INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
Governor

Thomas W. Easterly
Commissioner

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

TO: Interested Parties / Applicant

DATE: May 2, 2008

RE: Master Spas, Inc. / 003-21678-00249

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

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, 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, Suite N 501E, 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:

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

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

(1) the name and address of the person making the request;

Recycled Paper An Equal Opportunity Employer *Please Recycle*

(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.

Enclosures
FNTVOP.dot 3/27/08

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

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

Master Spas, Inc.
6927 Lincoln Parkway
Fort Wayne, Indiana 46804

(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.: T003-21678-00249	
Issued by/Original Signed By:	Issuance Date: May 2, 2008
Matt Stuckey, Branch Chief Permits Branch Office of Air Quality	Expiration Date: May 2, 2013

TABLE OF CONTENTS

A. SOURCE SUMMARY 3
- A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(15)][326 IAC 2-7-1(22)]
- A.2 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]
- A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]
- A.4 Part 70 Permit Applicability [326 IAC 2-7-2]

B. GENERAL CONDITIONS 7
- B.1 Definitions [326 IAC 2-7-1]
- 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)]
- B.3 Term of Conditions [326 IAC 2-1.1-9.5]
- B.4 Enforceability [326 IAC 2-7-7]
- B.5 Severability [326 IAC 2-7-5(5)]
- B.6 Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]
- B.7 Duty to Provide Information [326 IAC 2-7-5(6)(E)]
- B.8 Certification [326 IAC 2-7-4(f)][326 IAC 2-7-6(1)][326 IAC 2-7-5(3)(C)]
- B.9 Annual Compliance Certification [326 IAC 2-7-6(5)]
- 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]
- B.11 Emergency Provisions [326 IAC 2-7-16]
- B.12 Permit Shield [326 IAC 2-7-15][326 IAC 2-7-20][326 IAC 2-7-12]
- B.13 Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]
- B.14 Termination of Right to Operate [326 IAC 2-7-10][326 IAC 2-7-4(a)]
- B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]
- 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]
- B.17 Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]
- B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]
- B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]
- B.20 Operational Flexibility [326 IAC 2-7-20][326 IAC 2-7-10.5]
- B.21 Source Modification Requirement [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]
- B.23 Transfer of Ownership or Operational Control [326 IAC 2-7-11]
- B.24 Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)][326 IAC 2-1.1-7]
- B.26 Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]

C. SOURCE OPERATION CONDITIONS 18

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]
- C.2 Opacity [326 IAC 5-1]
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- C.6 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]

Testing Requirements [326 IAC 2-7-6(1)]
- C.7 Performance Testing [326 IAC 3-6]

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

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)]
C.10 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]
C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

Corrective Actions and Response Steps [326 IAC 2-7-5][326 IAC 2-7-6]
C.12 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]
C.13 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]
C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]
C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5] [326 IAC 2-7-6]

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]
C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

Stratospheric Ozone Protection
C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

D.1. EMISSIONS UNIT OPERATION CONDITIONS 25

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]
D.1.2 Reinforced Plastic Composites Production [326 IAC 20-56-2]
D.1.3 Particulate [326 IAC 6-3-2(d)]
D.1.4 Preventative Maintenance Plan

Compliance Determination Requirements
D.1.5 Volatile Organic HAPs
D.1.6 Volatile Organic HAPs Emissions

Compliance Monitoring Requirements [326 IAC 2-7-5(1)][326 IAC 2-7-6(1)]
D.1.7 Monitoring

Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]
D.1.8 Record Keeping Requirements
D.1.9 Reporting Requirements

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]
D.1.11 NESHAP WWWW Requirements [40 CFR Part 63, Subpart WWWW]
D.1.12 One Time Deadlines Relating to NESHAP WWWW

D.2. EMISSIONS UNIT OPERATION CONDITIONS - Insignificant Activities 54

Emission Limitations and Standards [326 IAC 2-7-5(1)]
D.2.1 Particulate Matter (PM) [326 IAC 6-3]

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)][326 IAC 2-6.1-5(a)(2)
D.2.2 Particulate Matter (PM)

Certification 55
Emergency Occurrence Report 56
Quarterly Report..... 58
Quarterly Deviation and Compliance Monitoring Report 59

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 stationary fiberglass reinforced plastic spas manufacturing facility.

Source Address:	6927 Lincoln Parkway, Fort Wayne, Indiana 46804
Mailing Address:	6927 Lincoln Parkway, Fort Wayne, IN 46804
General Source Phone Number:	(260) 436-9100
SIC Code:	3083
County Location:	Allen
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Minor Source, under PSD and Emission Offset Rules Major Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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

(a) Two (2) fiberglass lamination chop booths, installed in 1996, identified as FC1 and FC2, exhausted to stacks S19 and S15, respectively, each booth equipped with dry filters for particulate control, (including cleanup solvents), S19 equipped with a 10,250 cfm exhaust fan and S15 equipped with a 10,800 cfm exhaust fan, total capacity: 4.033 units per hour.

(b) One (1) fiberglass operation for hand lay application of resins, installed in 1996, capacity: 4.033 units per hour.

(c) One (1) fiberglass lamination chop booth, identified as FC3, installed in 2005, equipped with a dry filter for particulate control and exhausted to stack S21, equipped with a 10,800 cubic feet per minute (cfm) exhaust fan.

(d) One (1) surface coating operation for airless spray application of waterbase coatings to woodskirting of spas, installed in 1996, exhausted to stack S17, capacity: 4.033 units 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):

(a) Fiberglass trimming area that does not produce fugitive emissions, equipped with a torit dust collector known as DC14, with a flow rate of 2,050 cfm [326 IAC 6-3].

(b) Woodworking operations with PM emissions less than 5 pounds per hour or 25 pounds per day, equipped with a dust collector identified as DC10, with a flow rate of 8,000 cfm, and a dust collector identified as DC8, with a flow rate of 7,500 cfm [326 IAC 6-3].

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).

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, T003-21678-00249, 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) A "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, 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

(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

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

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

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

(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 T003-21678-00249 and issued pursuant to permitting programs approved into the state implementation plan have been either:

(1) incorporated as originally stated,

(2) revised under 326 IAC 2-7-10.5, or

(3) deleted under 326 IAC 2-7-10.5.

(b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

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

B.15 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]

(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 Advanced Source Modification Approval [326 IAC 2-7-5(16)] [326 IAC 2-7-10.5]

(a) The requirements to obtain a source modification approval under 326 IAC 2-7-10.5 or a permit modification under 326 IAC 2-7-12 are satisfied by this permit for the proposed emission units, control equipment or insignificant activities in Sections A.2 and A.3.

(b) Pursuant to 326 IAC 2-1.1-9 any permit authorizing construction may be revoked if construction of the emission unit has not commenced within eighteen (18) months from the date of issuance of the permit, or if during the construction, work is suspended for a continuous period of one (1) year or more.

B.26 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.

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). Condition C.5 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 by at least twenty percent (20%); or

(2) If there is a change in the following:

(A) Asbestos removal or demolition start date;

(B) Removal or demolition contractor; or

(C) Waste disposal site.

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

(d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

Indiana Department of Environmental Management
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by 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]

(a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing any

applicable procedures and analysis methods specified in 40 CFR 51, 40 CFR 60, 40 CFR 61, 40 CFR 63, 40 CFR 75, or other procedures approved by IDEM, OAQ.

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by 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.

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

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

C.11 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

(a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.

(b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

C.12 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 prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on August 10, 2001.

(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.13 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.

C.14 Response to Excursions or Exceedances [326 IAC 2-7-5] [326 IAC 2-7-6]

(a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:

(1) initial inspection and evaluation;

(2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or

(3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.

(c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

(1) monitoring results;

(2) review of operation and maintenance procedures and records; and/or

(3) inspection of the control device, associated capture system, and the process.

