate Control [326 IAC 2-7-6(6)]

In order to comply with Condition D.2.1, the dry filters for particulate control shall be in operation and control emissions from the grinding booth at all times that the grinding booth is in operation.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

PART 70 OPERATING PERMIT CERTIFICATION

Source Name: Structural Composites of Indiana, Inc.
Source Address: 1118 Gerber Street, Ligonier, Indiana 46767
Mailing Address: 1118 Gerber Street, Ligonier, Indiana 46767

Part 70 Permit No.: T 113-23208-00074

This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.				
Please check what document is being certified:				
☐ Annual Compliance Certification Letter				
☐ Test Result (specify)				
□ Report (specify)				
□ Notification (specify)				
☐ Affidavit (specify)				
□ Other (specify)				
I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.				
Signature:				
Printed Name:				
Title/Position:				
Phone:				
Date:				

Permit Reviewer: Kyle Gregory/MES

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE BRANCH 100 North Senate Avenue MC61-53 IGCN 1003 Indianapolis, Indiana 46204-2251 Phone: 317-233-0178 Fax: 317-233-6865

PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT

Source Name: Structural Composites of Indiana, Inc. Source Address: 1118 Gerber Street, Ligonier, Indiana 46767 Mailing Address: 1118 Gerber Street, Ligonier, Indiana 46767

Part 70 Permit No.: T 113-23208-00074

This form consists of 2 pages

\neg	This is an emergency as defined in 326 IAC 2-7-1(1

Page 1 of 2

Inis is an emergency as defined in 326 IAC 2-7-1(12) X 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 X (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	e, mark N/A	Page 2 of 2
Date/Time Emergency started:		
Date/Time Emergency was corrected:		
Was the facility being properly operate Describe:	ed at the time of the emergency? Y N	
Type of Pollutants Emitted: TSP, PM-	10, SO ₂ , VOC, NO _X , CO, Pb, other:	
Estimated amount of pollutant(s) emitt	ted during emergency:	
Describe the steps taken to mitigate the	ne problem:	
Describe the corrective actions/respon	nse steps taken:	
Describe the measures taken to minin	nize emissions:	
	by continued operation of the facilities are necessal mage to equipment, substantial loss of capital investial economic value:	
Form Completed by: Title / Position: Date:		
Phone:	A certification is not required for this report.	

Structural Composites of Indiana, Inc. Ligonier, Indiana

Permit Reviewer: Kyle Gregory/MES

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

Part 70 Quarterly Report

Source Name:	Structural Composites of Indiana, Inc.
Source Address:	1118 Gerber Street, Ligonier, Indiana 46767
Mailing Address:	1118 Gerber Street, Ligonier, Indiana 46767
Part 70 Permit No ·	T 113-23208-00074

Part 70 Permit No.: T 113-23208-00074

Facility: G1, L1, PF1, G2, G3, L2 and CM1
Parameter: Volatile Organic HAP (VHAP) usage.
Limit: Less than one hundred (100) tops per

Less than one hundred (100) tons per twelve (12) consecutive month period with

compliance determined at the end of each month.

YEAR:	

Month	VHAP Usage (tons)	VHAP Usage (tons)	VHAP Usage (tons)
	This Month	Previous 11 Months	12 Month Total
	No deviation occur	rred in this month.	
	Deviation/s occurre	Deviation/s occurred in this month.	

Deviation has been reported on: Submitted by: Title/Position: Signature: Date: Phone:

Attach a signed certification to complete this report.

Structural Composites of Indiana, Inc. Ligonier, Indiana

Signature:
Date:
Phone:

Permit Reviewer: Kyle Gregory/MES

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

Part 70 Quarterly Report

Source Name: Source Address: Mailing Address: Part 70 Permit No. Facility: Parameter: Limit:	urce Address: 1118 Gerber Street, Ligonier, Indiana 46767 illing Address: 1118 Gerber Street, Ligonier, Indiana 46767 rt 70 Permit No.: T 113-23208-00074 cility: G1, L1, PF1, G2, G3, L2 and CM1 rameter: Volatile Organic Compounds (VOC) usage.			
Month	VOC Usage (tons) VOC Usage (tons) (tons)			
	This Month	Previous 11 Months	12 Month Total	
	No deviation occur	rred in this month.		
	Deviation/s occurred in this month. Deviation has been reported on:			
Su	ıbmitted by:			
Tif	le/Position:			

Attach a signed certification to complete this report.

Source Name:

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY

COMPLIANCE DATA SECTION

PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Structural Composites of Indiana, Inc.

Source Address: 1118 Gerber Street, Ligonier, Inc. Mailing Address: 1118 Gerber Street, Ligonier, Inc.	
Part 70 Permit No.: T 113-23208-00074	
Months: to	Year:
P	Page 1 of 2
the date(s) of each deviation, the probable cause of reported. A deviation required to be reported produced independent of the permit, shall be reported ac requirement and does not need to be included in	calendar year. Any deviation from the requirements, the deviation, and the response steps taken must be bursuant to an applicable requirement that exists cording to the schedule stated in the applicable this report. Additional pages may be attached if cify in the box marked "No deviations occurred this
☐ NO DEVIATIONS OCCURRED THIS REPORTI	NG PERIOD.
☐ THE FOLLOWING DEVIATIONS OCCURRED	THIS REPORTING PERIOD
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
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Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
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Probable Cause of Deviation:	
Response Steps Taken:	

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Permit Requirement (specify permit condition #)		
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Permit Requirement (specify permit condition #)		
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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

Addendum to the Technical Support Document for a Part 70 Operating Permit Renewal

Source Name: Structural Composites of Indiana, Inc.