(d) Failure to take reasonable response steps shall be considered a deviation from the permit.

(e) The Permittee shall maintain the following records:

(1) monitoring data;

(2) monitor performance data, if applicable; and

(3) corrective actions taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][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.16 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 61-50 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.17 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

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

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by 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.

Stratospheric Ozone Protection

C.19 Compliance with 40 CFR 82 and 326 IAC 22-1

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

(a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.

(b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

(c) Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Two (2) fiberglass lamination chop booths, installed in 1996, identified as FC1 and FC2, exhausted to stacks S19 and S15, respectively, each booth equipped with dry filters for particulate control, (including cleanup solvents), S19 equipped with a 10,250 cfm exhaust fan and S15 equipped with a 10,800 cfm exhaust fan, total capacity: 4.033 units per hour.

(b) One (1) fiberglass operation for hand lay application of resins, installed in 1996, capacity: 4.033 units per hour.

(c) One (1) fiberglass lamination chop booth, identified as FC3, installed in 2005, equipped with a dry filter for particulate control and exhausted to stack S21, equipped with a 10,800 cubic feet per minute (cfm) exhaust fan.

(d) One (1) surface coating operation for airless spray application of waterbase coatings to woodskirting of spas, installed in 1996, exhausted to stack S17, capacity: 4.033 units per hour.

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

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

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

Pursuant to T 003-9073-000249 and the determination of Best Available Control Technology for VOC emissions from resin and gel coat application operations in the two (2) fiberglass lamination chop booths (identified as FC1 and FC2) and their associated hand layup area, the Permittee shall comply with the following conditions:

(a) Use of gel coats and resins that contain styrene shall be limited such that the potential to emit (PTE) VOCs from the above specified resin and gel coat operations, including resin cleanup solvents, shall be less than 132 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, 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.

(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	HAP Monomer Content, % by weight
Production[1] Gel Coat	37
Tooling[2] Gel Coat	38
Production Resin	35
Tooling Resin	43
Vinylester Resin[3]	42

[1] Production refers to the manufacture of parts.
[2] Tooling refers to the manufacture of the molds from which parts are manufactured.
[3] OAQ has determined that the use of vinylester resin will result in a net decrease in emissions when compared to alternative spa production methods and materials. The source is therefore allowed to use vinylester resin at 42% monomer by weight with air atomized spray application methods, or equivalent emissions.

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 obtain-

ed 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:

(i) 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 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.1.2 Reinforced Plastic Composites Production [326 IAC 20-56-2]

(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.

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

Pursuant to 326 IAC 6-3-2(d), the dry filters for particulate control shall be in operation in accordance with manufacturers specifications and control emissions from the two (2) fiberglass lamination chop booths (FC1 and FC2), the one (1) fiberglass lamination chop booth (FC3), and the one (1) surface coating operation for airless spray application of waterbase coatings to woodskirting of spas at all times when these facilities are in operation.

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 these facilities and any control devices.

Compliance Determination Requirements

D.1.5 Volatile Organic HAPs

Compliance with the volatile organic HAP content and usage limitations contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

D.1.6 Volatile Organic HAPs Emissions

Compliance with Condition D.1.1 shall be demonstrated within thirty (30) days of the end of each month based on the total volatile organic HAP usage for the twelve (12) month period.

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

D.1.7 Monitoring

The compliance monitoring requirements applicable to the fiberglass lamination chop booths, identified as FC1, FC2, and FC3, are as follows:

Control	Parameter	Frequency	Range	Excursions and Exceedances
Dry filters for Fiberglass Chop Booths FC1, FC2, and FC3	Placement, integrity and particle loading of the filters	Daily	Normal - Abnormal	Response Steps
	Overspray	Weekly		
	Coating emissions from the stacks (S15, S19 and S21) and the presence of overspray on the rooftops and the nearby ground.	Monthly		

These monitoring conditions are necessary because the dry filters for fiberglass chop booths FC1, FC2, and FC3 must operate properly to ensure compliance with 326 IAC 6-3-2(d) (Particulate) and 326 IAC 2-7 (Part 70).

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 Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (6) below. Records maintained for (1) through (6) shall be taken monthly and shall be complete and sufficient to establish compliance with the volatile organic HAP usage limits and/or the volatile organic HAP content limits established in Condition D.1.1.

(1) The amount, VOC content and volatile organic HAP content of each resin and gelcoat. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the month of use;

(3) The HAP monomer content for resins and gelcoats calculated on an equivalent mass basis for each month in which noncompliant resins or gelcoats are used.

(4) The cleanup solvent usage for each month;

(5) The total VOC and volatile organic HAP usage for each month; and

(6) The weight of VOCs and volatile organic HAPs emitted for each compliance period.

(b) To document compliance with Condition D.1.2, the Permittee shall maintain the following training records:

(1) A copy of the current training program.

(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.

(c) To document compliance with Condition D.1.7, the Permittee shall maintain a log of daily, weekly and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

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

D.1.9 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 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 the schedule in 40 CFR 63 Subpart WWWW.

D.1.11 NESHAP WWWW Requirements [40 CFR Part 63, Subpart WWWW][326 IAC 20-56-1]

Pursuant to CFR Part 63, Subpart WWWW and 326 IAC 20-56-1, the Permittee shall comply with the provisions of 40 CFR Part 63.5780, for the two (2) fiberglass lamination chop booths, identified as FC1 and FC2, the one (1) fiberglass operation for hand lay application of resins, the one (1) fiberglass lamination chop booth, identified as FC3, and equipment cleaning, cleaning of materials used in reinforced plastic composites manufacture and HAP-containing material storage, with a compliance date of April 21, 2006, as specified as follows:

What this Subpart Covers

§ 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.

§ 63.5785 Am I subject to this subpart?

(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; applications 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?

(a) A reinforced plastic composites production facility is a new affected source if it meets all the criteria in paragraphs (a)(1) and (2) of this section.

(1) You commence construction of the source after August 2, 2001.

(2) You commence construction, and no other reinforced plastic composites production source exists at that site.

(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 a 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 these 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.

(a) If you have an existing facility that has any centrifugal casting or continuous casting/lamination operations, you must meet the requirements of paragraph (a)(1) or (2) of this section:

(1) If the combination of all centrifugal casting and continuous lamination/casting operations emit 100 tpy or more of HAP, you must reduce the total organic HAP emissions from centrifugal casting and continuous lamination/casting operations by at least 95 percent by weight. As an alternative to meeting the 95 percent by weight requirement, centrifugal casting operations may meet the applicable organic HAP emissions limits in Table 5 to this subpart and continuous lamination/casting operations may meet an organic HAP emissions limit of 1.47 lbs/ton of neat resin plus and neat gel coat plus applied. For centrifugal casting, the percent reduction requirement does not apply to organic HAP emissions that occur during resin application onto an open centrifugal casting mold using open molding application techniques.

(2) If the combination of all centrifugal casting and continuous lamination/casting operations emit less than 100 tpy of HAP, then centrifugal casting and continuous lamination/casting operations must meet the appropriate requirements in Table 3 to this subpart.

(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 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 of appendix A to subpart WWWW of 40 CFR part 63. If you want to use an add-on control device 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.

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

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 the 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 the 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.

$$\text{Average organic HAP Emissions Factor} = \frac{\sum_{i=1}^{n}(\text{Actual Process Stream EF}_i * \text{Material}_i)}{\sum_{i=1}^{n} Material_i} \qquad \text{(Eq. 2)}$$

Where:

Actual Process Stream EF_i=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.

$$\textit{Weighted}\ \text{Average Emission Limit} = \frac{\sum_{i=1}^{n}(EL_i * \text{Material}_i)}{\sum_{i=1}^{n} Material_i} \qquad (Eq.\ 3)$$

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 actual 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.

$$\text{Actual Weighted Average Organic HAP Emissions Factor} = \frac{\sum_{i=1}^{n}\left(\text{Actual Operation EF}_i * \text{Material}_i\right)}{\sum_{i=1}^{n} \text{Material}_i} \qquad (Eq.\ 4)$$

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 of these operations 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 your resin organic HAP content is below the applicable value~~s~~ 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 (b)(1) 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 a 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 there 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 changed 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 operations on a 12-month rolling average.

§ 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 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 a 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.

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 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 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.....	a. Manual resin application.	i. Nonvapor-suppressed resin.	EF = 0.126 x % HAP x 2000.	EF = ((0.286 x %HAP)-0.0529) x 2000
		ii. Vapor-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))
		iii. Vacuum bagging/closed-	EF = 0.126 x % HAP x 2000 x 0.8.	EF = ((0.286 x %HAP)-0.0529) x

		mold curing with roll out.	2000 x 0.8
		iv. Vacuum bagging/ closed-mold curing without roll-out.	EF = (0.126 x % HAP x 2000 x 0.5.	EF = ((0.286 x %HAP)-0.0529) x 2000 x 0.5
	b. Atomized mechanical resin application.	i. Nonvapor-suppressed resin.	EF = 0.169 x %HAP x 2000.	EF = ((0.714 x %HAP)-0.18) x 2000
		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 roll-out.	EF = 0.169 x %HAP x 2000 x 0.55.	EF = ((0.714 x %HAP)-0.18) x 2000 x 0.55
	c. Nonatomized mechanical resin application.	i. Nonvapor-suppressed resin.	EF = 0.107 x %HAP x 2000.	EF = ((0.157 x %HAP)-0.0165) x 2000
		ii. Vapor-suppressed resin.	EF = 0.107 x %HAP x 2000 x (1-(0.45 x VSE factor)).	EF = ((0.157 x %HAP)-0.0165) x 2000 x (1-(0.45 x VSE factor))
		iii. Closed-mold curing with roll-out.	EF = 0.107 x %HAP x 2000 x 0.85.	EF = ((0.157 x %HAP)-0.0165) x 2000 x 0.85
		iv. Vacuum bagging/closed-mold curing without roll-out.	EF = 0.107 x %HAP x 2000 x 0.55.	EF = ((0.157 x %HAP)-0.0165) x 2000 x 0.55
	d. Atomized mechanical resin application with robotic or automated spray control \5\.	Nonvapor-suppressed resin.	EF = 0.169 x %HAP x 2000 x 0.77.	EF = 0.77 x ((0.714 x %HAP)-0.18) x 2000
	e. Filament application \6\.	i. Nonvapor-suppressed resin.	EF = 0.184 x %HAP x 2000.	EF = ((0.2746 x %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.	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.
h. Atomized spray gel coat using robotic or automated spray		Nonvapor-suppressed gel coat.	EF = 0.445 x %HAP x 2000 x 0.73	EF = ((1.03646 x %HAP)-0.195) x 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 lbs 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.

\8\ 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 Specific Open Molding, Centrifugal Casting, Pultrusion and Continuous Lamination/Casting Operations As required in §§63.5796, 63.5805 (a) through (c) and (g), 63.5810(a), (b), and (d), 63.5820(c), 63.5830, 63.5835(a), 63.5895(c) and (d), 63.5900(a)(2), and 63.5915(c), you must meet the appropriate organic HAP emissions limits in the following table:

If your operation type is . . .	And you use . . .	Your organic HAP emissions limit is 1 . . .
1. Open molding_corrosion-resistant and/or high strength (CR/HS).	a. Mechanical resin application.	113 lb/ton
	b. Filament application	171 lb/ton
	c. Manual resin application.	123 lb/ton
2. Open molding_non-CR/HS.....	a. Mechanical resin application.	88 lb/ton
	b. Filament application	188 lb/ton
	c. Manual resin application.	87 lb/ton
3. Open molding_tooling.....	a. Mechanical resin application.	254 lb/ton
	b. Manual resin application.	157 lb/ton
4. Open molding_low-flame spread/low-smoke products.	a. Mechanical resin application.	497 lb/ton
	b. Filament application	270 lb/ton
	c. Manual resin application.	238 lb/ton
5. Open molding_shrinkage controlled resins.	a. Mechanical resin application.	354 lb/ton
	b. Filament application	215 lb/ton
	c. Manual resin application.	180 lb/ton
6. Open molding_gel coat 3.....	a. Tooling gel coating.	440 lb/ton
	b. White/off white pigmented gel coating.	267 lb/ton
	c. All other pigmented gel coating.	377 lb/ton
	d. CR/HS or high performance gel coat.	605 lb/ton
	e. Fire retardant gel coat.	854 lb/ton
	f. Clear production gel coat.	522 lb/ton

Footnotes to Table 3
\1\ Organic 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.
\2\ This emission limit applies regardless of whether the shrinkage controlled resin is used as a production resin or a tooling resin.
\3\ If 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.
\4\ For 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.
\5\ Calculate 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.

\6\ Pultrusion 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:

For . . .	You must . . .
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.
2. 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.

\1\ Containers 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 contents 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:

	The highest resin weight is *** percent

If your facility has the following resin type and application method . . .	organic HAP content, or weighted average weight percent organic HAP content, you can use for . . .	Is . . .
2. 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.[12]	45.0
5. Non-CR/HS resins, nonatomized mechanical.	a. Non-CR/HS manual.	38.5
	b. non-CR/HS centrifugal casting.[12]	38.5
6. Non-CR/HS resins, centrifugal casting.[12]	Non-CR/HS manual....	37.5
7. Tooling resins, nonatomized mechanical.	Tooling manual.....	91.4
8. Tooling resins, manual.....	Tooling atomized mechanical.	45.9

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

For . . .	That must meet the following organic HAP emissions limit . . .	You have demonstrated initial compliance if . . .
1. 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.	i. You have met the appropriate organic HAP emissions limits for these operations as calculated using the procedures in § 63.5810 on a 12-month rolling average 1

		year after the appropriate compliance date, and/or ii. You demonstrate that any individual resins or gel coats not included in (i) above, as applied, meet their applicable emission limits, or iii. You demonstrate by using the appropriate values in Table 7 to this subpart that the weighted average of all resins and gel coats for each resin type and application method meet the appropriate organic HAP contents.
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.

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:

For . . .	That must meet the following standard . . .	You have demonstrated initial compliance if . . .
1. A new or existing closed or molding operation using compression/injection molding.	Uncover, unwrap or expose only one charge per mold cycle per compression/ injection molding	The owner or operator submits a certified statement in the notice of compliance status

	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.	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	The owner or operator submits a certified statement in the

	or covered except during the addition or removal of materials. Bulk HAP-containing materials storage tanks may be vented as necessary for safety.	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 . . .
1. 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,	Semiannually according to the requirements in § 63.5910(b).

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.	
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 One Time Deadlines Relating to NESHAP WWWW

(a) The Permittee must conduct the performance tests, performance evaluations, design evaluations, capture efficiency testing, and other initial compliance demonstrations by April 21, 2006.

(b) A notification of compliance status shall be submitted as follows:

(1) If complying with organic HAP emissions limit average provisions, the Permittee must submit a notification of compliance status on or before the close of business on May 21, 2007.

(2) If complying with organic HAP content limits, application equipment requirements, or organic HAP emissions limits other than organic HAP emissions limit averaging, the Permittee must submit a notification of compliance status on or before the close of business on May 21, 2006.

(3) The Permittee submitted a notification of compliance status on May 19, 2006.

SECTION D.2 FACILITY OPERATION CONDITIONS

Facility Description [326 IAC 2-7-5(15)]: Insignificant Activities

(a) Fiberglass trimming area that does not produce fugitive emissions, equipped with a torit dust collector identified as DC14 with a flow rate of 2,050 cfm.