Source Location: 1118 Gerber Street, Ligonier, Indiana 46767

County: Noble SIC Code: 3089

Operation Permit No.: T 113-23208-00074
Permit Reviewer: Kyle Gregory

On July 20, 2007, the Office of Air Quality (OAQ) had a notice published in the News-Sun newspaper, Kendallville, Indiana, stating that Structural Composites of Indiana, Inc. had applied for a Part 70 Operating Permit Renewal to continue to operate a fiber reinforced plastic composites manufacturing source. The notice also stated that OAQ proposed to issue a Part 70 Operating Permit renewal for this operation and provided information on how the public could review the proposed Part 70 Operating Permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this Part 70 Operating Permit renewal should be issued as proposed.

Upon further review, the OAQ has made the following changes to the Part 70 Operating Permit: The permit language is changed to read as follows (deleted language appears as strikeouts, new language is **bolded)**:

Change 1:

Condition C.12 has been revised because the Permittee has submitted an Emergency Reduction Plan.

C.11 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.
- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management Compliance Branch, Office of Air Quality 100 North Senate Avenue Indianapolis, Indiana 46204-2251

within ninety (90) days after the date of issuance of this permit.

The ERP does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (c) If the ERP is disapproved by IDEM, OAQ, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
- (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
- (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.

Structural Composites of Indiana, Inc. Ligonier, Indiana

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- (f) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]
- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on May 23, 2002.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

Change 2:

Condition D.1.6(a)(2) has been updated to specify the most recent reference.

D.1.6 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

- (a) Compliance with Condition D.1.2 shall be determined based upon the following criteria:
 - (1) Monthly usage by weight, content of monomer that is HAP, method of application, and other emission reduction techniques used for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the HAP monomer content, method of application, and other emission reduction techniques used for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAQ.
 - (2) The emission factors approved for use by IDEM, OAQ shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, April 1999, with the exception of the emission factors for controlled spray application. This reference is included with this permit. For HAP-emitting operations not addressed by this reference, emission factors shall be taken from U.S. EPA's AP-42 document. For the purposes of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.
 - (2) Emission factors shall be taken from the following reference approved by IDEM, OAQ: American Composites Manufacturers Association (ACMA) Emission Models for the Reinforced Plastics Industries, Unified Emission Factors dated 7/23/2001, or its updates.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Part 70 Operating Permit Renewal

Source Background and Description

Source Name: Structural Composites of Indiana, Inc. **Source Location:** 1118 Gerber Street, Ligonier, Indiana

County: Noble SIC Code: 3089

Permit Renewal No.: T 113-23208-00074
Permit Reviewer: Kyle Gregory

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Structural Composites of Indiana, Inc. relating to the operation of a fiber reinforced plastic composites manufacturing source.

History

On June 9, 2006, Structural Composites of Indiana, Inc. submitted an application to the OAQ requesting to renew its operating permit. Structural Composites of Indiana, Inc. was issued a Part 70 Operating Permit on March 20, 2002.

Permitted Emission Units and Pollution Control Equipment

- (a) One (1) gel and lamination area, identified as GL1, constructed in 2000, with three (3) exhaust fans with a flow rate of 10,000 cubic feet per minute consisting of the following:
 - (1) One (1) gel coating process, identified as G1, equipped with air-assisted airless spray guns, utilizing dry filters for particulate control, approximate capacity: 184 pounds of resin per hour. This is an open molding process under 40 CFR 63, Subpart WWWW.
 - (2) One (1) lamination process, identified as L1, equipped with flow coater equipment, utilizing dry filters for particulate control, approximate capacity: 720 pounds of resin per hour. This is an open molding process under 40 CFR 63, Subpart WWWW.
- (b) One (1) mold preparation and final finish area, identified as PF1, constructed in 2000, equipped with spray applicators, utilizing dry filters for particulate control. This is an open molding process under 40 CFR 63, Subpart WWWW.
- (c) One (1) gel coating process, identified as G2, constructed in 2003, equipped with airassisted airless spray applicators, utilizing dry filters for particulate control, exhausting to Stack SV-4, capacity: 44.43 pounds of gelcoat per hour. This is an open molding process under 40 CFR 63, Subpart WWWW.
- (d) One (1) gel coating process, identified as G3, constructed in 2003, equipped with airassisted airless spray applicators, utilizing dry filters for particulate control, exhausting to Stack SV-5, capacity: 6.92 pounds of gelcoat per hour. This is an open molding process under 40 CFR 63, Subpart WWWW.
- (e) One (1) lamination station, identified as L2, constructed in 2003, equipped with flow coaters, utilizing dry filters for particulate control, exhausting to Stack SV-6, capacity:

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Structural Composites of Indiana, Inc. Ligonier, Indiana Permit Reviewer: KRG/MES

199.63 pounds of resin per hour. This is an open molding process under 40 CFR 63, Subpart WWWW.

- (f) One (1) closed molding process, identified as CM1, constructed in 2003, capacity: 47.09 pounds of resin per hour. This is a closed molding process under 40 CFR 63, Subpart WWWW.
- (g) One (1) grinding booth, identified as GR1, constructed in 2000, consisting of grinders, diamond cutters, and various hand tools, utilizing dry filters for particulate control, exhausting to Stack GRD 08-11, capacity: 1,210 pounds per hour.

Insignificant Activities

- (a) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4,000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations.
- (b) Welding operations, with emissions equal to or less than the insignificant thresholds of five (5) pounds per hour or twenty-five (25) pounds per day for PM, SO₂, and/or NO_X, three (3) pounds per hour or fifteen (15) pounds per day for VOC, twenty-five (25) pounds per day for CO or 0.6 tons per year or 3.29 pounds per day of lead: consisting of two (2) arc welders, one (1) oxyacetylene torch.
- (c) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone.
- (d) Paved and unpaved roads and parking lots with public access. [326 IAC 6-4]
- (e) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour:
 - (1) Five (5) natural gas-fired radiant heaters, heat input capacity: 0.03 million British thermal units per hour, each.
 - (2) One (1) natural gas-fired air make-up system, heat input capacity: 3.575 million British thermal units per hour.
 - (3) Three (3) natural gas-fired radiant heaters, heat input capacity: 0.15 million British thermal units per hour.
 - (4) One (1) natural gas-fired oven, heat input capacity: 0.225 million British thermal units per hour.
- (f) Propane for liquefied petroleum gas, or butane-fired combustion sources with heat input equal to or less than six million (6,000,000) British thermal units per hour.
- (g) The following VOC and HAP storage containers: Storage tanks with capacity less than or equal to 1,000 gallons and annual throughputs less than 12,000 gallons.
- (h) Infrared cure equipment.
- (i) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.

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- (j) Purging of gas lines and vessels that is related to routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process.
- Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling (k) tower.
- (l) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38°C).
- (m) One (1) bulk resin storage tank, capacity: 6000 gallons.

Existing Approvals

Since the issuance of the Part 70 Operating Permit 113-12934-00074 on March 20, 2002, the source has been operating under the following approvals as well:

- Significant Source Modification No. 113-16514-00074 issued on April 1, 2003; and (a)
- Significant Permit Modification No. 113-16656-00074 issued on April 14, 2003; and (b)
- Administrative Amendment No. 113-20600-00074 issued on August 15, 2005; and (c)
- (d) Significant Permit Modification No. 113-21560-00074 issued on February 10, 2006.

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 registrations and permits are superseded by this permit.

Enforcement Issue

There are no enforcement actions pending.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
GB 01-03	G1	3.0	2.5	6,600	70
LB 04-07	L1	3.0	2.5	6,600	70
GRD 08-11	GR1	3.0	2.5	6,600	70
MR 12-13	PF1	3.0	2.5	6,600	70
SV-4	G2	30.0	1.25	11,430	ambient
SV-5	G3	30.0	1.25	11,430	ambient
SV-6	L2	30.0	1.25	11,430	ambient

Note: Stacks GB 01-03, LB 04-07, GRD 08-11 and MR 12-13 are horizontal through the sides of the building.

Emission Calculations

See Appendix A of this document for detailed emission calculations (pages 1 through 5).

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County Attainment Status

The source is located in Noble County.

Pollutant	Status
PM ₁₀	attainment
PM _{2.5}	attainment
SO ₂	attainment
NO _X	attainment
8-hour Ozone	attainment
СО	attainment
Lead	attainment

- (a) Noble County has been classified as unclassifiable or attainment for $PM_{2.5}$. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for $PM_{2.5}$ emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for $PM_{2.5}$ emissions, it has directed states to regulate PM_{10} emissions as a surrogate for $PM_{2.5}$ emissions. See the State Rule Applicability Entire Source section.
- (b) Volatile organic compounds (VOC) and nitrogen oxides (NO_X) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NO_X emissions are considered when evaluating the rule applicability relating to ozone. Noble County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NO_X emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability Entire Source section.
- (c) Noble County has been classified as attainment or unclassifiable in Indiana for all remaining criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability Entire Source section.
- (d) 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.
- (e) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive emissions are not counted toward determination of PSD applicability.

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Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	268
PM ₁₀	268
SO ₂	0.012
VOC	386
CO	1.62
NO_X	1.93

HAPs	tons/year
Styrene	321
Methyl Methacrylate	30.0
Dimethyl Phthalate	11.2
Hexane	0.035
Total	362

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM₁₀ and VOC is equal to or greater than one hundred (100) tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (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. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (c) **Fugitive Emissions** 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.

Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2003 OAQ emission data and the 2005 TRI emission data for HAPs.

Pollutant	Actual Emissions (tons/year)
PM _{2.5}	0
PM ₁₀	0
SO ₂	0
VOC	40
CO	0
NO _X	0
HAP (Styrene)	36.9

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Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, pursuant to which the source has to meet the following:

- Emission limitations and standards, including those operational requirements and (a) limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.
- Monitoring and related record keeping requirements which assume that all reasonable (b) information is provided to evaluate continuous compliance with the applicable requirements.

Potential to Emit After Issuance

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

		Potential to Emit (tons/year)								
Process/Emission Unit	PM PM ₁₀ SO ₂ VOC CO NO _X									
G1, L1 and PF1	2.44	2.44	0.00	249	0.00	0.00	100			
G2, G3, L2 and CM1	0.779	0.779	0.00	249	0.00	0.00	100			
Insignificant Combustion	0.037	0.146	0.012	0.106	1.62	1.93	0.036			
Resin Storage Tank	0.00	0.00	0.00	0.031	0.00	0.00	0.00			
Grinding Booth	12.8	12.8	0.00	0.00	0.00	0.00	0.00			
Total	16.1	16.2	0.012	249	1.62	1.93	100			
Major Source Threshold	250	250	250	250	250	250	250			

- This existing stationary source is not major for PSD because the emissions of each (a) 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.
- (c) The emission values represent the unrestricted potential to emit except the PM and PM₁₀, Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs) from the reinforced plastics composites fabricating manufacturing processes (G1, L1, PF1, G2, G3, L2 and CM1) and PM and PM₁₀ from the Grinding Booth.