(b) Woodworking operations with PM emissions less than 5 pounds per hour or 25 pounds per day, equipped with a dust collector known as DC10 with a flow rate of 8,000 cfm, and a dust collector known as DC8 with a flow rate of 7,500 cfm.

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

Emission Limitations and Standards

D.2.1 Particulate Matter (PM) [326 IAC 6-3]

(a) The particulate matter (PM) emissions from the woodworking operations will be limited to 2.00 pounds per hour when operating at a process weight rate 690 pounds per hour.

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

Interpolation of the data for process weight rates 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.

Compliance will be demonstrated by operating the dust collector at all times when woodworking operations are taking place.

(b) The particulate matter (PM) emissions from the fiberglass trimming area will be limited to 1.63 pounds per hour when operating at a process weight rate of 507 pounds per hour.

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

Interpolation of the data for process weight rates 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.

Compliance will be demonstrated by operating the dust collector at all times when the grinding is taking place.

Compliance Determination Requirements [326 IAC 2-5.1-3(e)(2)] [326 IAC 2-6.1-5(a)(2)]

D.2.2 Particulate Matter (PM)

In order to comply with Condition D.2.1, the dust collectors in the grinding and woodworking areas shall be in operation at all times when the grinding and woodworking facilities are in operation.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
PART 70 OPERATING PERMIT
CERTIFICATION

Source Name: Master Spas, Inc.
Source Address: 6927 Lincoln Parkway, Fort Wayne, Indiana 46804
Mailing Address: 6927 Lincoln Parkway, Fort Wayne, IN 46804
Part 70 Permit No.: T003-21678-00249

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:

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

PART 70 OPERATING PERMIT
EMERGENCY OCCURRENCE REPORT

Source Name: Master Spas, Inc.
Source Address: 6927 Lincoln Parkway, Fort Wayne, Indiana 46804
Mailing Address: 6927 Lincoln Parkway, Fort Wayne, IN 46804
Part 70 Permit No.: T003-21678-00249

This form consists of 2 pages **Page 1 of 2**

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

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

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

If any of the following are not applicable, mark N/A **Page 2 of 2**

Date/Time Emergency started:
Date/Time Emergency was corrected:
Was the facility being properly operated at the time of the emergency? Y N
Type of Pollutants Emitted: TSP, PM-10, SO_2, VOC, NO_X, CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

A certification is not required for this report.

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

Part 70 Quarterly Report

Source Name: Master Spas, Inc.
Source Address: 6927 Lincoln Parkway, Fort Wayne, Indiana 46804
Mailing Address: 6927 Lincoln Parkway, Fort Wayne, IN 46804
Part 70 Permit No.: T003-21678-00249
Facility: FC1 and FC2 Resin and gel coat operations including hand layup area
Parameter: Volatile Organic Compounds, including cleanup solvents
Limit: Less than 132 tons per consecutive twelve (12) month period

Monthly usage by weight, percent volatiles, and method of application shall be recorded for each resin and solvent. Volatile organic compound emissions shall be calculated by multiplying the usage of each resin and solvent by the emission factor that is appropriate for the percent volatiles or monomer content, and the method of application, and summing the emissions for all resins and solvents. Emission factors shall be obtained from a reference approved by IDEM, OAQ.

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

QUARTER : YEAR:

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

☐ No deviation occurred in this quarter.

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

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

Attach a signed certification to complete this report.

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE DATA SECTION
PART 70 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Master Spas, Inc.
Source Address: 6927 Lincoln Parkway, Fort Wayne, Indiana 46804
Mailing Address: 6927 Lincoln Parkway, Fort Wayne, IN 46804
Part 70 Permit No.: T003-21678-00249

Months: _____ to _ Year: _____

This report shall be submitted quarterly based on a calendar year. Any deviation from the requirements, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period".	
☐ NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
☐ THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	**Duration of Deviation:**
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

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

Form Completed by:_____

Title / Position: _____

Date:_____

Phone: _____

Attach a signed certification to complete this report.

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	Master Spas, Inc.
Source Location:	6927 Lincoln Parkway, Fort Wayne, Indiana 46804
County:	Allen
SIC Code:	3083
FESOP Permit No.:	T003-21678-00249
Permit Reviewer:	Summer Keown

On January 28, 2008, the Office of Air Quality (OAQ) sent a Public Notice to the Fort Wayne Journal Gazette stating that Master Spas, Inc had applied for a Part 70 Operating Permit Renewal to continue to operate a fiberglass reinforced plastic spas manufacturing facility. The notice also stated that OAQ proposed to issue a Part 70 Operating Permit 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 should be issued as proposed.

On January, 31, 2008, on behalf of Master Spas, Inc., Mary Anne F. Saggesse, attorney for Master Spas, Inc., submitted comment on the proposed Part 70 Operating Permit. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

On page 60 of the Permit is the Part 70 Quarterly Report form. The publication date for the Unified Emission Factor document should be corrected to July 2001.

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

Part 70 Quarterly Report

Source Name:	Master Spas, Inc.
Source Address:	6927 Lincoln Parkway, Fort Wayne, Indiana 46804
Mailing Address:	6927 Lincoln Parkway, Fort Wayne, IN 46804
Part 70 Permit No.:	T003-21678-00249
Facility:	Resin and gel coat operations
Parameter:	Volatile Organic Compounds, including cleanup solvents
Limit:	Less than 132 tons per consecutive twelve (12) month period

Monthly usage by weight, percent volatiles, and method of application shall be recorded for each resin and solvent. Volatile organic compound emissions shall be calculated by multiplying the usage of each resin and solvent by the emission factor that is appropriate for the percent volatiles or monomer content, and the method of application, and summing the emissions for all resins and solvents. Emission factors shall be obtained from a reference approved by IDEM, OAQ.

The emission factors approved for use by IDEM, OAQ for resin and gelcoat operations shall be taken from the following reference: "Unified Emission Factors for Open Molding of

Composites," Composites Fabricators Association, April 2001, with the exception of the emission factors for controlled spray application. This reference is included with this permit. The emission factors for all other VOC emitting compounds shall be 100% of the input volatile organic compounds.

Response 1:

The Part 70 Quarterly Report form on page 58 of the permit has been changed to reflect the correct date for the Unified Emission Factor document.

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

Part 70 Quarterly Report

Source Name:	Master Spas, Inc.
Source Address:	6927 Lincoln Parkway, Fort Wayne, Indiana 46804
Mailing Address:	6927 Lincoln Parkway, Fort Wayne, IN 46804
Part 70 Permit No.:	T003-21678-00249
Facility:	Resin and gel coat operations
Parameter:	Volatile Organic Compounds, including cleanup solvents
Limit:	Less than 132 tons per consecutive twelve (12) month period

Monthly usage by weight, percent volatiles, and method of application shall be recorded for each resin and solvent. Volatile organic compound emissions shall be calculated by multiplying the usage of each resin and solvent by the emission factor that is appropriate for the percent volatiles or monomer content, and the method of application, and summing the emissions for all resins and solvents. Emission factors shall be obtained from a reference approved by IDEM, OAQ.

The emission factors approved for use by IDEM, OAQ for resin and gelcoat operations shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, ~~April 2001~~ **July 2001**, with the exception of the emission factors for controlled spray application. This reference is included with this permit. The emission factors for all other VOC emitting compounds shall be 100% of the input volatile organic compounds.

On February 4, 2008, on behalf of Master Spas, Inc., Mary Anne F. Saggesse, attorney for Master Spas, Inc., submitted comment on the proposed Part 70 Operating Permit. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

The "Notice of 30 day Public Comment Period" for the Master Spas Renewal Part 70 Permit contained an error in the 2nd paragraph where it refers to the operation as a municipally owned wastewater treatment plant. The first paragraph correctly referred to Master Spas operation.

Response 1:

Master Spas, Inc was incorrectly described as a "municipally owned wastewater treatment plant" in the Public Notice letter. However, throughout the permit itself, Master Spas, Inc. was correctly identified as a fiberglass reinforced plastic spas manufacturing facility. Therefore, no changes have been made to the permit.

On February 20, 2008, on behalf of Master Spas, Inc., Mary Anne F. Saggesse, attorney for Master Spas, Inc., submitted comment on the proposed Part 70 Operating Permit. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

The stated exhaust fan capacity for S21 should be corrected to 10,800 cfm (as in the stack summary) for conditions A.2(c), D.1(c) and the TSD (Page 1@(c) and Page 7@(3)). The 10,300 cfm is not correct.

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) Two (2) fiberglass lamination chop booths, installed in 1996, identified as FC1 and FC2, exhausted to stacks S19 and S15, respectively, each booth equipped with dry filters for particulate control, (including cleanup solvents), S19 equipped with a 10,250 cfm exhaust fan and S15 equipped with a 10,800 cfm exhaust fan, total capacity: 4.033 units per hour.

(b) One (1) fiberglass operation for hand lay application of resins, installed in 1996, capacity: 4.033 units per hour.

(c) One (1) fiberglass lamination chop booth, identified as FC3, installed in 2005, equipped with a dry filter for particulate control and exhausted to stack S21, equipped with a 10,300 cubic feet per minute (cfm) exhaust fan.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Two (2) fiberglass lamination chop booths, installed in 1996, identified as FC1 and FC2, exhausted to stacks S19 and S15, respectively, each booth equipped with dry filters for particulate control, (including cleanup solvents), S19 equipped with a 10,250 cfm exhaust fan and S15 equipped with a 10,800 cfm exhaust fan, total capacity: 4.033 units per hour.

(b) One (1) fiberglass operation for hand lay application of resins, installed in 1996, capacity: 4.033 units per hour.

(c) One (1) fiberglass lamination chop booth, identified as FC3, installed in 2005, equipped with a dry filter for particulate control and exhausted to stack S21, equipped with a 10,300 cubic feet per minute (cfm) exhaust fan.

(d) One (1) surface coating operation for airless spray application of waterbase coatings to woodskirting of spas, installed in 1996, exhausted to stack S17, capacity: 4.033 units per hour.

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

Response 1:

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) Two (2) fiberglass lamination chop booths, installed in 1996, identified as FC1 and FC2, exhausted to stacks S19 and S15, respectively, each booth equipped with dry filters for particulate control, (including cleanup solvents), S19 equipped with a 10,250 cfm exhaust fan and S15 equipped with a 10,800 cfm exhaust fan, total capacity: 4.033 units per hour.

(b) One (1) fiberglass operation for hand lay application of resins, installed in 1996, capacity: 4.033 units per hour.

(c) One (1) fiberglass lamination chop booth, identified as FC3, installed in 2005, equipped with a dry filter for particulate control and exhausted to stack S21, equipped with a ~~10,300~~ **10,800** cubic feet per minute (cfm) exhaust fan.

Response 1:

Condition A.2(c) and the unit description in D.1(c) have been changed to reflect the correct cubic feet per minute (cfm) for the exhaust fan. IDEM, OAQ maintains the unchanged Technical Support Document (TSD) as a historical record. The Addendum to the Technical Support Document (ATSD) will serve as a documentation of all comments made and the appropriate changes made in the permit. The TSD has not been changed as a result of these comments.

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) Two (2) fiberglass lamination chop booths, installed in 1996, identified as FC1 and FC2, exhausted to stacks S19 and S15, respectively, each booth equipped with dry filters for particulate control, (including cleanup solvents), S19 equipped with a 10,250 cfm exhaust fan and S15 equipped with a 10,800 cfm exhaust fan, total capacity: 4.033 units per hour.

(b) One (1) fiberglass operation for hand lay application of resins, installed in 1996, capacity: 4.033 units per hour.

(c) One (1) fiberglass lamination chop booth, identified as FC3, installed in 2005, equipped with a dry filter for particulate control and exhausted to stack S21, equipped with a ~~10,300~~ **10,800** cubic feet per minute (cfm) exhaust fan.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Two (2) fiberglass lamination chop booths, installed in 1996, identified as FC1 and FC2, exhausted to stacks S19 and S15, respectively, each booth equipped with dry filters for particulate control, (including cleanup solvents), S19 equipped with a 10,250 cfm exhaust fan and S15 equipped with a 10,800 cfm exhaust fan, total capacity: 4.033 units per hour.

(b) One (1) fiberglass operation for hand lay application of resins, installed in 1996,

capacity: 4.033 units per hour.

(c) One (1) fiberglass lamination chop booth, identified as FC3, installed in 2005, equipped with a dry filter for particulate control and exhausted to stack S21, equipped with a ~~10,300~~ **10,800** cubic feet per minute (cfm) exhaust fan.

(d) One (1) surface coating operation for airless spray application of waterbase coatings to woodskirting of spas, installed in 1996, exhausted to stack S17, capacity: 4.033 units per hour.

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

Comment 2:

The first paragraph language of Condition D.1.1 in the draft Public Notice version of the Renewal Part 70 Permit was revised incorrectly from the current Part 70 Operating Permit. The current permit states that the BACT requirement applies to the "resin and gel coat application operations in the chop booths and hand layup area" only. Master Spas currently has these operations existing in 2 chop booths (known as FC1 and FC2), mold construction, and the resin cleanup solvents from those 2 chop booths plus the cleanup solvents from FC3. (Due to a bottleneck, FC3 cannot increase the operational capacity and therefore attributes no usage of additional resin. The first paragraph of this same requirement in the draft Public Notice version of the Renewal Part 70 Permit has been revised incorrectly to include FC3 without limitation to solely the cleanup solvent usage, and to include the surface coating of waterbase coatings to woodskirting. The applicability of the BACT requirement cannot be revised in the Renewal Part 70 Permit to broaden its applicability to more operations than were historically correct.

Ms. Saggese also provided a follow-up comment on March 20, 2008:

The proposed version uses solely the original BACT language but without the specificity as to which emission units are applicable. The problem is that the current permit had additional references to specify the emission units in other paragraphs which have now been deleted in the renewal.

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

Pursuant to T 003-9073-000249 and the determination of Best Available Control Technology for VOC emissions from resin and gel coat application operations in the chop booths and hand lay application area, the following BACT requirements are applicable to the two (2) fiberglass lamination chop booths, identified as FC1 and FC2, the one (1) fiberglass operation for hand lay of resins, the one (1) fiberglass lamination chop booth, identified as FC3 and the one (1) surface coating operation for airless spray application of waterbase coatings to woodskirting of spas:

(a) Use of gel coats and resins that contain styrene shall be limited such that the potential to emit (PTE) VOCs from resin and gel coat operations, including resin cleanup solvents, shall be less than 132 tons per twelve (12) consecutive month period. Compliance with this limit shall be determined based upon the following criteria:

Response 2:

D.1.1 of the Part 70 Operating Permit has been revised to reflect the requested changes:

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

Pursuant to T 003-9073-000249 and the determination of Best Available Control Technology for VOC emissions from resin and gel coat application operations in the **two (2) fiberglass**

lamination chop booths **(identified as FC1 and FC2)** and **their associated** hand lay application area, ~~the following BACT requirements are applicable to the two (2) fiberglass lamination chop booths, identified as FC1 and FC2, the one (1) fiberglass operation for hand lay of resins, the one (1) fiberglass lamination chop booth, identified as FC3 and the one (1) surface coating operation for airless spray application of waterbase coatings to woodskirting of spas:~~ **the Permittee shall comply with the following conditions:**

(a) Use of gel coats and resins that contain styrene shall be limited such that the potential to emit (PTE) VOCs from **above specified** resin and gel coat operations, including resin cleanup solvents, shall be less than 132 tons per twelve (12) consecutive month period. Compliance with this limit shall be determined based upon the following criteria:

On March 20, 2008, on behalf of Master Spas, Inc., Mary Anne F. Saggesse, attorney for Master Spas, Inc., submitted comments on the proposed Part 70 Operating Permit. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

The reporting form should be revised by adding the words in bold italics for these sections specified, as follows:

Facility: **FC1 and FC2** Resin and gel coat operations **including hand layup area**
Parameter: Volatile Organic Compounds, including cleanup solvents
Limit: Less than 132 tons per consecutive twelve (12) month period.