Federal Rule Applicability

- (a) Compliance Assurance Monitoring (CAM) [40 CFR 64]
 - (1) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to existing emission units that involve a pollutant-specific emission unit and meet the following criteria:
 - (A) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;

- (B) is subject to an emission limitation or standard for that pollutant; and
- (C) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each existing emission unit and specified pollutant subject to CAM:

Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
			PM ₁₀				
G1							
L1	Dry filters	Υ	122	2.44	100	Υ	Ν
PF1							
G2							
G3	D		00.0	0.770	400		
L2	Dry Filters	Υ	39.0	0.779	100	N	N
CM1							
GR1	Dry Filters	Υ	106	0.011	100	N^1	N
			VOC/HAPs	3		•	
G1							
L1	None	Υ	285 (VOC) 285 (HAPS)	285 (VOC) 285 (HAPS)	100 (VOC) 25 (HAPs)	N	Ν
PF1			200 (0)		_ ()		
G2							
G3	None	Y	97.1 (VOC)	97.1 (VOC)	100 (VOC)	N	N
L2	None	Ţ	76.6 (HAPS)	76.6 (HAPS)		IN	IN
CM1							

¹The grinding operations (GR1) consist of multiple units which results in a total of over 100 tons per year.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are applicable to the one (1) gel coating process, identified as G1, the one (1) lamination process, identified as L1 and the one (1) mold preparation and final finish area, identified as PF1 for PM_{10} . Requirements are detailed in the Compliance Determination and Monitoring Requirements section of this document.

(b) The requirements of the New Source Performance Standard for Standards of Performance for Volatile Organic Liquid Storage Vessels (Including Petroleum Liquid Storage Vessels) for Which Construction, Reconstruction, or Modification Commenced After July 23, 1984, 40 CFR 40 CFR 60.110, Subpart Kb, are not included in the permit for the one (1) bulk resin storage tank. The capacity of the tank is less than 75 cubic meters.

(c) This source is a major source of HAPs and the gel coat and resin facilities are used to manufacture reinforced plastics composites. Therefore, this source is subject to the National Emission Standards for Hazardous Air Pollutants for Reinforced Plastics Composites Production (40 CFR 63.5780, Subpart WWWW), which is incorporated by reference as 326 IAC 20-56.

Pursuant to 40 CFR 63.5785 and 40 CFR 63.5790, the affected source that is subject to the requirements of 40 CFR 63, Subpart WWWW consists of all facilities located at the source engaged in the following operations: open molding operations in which reinforced and/or nonreinforced plastic composites or plastic molding compounds are manufactured using thermoset resins and/or gel coats that contain styrene to produce plastic composites, mixing, cleaning of equipment used in reinforced plastic composites manufacture, HAP-containing materials storage, and repair operations associated with the production of plastic composites. This source does not have any centrifugal casting or continuous lamination/casting operations. The specific facilities include the following:

- (1) One (1) gel and lamination area, identified as GL1, constructed in 2000, with three (3) exhaust fans with a flow rate of 10,000 cubic feet per minute consisting of the following:
 - (A) One (1) gel coating process, identified as G1, equipped with air-assisted airless spray guns, utilizing dry filters for particulate control, approximate capacity: 184 pounds of resin per hour;
 - (B) One (1) lamination process, identified as L1, equipped with flow coater equipment, utilizing dry filters for particulate control, approximate capacity: 720 pounds of resin per hour.
- One (1) mold preparation and final finish area, identified as PF1, constructed in 2000, equipped with spray applicators, utilizing dry filters for particulate control.
- One (1) gel coating process, identified as G2, constructed in 2003, equipped with air-assisted airless spray applicators, utilizing dry filters for particulate control, exhausting to Stack SV-4, capacity: 44.43 pounds of gelcoat per hour.
- (4) One (1) gel coating process, identified as G3, constructed in 2003, equipped with air-assisted airless spray applicators, utilizing dry filters for particulate control, exhausting to Stack SV-5, capacity: 6.92 pounds of gelcoat per hour.
- (5) One (1) lamination station, identified as L2, constructed in 2003, equipped with flow coaters, utilizing dry filters for particulate control, exhausting to Stack SV-6, capacity: 199.63 pounds of resin per hour.
- (6) One (1) closed molding process, identified as CM1, constructed in 2003, capacity: 47.09 pounds of resin per hour.

Nonapplicable portions of the NESHAP will not be included in the permit. The existing affected source associated with the production of plastic composites is subject to the following portions of 40 CFR 63, Subpart WWWW:

- (a) 40 CFR 63.5780
- (b) 40 CFR 63.5785 (a)
- (c) 40 CFR 63.5790 (a), (b) and (c)
- (d) 40 CFR 63.5795 (b)
- (e) 40 CFR 63.5796

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(f)
        40 CFR 63.5797 (a), (b) and (c)
(g)
        40 CFR 63.5798 (a) and (b)
        40 CFR 63.5800
(h)
(i)
        40 CFR 63.5805 (a), (b) and (g)
(j)
        40 CFR 63.5810
        40 CFR 63.5835 (a) and (c)
(k)
        40 CFR 63.5840
(l)
(m)
        40 CFR 63.5860 (a)
        40 CFR 63.5895 (c) and (d)
(n)
        40 CFR 63.5900 (a) (2), (3), and (4), (b) and (c)
(0)
        40 CFR 63.5905
(p)
        40 CFR 63.5910 (a), (b), (c)(1), (2), (3) and (5), (d), (g), (h) and (i)
(q)
        40 CFR 63.5915 (a), (c) and (d)
(r)
        40 CFR 63.5920
(s)
        40 CFR 63.5925
(t)
        40 CFR 63.5930
(u)
        40 CFR 63.5935
(v)
        Tables 1, 2, 3, 4, 7, 8, 9, 13 and 14
(w)
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The provisions of 40 CFR 63 Subpart A – General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR 63, Subpart WWWW.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration)