Response 1:

The reporting form has been revised to reflect the requested changes:

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

Part 70 Quarterly Report

Source Name:	Master Spas, Inc.
Source Address:	6927 Lincoln Parkway, Fort Wayne, Indiana 46804
Mailing Address:	6927 Lincoln Parkway, Fort Wayne, IN 46804
Part 70 Permit No.:	T003-21678-00249
Facility:	**FC1 and FC2** Resin and gel coat operations **including hand layup area**
Parameter:	Volatile Organic Compounds, including cleanup solvents
Limit:	Less than 132 tons per consecutive twelve (12) month period

Monthly usage by weight, percent volatiles, and method of application shall be recorded for each resin and solvent. Volatile organic compound emissions shall be calculated by multiplying the usage of each resin and solvent by the emission factor that is appropriate for the percent volatiles or monomer content, and the method of application, and summing the emissions for all resins and solvents. Emission factors shall be obtained from a reference approved by IDEM, OAQ.

The emission factors approved for use by IDEM, OAQ for resin and gelcoat operations shall be taken from the following reference: "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association, July 2001, with the exception of the emission factors for controlled spray application. This reference is included with this

permit. The emission factors for all other VOC emitting compounds shall be 100% of the input volatile organic compounds.

On February 4, 2008, on behalf of IDEM Compliance, Greg Wingstrom submitted commens on the proposed Part 70 Operating Permit. The comments are as follows: The permit language, if changed, has deleted language as ~~strikeouts~~ and new language **bolded**.

Comment 1:

Condition No. C.12(a), Emergency Reduction Plans: The date is missing from the end of the sentence. The ERP was received on August 10, 2001.

C.12 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 prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on.

Response 1:

C.12 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 prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on **August 10, 2001**.

Comment 2:

Condition No.D.1.8 (c): Condition no. D.1.7 appears to require daily, monthly and weekly monitoring but D.1.8(c) does not require records to be kept for the weekly monitoring.

D.1.7 Monitoring

The compliance monitoring requirements applicable to the fiberglass lamination chop booths, identified as FC1, FC2, and FC3, are as follows:

Control	Parameter	Frequency	Range	Excursions and Exceedances
Dry filters for Fiberglass Chop Booths FC1, FC2, and FC3	Placement, integrity and particle loading of the filters	Daily	Normal - Abnormal	Response Steps
	Overspray	Weekly		
	Coating emissions from the stacks (S15, S19 and S21) and the presence of overspray on the rooftops and the nearby ground.	Monthly		

These monitoring conditions are necessary because the dry filters for fiberglass chop booths FC1, FC2, and FC3 must operate properly to ensure compliance with 326 IAC 6-3-2(d) (Particulate) and 326 IAC 2-7 (Part 70).

D.1.8 Record Keeping Requirements

. . .

(c) To document compliance with Condition D.1.7, the Permittee shall maintain a log of daily and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

Response 2:

D.1.8 Record Keeping Requirements

. . .

(c) To document compliance with Condition D.1.7, the Permittee shall maintain a log of daily**, weekly** and monthly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

Comment 3:

Condition No. D.1.12(b)(3): The date cited is incorrect. The notification of compliance status was actually submitted on 5/19/06.

D.1.12 One Time Deadlines Relating to NESHAP WWWW

. . .

(3) The Permittee submitted a notification of compliance status on April 12, 2003.

Response 3:

D.1.12 One Time Deadlines Relating to NESHAP WWWW

. . .

(3) The Permittee submitted a notification of compliance status on ~~April 12, 2003~~ **May 19, 2006**.

Upon further review, IDEM, OAQ, has made the following changes to the permit:

Change 1:

Operation Permit No.: T 003-21678-00249	
Issued by: Matt Stuckey, ~~Deputy~~ Branch Chief Permits Branch Office of Air Quality	Issuance Date: Expiration Date:

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:	**Master Spas, Inc.**
Source Location:	**6927 Lincoln Parkway, Fort Wayne, Indiana 46804**
County:	**Allen**
SIC Code:	**3083**
Permit Renewal No.:	**T 003-21678-00249**
Permit Reviewer:	**Summer Keown**

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Master Spas, Inc. relating to the operation of a stationary fiberglass reinforced plastic spas manufacturing facility.

History

On August 15, 2005, Master Spas, Inc submitted applications to the OAQ requesting to renew its operating permit. Master Spas, Inc was issued a Part 70 Operating Permit Renewal, T003-9073-00249 on May 16, 2001.

Permitted Emission Units and Pollution Control Equipment

(a) Two (2) fiberglass lamination chop booths, installed in 1996, identified as FC1 and FC2, exhausted to stacks S19 and S15, respectively, each booth equipped with dry filters for particulate control, (including cleanup solvents), S19 equipped with a 10,250 cfm exhaust fan and S15 equipped with a 10,800 cfm exhaust fan, total capacity: 4.033 units per hour.

(b) One (1) fiberglass operation for hand lay application of resins, installed in 1996, capacity: 4.033 units per hour.

(c) One (1) fiberglass lamination chop booth, identified as FC3, installed in 2005, equipped with a dry filter for particulate control and exhausted to stack S21, equipped with a 10,300 cubic feet per minute (cfm) exhaust fan.

(d) One (1) surface coating operation for airless spray application of waterbase coatings to woodskirting of spas, installed in 1996, exhausted to stack S17, capacity: 4.033 units per hour.

Insignificant Activities

(a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour.

(b) The following VOC and HAP storage containers: vessels storing lubricating oil, hydraulic oils, machining oils, and machining fluids.

(c) Application of oils, greases, lubricants or other nonvolatile materials applied as temporary protective coatings.

(d) Any operation using aqueous solutions containing less than 1 percent by weight of VOCs, excluding HAPs.

(e) Replacement or repair of electrostatic precipitators, bags in baghouses, and filters in other air filtration equipment.

(f) Fiberglass trimming area that does not produce fugitive emissions, equipped with a torit dust collector known as DC14, with a flow rate of 2,050 cfm [326 IAC 6-3-2].

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

(h) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower.

(i) Woodworking operations with PM emissions less than 5 pounds per hour or 25 pounds per day, equipped with a dust collector known as DC10, with a flow rate of 8,000 cfm, and a dust collector known as DC8, with a flow rate of 7,500 cfm [326 IAC 6-3-2].

(j) Two (2) urethane foam (A/B) air gun booths, exhausting to stacks S3 and S16, total capacity: 300 pounds of foam per hour, with emissions of less than 1.0 ton per year of a single HAP.

(k) Fiberglass hole cutting operation, constructed in 2005, equipped with 4 individual 3800 cfm Micro Air dust collectors, identified as DC1, DC2, DC3 and DC4, each with design grain loading of 0.000777 grains per actual cubic foot.

(l) Fiberglass hole cutting operation, equipped with 3 Donaldson Torit Dust Collectors, identified as DC5, DC6 and DC7, each with 5,500 cfm exhaust.

(m) Two (2) fiberglass operations for roller application of resins that do not produce VOC emissions greater than three (3) pounds per hour or fifteen (15) pounds per day, with a capacity of 4.033 units per hour.

Existing Approvals

Since the issuance of the Part 70 Operating Permit (003-21678-00249) on May 16, 2001, the source has constructed or has been operating under the following approvals as well:

(a) Administrative Amendment No. 003-14567-00249, issued on July 31, 2001.

(b) Administrative Amendment No. 003-14550-00249, issued on August 12, 2003.

(c) 112(j) Applicability Determination No. 003-16309-00249, issued on September 21, 2004.

(d) Minor Source Modification No. 003-19919-00249, issued on February 1, 2005.

(e) Minor Permit Modification No. 003-19975-00249, issued on May 23, 2005.

(f) Review Request No. 003-21411-00249, issued on July 29, 2005; and

(g) Significant Permit Modification No. 003-21528-00249, issued on February 7, 2006.

The following terms and conditions from previous approvals have been revised in this Part 70 Operating Permit Renewal:

(a) Emission Unit ID names and numbers

The source has requested that the fiberglass chop booths be referred to as fiberglass lamination chop booths. This change has been made throughout the permit renewal. The source has informed IDEM that the Emission Unit ID numbers have changed. The fiberglass lamination booth previously identified as S5 is now identified as FC1. The fiberglass lamination booth previously identified as S15 is now identified as FC2. The fiberglass lamination booth previously identified as S18 is now identified as FC3. The identification numbers for the dust collectors associated with the insignificant

woodworking operations have also changed. The dust collector previously identified as S1 is now identified as DC10. The dust collector previously identified as S6 is now identified as DC8.

The following terms and conditions from previous approvals have been determined no longer applicable; therefore, were not incorporated into this Part 70 Operating Permit Renewal:

(a) It has been determined that Master Spas, Inc. is not subject to to the National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production, 40 CFR 63.4480, Subpart PPPP (Plastic Parts Surface Coating). Therefore, all permit conditions related to 40 CFR 63.4480, Subpart PPPP have been removed from the permit renewal.

(b) 326 IAC 20-25 (Emissions from Reinforced Plastics Composites Fabricating Emission Units) has been repealed. The requirements of 326 IAC 20-25 have been replaced by the requirements in 20-56 (Reinforced Plastics Composites Production). Therefore, all permit conditions related to 326 IAC 20-25 have been removed from the permit renewal.

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 (cfm)	Temperature (^{0}F)
S3	exhaust foam booth	6.5	2	4,200	ambient
S5	exhaust fiberglass lamination with roller	6.7	2.5	9,800	ambient
S15	exhaust fiberglass lamination with flow coater (FC2)	6.7	2.8	10,800	ambient
S16	exhaust foam insulation booth	7	2.8	10,800	ambient
S18	exhaust fiberglass lamination with roller	6.7	2.5	9,800	ambient
S19	vinyl resin exhaust fiberglass lamination with flow coaters (FC1)	7	2.5	10,250	ambient
S20	exhaust fiberglass lamination with roller	7	2.5	10,300	ambient
S21	exhaust fiberglass lamination with flow coater (FC3)	6.8	2.8	10,800	ambient
DC1	micro air dust collection for hole cutting	n/a	n/a	3,800	ambient
DC2	micro air dust collection for hole cutting	n/a	n/a	3,800	ambient
DC3	micro air dust collection for hole cutting	n/a	n/a	3,800	ambient
DC4	micro air dust collection for hole cutting	n/a	n/a	3,800	ambient
DC5	Donaldson Torit dust collection for hole cutting	n/a	n/a	5,500	ambient

DC6	Donaldson Torit dust collection for hole cutting	n/a	n/a	5,500	ambient
DC7	Donaldson Torit dust collection for hole cutting	n/a	n/a	5,500	ambient
DC14	Torit dust collector	n/a	n/a	2,050	ambient
GE1	general exhaust	3.8	4	29,500	ambient
GE2	general exhaust	3.8	4	29,500	ambient
GE3	general exhaust	3.8	4	29,500	ambient
G3	space heater	n/a	n/a	n/a	ambient
G4	space heater	n/a	n/a	n/a	ambient
G5	space heater	n/a	n/a	n/a	ambient
G15	make-up air unit	n/a	n/a	25,000	ambient
G16	make-up air unit	n/a	n/a	50,000	ambient
G17	make-up air unit	n/a	n/a	50,000	ambient
S17	wood skirting stain applications	6.3	3	2,550	ambient

Emission Calculations

See Appendix A, pages 1 and 2, of this document for detailed emission calculations.

County Attainment Status

The source is located in Allen County

Pollutant	Status
PM_{10}	Attainment
$PM_{2.5}$	Attainment
SO_2	Attainment
NOx	Attainment
8-hour Ozone	Attainment
CO	Attainment
Lead	Attainment

Note: On September 6, 2007 the Indiana Air Pollution Control Board finalized a temporary emergency rule to redesignate Allen, Clark, Elkhart, Floyd, LaPorte, and St. Joseph as attainment for the 8-hour ozone standard.

(a) Allen County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM 2.5 emissions. Therefore, until the U.S.EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions. See the State Rule Applicability – Entire Source section.

(b) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC emissions and NOx emissions are considered when evaluating the rule applicability relating to ozone. Allen County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx 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) Allen County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the

requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

(d) Fugitive Emissions
Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3 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 or Emission Offset applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	tons/year
PM	142.46
PM-10	142.46
SO_2	0.00
VOC	143.21
CO	0.00
NO_x	0.00

HAPs	tons/year
Styrene	104.25
Total	104.25

(a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of PM-10 is equal to or greater than 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 32 IAC 2-7-1(29)) of VOC is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.

(c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants is less than 100 tons per year.

(d) 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/or 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.

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:

(a) Emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of issuance of Part 70 permits.

(b) Monitoring and related record keeping requirements which assume that all reasonable 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**	**PM10**	**SO_2**	**VOC**	**CO**	**NO_X**	**Total HAPs**
Spa Manufacturing / Mold Construction	10.55	10.55	0.00	132	0.00	0.00	104.25
Spa Assembly / Cleanup	0.01	0.01	0.00		0.00	0.00	0.00
Wood Skirting	0.01	0.01	0.00		0.00	0.00	0.00
Insignificant Activities	0.00	0.00	0.00	0.07	0.00	0.00	0.00
Total	**10.57**	**10.57**	**0.00**	**132.07**	**0.00**	**0.00**	**104.25**
Major Source Threshold	250	250	250	250	250	250	10 single HAP 25 total HAPs

(a) This existing stationary source is not major for PSD because the emissions of each criteria pollutant are less than two hundred fifty (<250) tons per year, and it is not one of the twenty-eight (28) listed source categories.

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

Federal Rule Applicability

The following federal rules are applicable to the source:

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

(b) This source is not subject to the requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAPs) for Wood Furniture Manufacturing Operations, 326 IAC 14, (40 CFR 63.800, Subpart JJ), because OAQ has determined that spas are appliances and not wood furniture. This determination was reflected in the issued Part 70 Permit T003-9073-00249, issued on May 16, 2001.

(c) This source is not subject to the requirements of the National Emission Standard for Hazardous Air Pollutants (NESHAPs) for Plastic Parts Surface Coating (40 CFR 63.4480, Subpart PPPP) because the source does not apply surface coating to plastic parts.

(d) This source performs reinforced plastic composites production and is a major source of Hazardous Air Pollutants (HAPs). Therefore, this source is subject to the National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production, 40 CFR 63.5780, Subpart WWWW. An initial notification was submitted April 12, 2003.

Construction of this source commenced prior to August 2, 2001. Therefore, this is an existing affected source. The affected source consists of all parts of the facility engaged in the following operations: open molding, mixing, cleaning of equipment used in reinforced plastic composites manufacture, HAP-containing materials storage, and repair operations on parts this source also manufactures. This source does not have any centrifugal casting or continuous lamination / casting operations. The specific facilities include the following:

(1) Two (2) fiberglass lamination chop booths, constructed prior to 1997, identified as FC1 and FC2, each equipped with dry filters for particulate control, including cleanup solvents, exhausted to stack S19, equipped with a 10,250 cfm exhaust fan, and stack S15, equipped with a 10,800 cubic feet per minute (cfm) exhaust fan, total capacity: 4.033 units per hour.