This source has an unrestricted potential to emit greater than two hundred fifty (250) tons per year of PM, PM_{10} and VOC. This source will remain a minor source pursuant to 326 IAC 2-2 (PSD), as a result of the following limits:

- (a) Total VOC usage from the reinforced plastics composites fabricating manufacturing processes (G1, L1, PF1, G2, G3, L2 and CM1) shall be limited to no more than two hundred forty-nine (249) tons per twelve (12) consecutive month period, with compliance determined at the end of each month. The unrestricted potential VOC emissions from the insignificant activities are 0.106 tons per year, total. Therefore, the total source potential to emit VOC is limited to less than two hundred fifty (250) tons per year.
- (b) Pursuant to 326 IAC 6-3-2(d), the dry filters for particulate control shall be operation in accordance with manufacturer's specifications and control emissions from the reinforced plastics composites fabricating manufacturing processes (G1, L1, PF1, G2, G3 and L2), at all times when these operations are in operation. The controlled PM and PM₁₀ emissions are 15.4 tons per year, each. Pursuant to 326 IAC 6-3-2(e), PM from the grinding booth (GR1) is limited to 2.93 pounds per hour, equivalent to 12.8 tons per year. The unrestricted potential emissions from insignificant natural gas combustion is 0.037 tons per year and 0.146 tons per year of PM and PM₁₀ respectively. Therefore, the total source potential to emit PM and PM₁₀ is limited to less than two hundred fifty (250) tons per year.
- (c) All other remaining criteria pollutants have potential emissions less than two hundred fifty (250) tons per year.

326 IAC 2-4.1-1 (New Source Toxics Control)

The reinforced plastics composites fabricating manufacturing processes (G1, L1, PF1, G2, G3, L2 and CM1) are specifically regulated by NESHAP 40 CFR 63, Subpart WWWW, which was issued pursuant to Section 112i of the CAA; therefore, this source is exempt from the requirements of 326 IAC 2-4.1.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7, Part 70. Since this source in not located in Lake or Porter County, carbon monoxide, oxides of nitrogen, and sulfur dioxide emissions are less than two thousand five hundred (2,500) tons per year, and potential volatile organic compound and PM₁₀ emissions are less than two hundred fifty (250) tons per year, triennial reporting shall be required. In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted by July 1, 2004 and every three (3) years thereafter. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

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

State Rule Applicability – Individual Facilities

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

Pursuant to 326 IAC 6-3-2(e), the particulate from the one (1) grinding booth, identified as (a) GR1, shall be limited by the following:

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:

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

The allowable rate of particulate emissions shall not exceed 2.93 pounds per hour when operating at a process weight rate of 1,210 pounds per hour, equivalent to 0.605 tons per hour. The potential to emit particulate from the grinding booth after control is 0.0024

pounds per hour. Therefore, the grinding booth can comply with this rule when operating the control device.

- (b) Pursuant to 326 IAC 6-3-2(d), particulate from the following reinforced plastics composites fabricating manufacturing processes (G1, L1, PF1, G2, G3, and L2), shall be controlled by a (dry particulate filter, waterwash, or an equivalent control device), and the Permittee shall operate the control device in accordance with manufacturer's specifications.
- (c) All other facilities at this source have potential particulate emissions less than 0.551 pound per hour. Therefore, pursuant to 326 IAC 6-3-1(b)(14), those facilities are exempt from the requirements of 326 IAC 6-3.

326 IAC 8-1-6 (New facilities; general reduction requirements)

The source, constructed after January 1, 1980, is subject to the requirements of 326 IAC 8-1-6 because the potential VOC emissions from the customized fiberglass parts manufacturing operations (G1, L1, PF1, G2, G3, L2 and CM1) are greater than twenty-five (25) tons per year, and is governed by no other provisions of Article 8. Pursuant to MSOP 113-11385-00074, issued March 3, 2000, the BACT requirements are as follows:

- (a) Use of resins and gel coats that contain styrene shall be limited such that the potential to emit (PTE) volatile organic HAPs from use of such resins and gel coats only shall be less than one hundred (100) tons per twelve (12) consecutive month period. Compliance with this limit shall be determined based upon the following criteria:
 - (1) Monthly usage by weight, content of monomer that is HAP, method of application, and other emission reduction techniques used for each gel coat and resin shall be recorded. Volatile organic HAP emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the HAP monomer content, method of application, and other emission reduction techniques used for each gel coat and resin, and summing the emissions for all gel coats and resins. Emission factors shall be obtained from the reference approved by IDEM, OAQ.
 - (2) The emission factors approved for use by IDEM, OAQ shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, July 2001, or its updates, with the exception of the emission factors for controlled spray application. This reference is included with this permit. For the purposes of these emission calculations, HAP monomer in resins and gel coats that is not styrene or methyl methacrylate shall be considered as styrene on an equivalent weight basis.
- (b) The HAP monomer content of resins and gel coats used shall be limited to the following or their equivalent on an emissions mass basis:

Type of Gel Coat or Resin	Content, % by weight
Production ¹ Gel Coat	37
Tooling Gel ² Coat	38
Production Resin	35
Tooling Resin	43

¹Production refers to the manufacture of parts.

²Tooling refers to the manufacture of the molds from which parts are manufactured.

HAP monomer contents shall be calculated on a neat basis, which means excluding any filler. Compliance with these HAP monomer content limits shall be demonstrated on a monthly basis.

Gel coats or resins with HAP monomer contents lower than those specified in the table in this subsection or additional emission reduction techniques approved by IDEM, OAQ may be used to offset the use of gel coats or resins with HAP monomer contents higher than those specified in the table in this subsection. This is allowed to meet the HAP monomer content limits for resins and gel coats and shall be calculated on an equivalent emissions mass basis as shown below:

(Emissions from higher than compliant HAP monomer content resin or gel coat) - (Emissions from compliant resin or gel coat) ≤ (Emissions from compliant resin or gel coat) - (Emissions from lower than compliant HAP monomer content resin or gel coat and/or using other emission reduction techniques).

Where: Emissions, lb or ton = M (mass of resin or gel coat used, lb or ton) *
EF (HAP monomer emission factor for resin or gel coat used, %);

EF, HAP monomer emission factor = emission factor, expressed as pounds (lbs) HAP emitted per ton of resin/gel coat processed, which is indicated by the HAP monomer content, method of application, and other emission reduction techniques for each gel coat and resin used.

(c) Non-atomized spray application technology shall be used to apply unfilled production resins. Non-atomized spray application technology includes flow coaters, flow choppers, pressure-fed rollers, or other non-spray applications of a design and specifications approved by IDEM, OAQ.

If it is not possible to apply a portion of unfilled resins with non-atomized spray application technology, equivalent emissions reductions must be obtained via use of other emission reduction techniques. Examples of other emission reduction techniques include, but are not limited to, lower HAP monomer content resins and gel coats, closed molding, vapor suppression, vacuum bagging/bonding, or installing a control device.

(d) Optimized spray techniques according to a manner approved by IDEM, OAQ shall be used for gel coats and filled resins (where fillers are required for corrosion or fire retardant purposes) at all times. Optimized spray techniques include, but are not limited to, the use of airless, air-assisted airless, high volume low pressure (HVLP), or other spray applicators demonstrated to the satisfaction of IDEM, OAQ, to be equivalent to the spray applicators listed above.

HVLP spray is the technology used to apply material to substrate by means of application equipment that operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (e) The listed work practices shall be followed:
 - (1) To the extent possible, a non-VOC, non-HAP solvent shall be used for cleanup.
 - (2) For VOC- and/or HAP-containing materials:
 - Cleanup solvent containers shall be used to transport solvent from drums to work.

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(ii) Cleanup stations shall be closed containers having soft-gasketed, spring-loaded closures and shall be kept completely closed when not in use.

- (iii) Cleanup rags saturated with solvent shall be stored, transported, and disposed of in containers that are closed tightly.
- (iv) The spray guns used shall be the type that can be cleaned without the need for spraying the solvent into the air.
- (v) All solvent sprayed during cleanup or resin changes shall be directed into containers. Such containers shall be closed as soon as solvent spraying is complete and the waste solvent shall be disposed of in such a manner that evaporation is minimized.
- (3) All material storage containers shall be kept covered when not in use.

326 IAC 20-56-2 (Reinforced Plastic Composites Production)

326 IAC 20-56-2 includes the following operator training requirements:

- (a) Each owner or operator shall train all new and existing personnel, including contract personnel, who are involved in resin and gel coat spraying and applications that could result in excess emissions if performed improperly according to the following schedule:
 - (1) All personnel hired shall be trained within thirty (30) days of hiring.
 - (2) To ensure training goals listed in subsection (b) are maintained, all personnel shall be given refresher training annually.
 - (3) Personnel who have been trained by another owner or operator subject to this rule are exempt from subdivision (1) if written documentation that the employee's training is current is provided to the new employer.
- (b) The lesson plans shall cover, for the initial and refresher training, at a minimum, all of the following topics:
 - (1) Appropriate application techniques.
 - (2) Appropriate equipment cleaning procedures.
 - (3) Appropriate equipment setup and adjustment to minimize material usage and overspray.
- (c) The owner or operator shall maintain the following training records on site and make them available for inspection and review:
 - (1) A copy of the current training program.
 - (2) A list of the following:
 - (A) All current personnel, by name, that are required to be trained.
 - (B) The date the person was trained or date of most recent refresher training, whichever is later.

Records of prior training programs and former personnel are not required to be (d) maintained.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 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 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

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

Control	Parameter	Frequency	Range	Excursions and Exceedances
	Placement, integrity and particle loading of the filters.	Daily		
Dry Filters for G1,	Overspray	Weekly	Normal-	Response
L1, PF1, G2, G3, and L2	Coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground.	Monthly	Abnormal	Steps

These compliance monitoring conditions are necessary to comply with 362 IAC 6-3-2 and 40 CFR 40 CFR 64.2, Compliance Assurance Monitoring (CAM).

Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit 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 June 9, 2006.

Conclusion

The operation of this fiber reinforced plastic composites manufacturing source shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. 113-23208-00074.

Appendix A: Emissions Calculations Reinforced Plastics and Composites Particulate, VOC and HAPs

Company Name: Structural Composites of Indiana, Inc.
Address City IN Zip: 1118 Gerber Street, Ligonier, Indiana 46563

Permit Number: T 113-23208-00074 Reviewer: Kyle Gregory/MES Date: October 24, 2007

Facilities: G1, L1, PF1

	Density	Weight %	CFA Unified	Gallons per	Units per	Potential VOC	Potential VOC	Potential VOC	Potential HAPs	Particulate	Transfer	Application
Material	(lb/gal)	Monomer	Emission Factor	unit	hour	(lb/hr)	(lb/day)	(ton/yr)	(ton/yr)	Potential	Efficiency	Method
		VOC	(lbs/ton)	(gal/unit)	(unit/hour)					(ton/year)		
POLAR WHITE GELCOAT												
Styrene	10.9	34.0%	315	0.840	20.0	28.8	691	126	126	122	75.0%	
Methyl Methacrylate	10.9	5.0%	75.0	0.840	20.0	6.85	165	30.0	30.0	0.00	75.0%	Air Assisted Airless
TOOLING GELCOAT												
Styrene	9.86	36.9%	377	0.013	1.00	0.025	0.600	0.109	0.109	0.092	75.0%	
Methyl Methacrylate	9.86	5.0%	75.0	0.013	1.00	0.00	0.119	0.022	0.022	0.00	75.0%	Air Assisted Airless
RESIN LAYUP												
Styrene	10.8	33.0%	71.0	3.83	20.0	29.4	705	129	129	0	100.0%	Flow Coat
TOOLING RESIN												
Styrene	10.0	47.0%	115	0.134	1.00	0.077	1.85	0.339	0.339	0.00	100.0%	Flow Coat
Styrene	10.0	47.0%	115	0.134	1.00	0.077	1.00	0.339	0.339	0.00	100.0%	Flow Coat

Particulate Control 98.0%

Total (Uncontrolled)	65.1	1563	285	285	122
Total (Controlled)	65.1	1563	285	285	2.44

METHODOLOGY

Potential VOC Pounds per Hour =Density (lb/gal)* Gal of Material (gal/unit) * Maximum (unit/hr) * Emission factor (lb/ton)*(1 ton/2000 lbs)

Potential VOC Pounds per Day =Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * (24 hrs / 1 day) * Emission factor(lb/ton)*(1 ton/2000 lbs)

Potential VOC Tons per Year = Density (lb/gal)* Gal of Material (gal/unit) * Maximum (unit/hr) * (8760 hr/yr) * (1 ton / 2000 lbs) * Emission factor(lb/ton)*(1 ton/2000lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (lbs/gal) * (1 - Weight % Volatiles) * (1 - Transfer efficiency) * (8760 hr/yr) * (1 ton / 2000 lbs)

Total = Sum of all worst case coatings and solvents used

Emission Factor (lbs VOC/ton) taken from "Unified Emission Factors for Open Molding of Composites", Composite Fabricators Association (CFA), April 1999

Appendix A: Emissions Calculations **Reinforced Plastics and Composites** Particulate, VOC and HAPs

Company Name: Structural Composites of Indiana, Inc. Address City IN Zip: 1118 Gerber Street, Ligonier, Indiana 46563

Permit Number: T 113-23208-00074 Reviewer: Kyle Gregory/MES Date: October 24, 2007

Facilities: G2, G3, L2, CM1

	Density	Weight %	CFA Unified	Gallons per	Units per	Potential VOC	Potential VOC	Potential VOC	Potential HAPs	Particulate	Transfer	Application
Material	(lb/gal)	Monomer	Emission Factor	unit	hour	(lb/hr)	(lb/day)	(ton/yr)	(ton/yr)	Potential	Efficiency	Method
		VOC	(lbs/ton)	(gal/unit)	(unit/hour)					(ton/year)		
Roof production												
G309-LA-80780 GELCOAT												
Styrene	11.70	29.0%	258.00	3.71	1.00	5.59	134	24.5	24.5	33.7	75.0%	Air Assisted Airless
Roof production												
H834-RLC-20 RESIN												
Styrene	9.17	35.0%	77.00	21.2	1.00	7.50	180	32.8	32.8	0.00	100%	Flow Coat
Roof production												
Hi-Point 90 Catalyst	8.94	100.0%	N/A	0.665	1.00	5.94	143	26.0	9.37	0.00	100%	Flow Coat
36% dimethyl phthalate												
Roof production												
CT-AR7 Mold Release	7.43	100.0%	N/A	0.010	1.00	0.074	1.78	0.324	0.00	0.00	75.0%	
Component production												
G309-LA-80780 GELCOAT												
Styrene	11.70	29.0%	258.00	0.577	1.00	0.871	20.9	3.81	3.81	5.25	75.0%	Air Assisted Airless
Component production (no stack)												
H834-RLC-20 RESIN												
Styrene	9.17	35.0%	42.40	5.01	1.00	0.97	23.4	4.27	4.27	0.00	100%	Closed Molding *
Component production												
Hi-Point 90 Catalyst	8.94	100.0%	N/A	0.128	1.00	1.15	27.6	5.03	1.81	0.00	75.0%	
36% dimethyl phthalate												
Component production												
CT-AR7 Mold Release	7.43	100.0%	N/A	0.010	1.00	0.074	1.78	0.324	0.00	0.00	75.0%	

Particulate Control

98.0%

Total (Uncontrolled)	22.2	532	97.1	76.6	39.0
Total (Controlled)	22.2	532	97.1	76.6	0.779

METHODOLOGY

Potential VOC Pounds per Hour =Density (lb/gal)* Gal of Material (gal/unit) * Maximum (unit/hr) * Emission factor (lb/ton)*(1 ton/2000 lbs)

Potential VOC Pounds per Day = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * (24 hrs / 1 day) * Emission factor(lb/ton)*(1 ton/2000 lbs)

Potential VOC Tons per Year = Density (lb/gal)* Gal of Material (gal/unit) * Maximum (unit/hr) * (8760 hr/yr) * (1 ton / 2000 lbs) * Emission factor(lb/ton)*(1 ton/2000lbs)

Particulate Potential Tons per Year = (units/hour) * (gal/unit) * (Ibs/gal) * (1 - Weight % Volatiles) * (1 - Transfer efficiency) * (8760 hr/yr) * (1 ton / 2000 lbs)

Total = Sum of all worst case coatings and solvents used

Emission Factor (lbs VOC/ton) taken from "Unified Emission Factors for Open Molding of Composites", Composite Fabricators Association (CFA), April 1999

^{*} Emission factor for closed molding is applicant supplied, and uses a conservative flash-off factor of 6%

Appendix A: Emissions Calculations Natural Gas Combustion MM BTU/HR <100

Company Name: Structural Composites of Indiana, Inc. Address City IN Zip: 1118 Gerber Street, Ligonier, Indiana 46563

Permit Number: T 113-23208-00074 Reviewer: Kyle Gregory/MES Date: October 24, 2007

Unit ID	MMBtu/hr
Five (5) radiant heaters	0.150
One (1) air make-up system	3.575
Three (3) radiant heaters	0.450
One (1) oven	0.225

Total Heat Input Capacity	MMBtu/hr	4.40
Potential Throughput	MMCF/yr	38.54

	Pollutant							
	PM*	PM10*	SO2	NOx	VOC	CO		
Emission Factor in lb/MMCF	1.90	7.60	0.600	100	5.50	84.0		
				**see below				
Potential Emission in tons/yr	0.037	0.146	0.012	1.93	0.106	1.62		

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

^{**}Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

	HAPs - Organics							
Emission Factor in lb/MMcf	Benzene 0.00210	Dichlorobenze ne 0.00120	Formaldehyde 0.07500	Hexane 1.80000	Toluene 0.00340			
Potential Emission in tons/yr	0.000040	0.000023	0.00145	0.035	0.000066			

		HAPs - Metals									
Emission Factor in lb/MMcf	Lead 0.0005	Cadmium 0.0011	Chromium 0.0014	Manganese 0.0004	Nickel 0.0021	Total					
Potential Emission in tons/yr	0.0000096	0.000021	0.000027	0.0000073	0.000040	0.036					

The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

Methodology

All emission factors are based on normal firing.

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) \times 8,760 hrs/yr \times 1 MMCF/1,000 MMBtu 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)

Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Appendix A: Emission Calculations Grinding Operation

Company Name: Structural Composites of Indiana, Inc.
Address City IN Zip: 1118 Gerber Street, Ligonier, Indiana 46563

Permit Number: T 113-23208-00074 Reviewer: Kyle Gregory/MES Date: October 24, 2007

Unit ID	Control Efficiency (%)	Grain Loading per Actual Cubic foot of Outlet Air (grains/cub. ft.)	Gas or Air Flow Rate (acfm.)	PM Emission Rate before Controls (lb/hr)	PM Emission Rate before Controls (tons/yr)	PM Emission Rate after Controls (lb/hr)	PM Emission Rate after Controls (tons/yr)
	,	,	,			, ,	
Grinding Booth	99.99%	0.00002	13500	24.3	106	0.002	0.011

Methodology

Emission Rate in lbs/hr (after controls) = (grains/cub. ft.) (cub. ft./min.) (60 min/hr) (lb/7000 grains) Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

Emission Rate in lbs/hr (before controls) = Emission Rate (after controls)(lbs/hr) / (1-control efficiency) Emission Rate in tons/yr = (lbs/hr) (8760 hr/yr) (ton/2000 lb)

326 IAC 6-3-2 Limited Particulate Emission Rate

Process Rate	Process	Allowable
	Weight Rate	Emissions
(lbs/hr)	(tons/hr)	(lbs/hr)
1210	0.605	2.93

Methodology

Allowable Emissions = 4.10(Process Weight Rate)^0.67

Appendix A: Emissions Summary

Company Name: Structural Composites of Indiana, Inc.
Address City IN Zip: 1118 Gerber Street, Ligonier, Indiana 46563

Permit Number: T 113-23208-00074
Reviewer: Kyle Gregory/MES
Date: October 24, 2007

Uncontrolled Potential to Emit

	Pollutants							HAPs			
	PM	PM10	SO2	NOx	VOC	CO	Styrene	Methyl Methacrylate	Dimethyl Phthalate	Total Haps	
G1, L1, PF1	122	122	0.00	0.00	285	0.00	255	30.0	0.00	285	
G2, G3, L2, CM1	39.0	39.0	0.00	0.00	97.1	0.00	65.4	0.00	31.1	76.6	
Grinding (GR1)	106	106	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Natural Gas Combustion	0.037	0.146	0.012	1.93	0.106	1.62	0.00	0.00	0.00	0.036	
Total	268	268	0.012	1.93	382	1.62	321	30.0	31.1	362	

Controlled Potential to Emit

	Pollutants							HAPs			
	PM	PM10	SO2	NOx	VOC	CO	Styrene	Methyl Methacrylate	Dimethyl Phthalate	Total Haps	
G1, L1, PF1	2.44	2.44	0.00	0.00	285	0.00	255	30.0	0.00	285	
G2, G3, L2, CM1	0.779	0.779	0.00	0.00	97.1	0.00	65.4	0.00	31.1	76.6	
Grinding (GR1)	0.011	0.011	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Natural Gas Combustion	0.037	0.146	0.012	1.93	0.106	1.62	0.00	0.00	0.00	0.036	
Total	3.27	3.38	0.012	1.93	382	1.62	321	30.0	31.1	362	

Limited Potential to Emit

	Pollutants							HAPs				
	PM	PM10	SO2	NOx	VOC	CO	Styrene	Methyl Methacrylate	Dimethyl Phthalate	Total Haps		
G1, L1, PF1	2.44	2.44	0.00	0.00	249	0.00	66.6	7.84	0.00	74.4		
G2, G3, L2, CM1	0.779	0.779	0.00	0.00	249	0.00	17.1	0.00	8.11	25.2		
Grinding (GR1)	12.8	12.8	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00		
Natural Gas Combustion	0.037	0.146	0.012	1.93	0.106	1.62	0.00	0.00	0.00	0.036		
Total	16.1	16.2	0.012	1.93	249	1.62	83.7	7.84	8.11	100		