(2) One (1) fiberglass operation for hand lay application of resins, constructed prior to 1997, capacity: 4.033 units per hour.

(3) One (1) fiberglass lamination chop booth, constructed in 2005, identified as FC3, exhausted to stack S21, equipped with dry filters for particulate control and a 10,300 cfm exhaust fan. Per Significant Permit Modification No. 003-21528-00249, this booth will be considered part of the existing affected facility since fiberglass molding operations were constructed at this source prior to August 2, 2001.

Non-applicable portions of the NESHAP will not be included in the permit. This source is subject to the following portions of Subpart WWWW:

(1) 63.5780
(2) 63.5785 (a)
(3) 63.5790 (a), (b) and (c)
(4) 63.5795 (a)(1) and (2), (b)
(5) 63.5796
(6) 63.5797 (a), (b) and (c)
(7) 63.5798 (a) and (b)
(8) 63.5800
(9) 63.5805 (a) and (g)
(10) 63.5810
(11) 63.5835 (a) and (c)
(12) 63.5840
(13) 63.5860 (a)
(14) 63.5895 (c) and (d)
(15) 63.5900 (a)(2), (3), and (4), (b) and (c)
(16) 63.5905
(17) 63.5910(a), (b), (c)(1), (2), (3) and (5), (d) and (g)
(18) 63.5915 (a), (c) and (d)
(19) 63.5920
(20) 63.5925
(21) 63.5930
(22) 63.5935

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, aply to the facilities 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 is not subject to 326 IAC 2-2 (Prevention of Significant Deterioration) because it is not in one of the 28 listed source categories and the total source potential emissions are less than two hundred fifty (250) tons per twelve (12) consecutive month period. Therefore, 326 IAC 2-2 is not applicable.

326 IAC 2-3 (Emission Offset)

326 IAC 2-3 (Emission Offset) applies to new major stationary sources or major modifications to sources located in an area which is nonattainment for which the stationary source is major. This

source is located in Allen County, which is in attainment for all criteria pollutants. Therefore, 326 IAC 2-3 is not applicable to this source.

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 under 326 IAC 2-7, Part 70 program. Pursuant to this rule, the Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. In accordance with the compliance schedule specified in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1 beginning in 2004 and every 3 years after. The most recent emissions statement was submitted in 2007. Therefore, the next emission statement for this source must be submitted by July 1, 2010. 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 Exemptions), opacity shall meet the following, unless otherwise stated in the permit:

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

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

326 IAC 20-56 (Reinforced Plastic Composites Production)

326 IAC 20-56-1 incorporates by reference the requirements of 40 CFR Part 63, Subpart WWWW (National Emissions Standards for Hazardous Air Pollutants: 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 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.

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

State Rule Applicability – Individual Facilities

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

326 IAC 2-4.1-1 (New Source Toxics Control) applies to sources constructed after July 27, 1997 with the potential to emit (as defined in 326 IAC 2-1.1-1(16)) of equal to or greater than ten (10) tons per year and/or a potential to emit equal to or greater than twenty-five (25) tons per year of a combination of HAPs. Because fiberglass operations at the source were permitted under CP 003-6339-00249, issued on December 6, 1996, the requirements of 326 IAC 2-4.1-1 are not applicable.

326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices, and Control Technologies)

Pursuant to 326 IAC 6-3-2(d), the dry filters for particulate control shall be in operation in accordance with manufacturer's specifications and control emissions from the two (2) fiberglass lamination chop booths (FC1 and FC2), the one (1) fiberglass lamination chop booth (FC3), and the one (1) surface coating operation for airless spray application of waterbase coatings to woodskirting of spas, at all times when these facilities are in operation.

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

The source is subject to 326 IAC 8-1-6 because the VOC potential emissions from fiberglass operations are greater than 25 tons per year, commenced after January 1, 1980 and are governed by no other provisions of Article 8. Pursuant to this rule, a Best Available Control Technology (BACT) Analysis is required. BACT for this facility was previously determined in CP 003-6339-00249, issued on December 6, 1996. Pursuant to the determination of Best Available Control Technology (BACT) for VOC emissions from resin and gel coat application operations, the Permittee shall comply with the following conditions:

(a) Use of gel coats and resins that contain styrene shall be limited such that the potential to emit (PTE) VOCs from resin and gel coat operations shall be less than 132 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, 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.

(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	HAP Monomer Content, % by weight
Production[1] Gel Coat	37
Tooling[2] Gel Coat	38
Production Resin	35
Tooling Resin	43
Vinylester Resin[3]	42

[1] Production refers to the manufacture of parts.
[2] Tooling refers to the manufacture of the molds from which parts are manufactured.
[3] OAQ has determined that the use of vinylester resin will result in a net decrease in emissions when compared to alternative spa production methods and materials. The source is therefore allowed to use vinylester resin at 42% monomer by weight with air atomized spray application methods, or equivalent emissions.

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) $\leq$ (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:

(i) 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 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.

State Rule Applicability - Insignificant Activities

326 IAC 6-3-2 (Particulate Emission Limitations, Word Practices, and Control Technologies)

(a) The particulate matter (PM) emissions from the woodworking operations will be limited to 2.00 pounds per hour when operating at a process weight rate 690 pounds per hour. Since potential PM emissions after control by the dust collector are 0.014 pounds per hour, the grinding operations will comply with this rule.

The pounds per hour limitation was calculated from the following 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.

$E = 4.10\ (0.345\ \text{tons/hr})^{0.67} = 2.00$ pounds per hour.

Compliance will be demonstrated by operating the dust collector at all times when woodworking operations are taking place.

(b) The particulate matter (PM) emissions from the fiberglass trimming area will be limited to 1.63 pounds per hour when operating at a process weight rate of 507 pounds per hour. Since potential PM emissions after control by the dust collector are 0.016 pounds per hour, the grinding operations will comply with this rule.

The pounds per hour limitation was calculated from the following 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.

$E = 4.10\ (0.254\ \text{tons/hr})^{0.67} = 0.777$ pounds per hour.

Compliance will be demonstrated by operating the dust collector at all times when the grinding is taking place.

326 IAC 6.5 (Particulate Matter Limitations Except Lake County)

326 IAC 6.5 (Particulate Matter Limitations Except Lake County) applies to sources located in Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo, and Wayne counties. This source is located in Allen County, therefore, 326 IAC 6.5 is not applicable.

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

The urethane foam (A/B) air gun booths, exhausted to stacks S3 and S16, are not subject to 326 IAC 8-1-6 because the VOC potential emissions are less than 1.0 ton per year. There are no other facilities at this source subject to 326 IAC 8-1-6.

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:

(a) The dust collectors for PM control shall be in operation at all times when the woodworking and grinding areas are in operation.

(b) The dry filters for PM control shall be in operation at all times when the lamination chop booths are in operation.

(c) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. Section C - Response to Excursions or Exceedances shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation of this permit.

(d) Monthly inspections shall be performed of the coating emissions from the stacks identified as S19, S15 and S21 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.

(e) The dust collectors in the grinding and woodworking areas shall be in operation at all times when the grinding and woodworking facilities are in operation.

These monitoring conditions are necessary because the dust collectors for the woodworking and grinding operations and the dry filters for the chop booths must operate properly to ensure compliance with 326 IAC 6-3 (Process Operations).

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 August 15, 2005.

Conclusion

The operation of this stationary fiberglass reinforced plastic spas manufacturing facility shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No. **T 003-21678-00249**.

Appendix A
Summary

Company Name: MasterSpas, Inc.
Address City IN Zip: 6927 Lincoln Parkway, Fort Wayne, Indiana 46804
CP: T003-21678-00249
Plt ID: 003-00249
Reviewer: Summer Keown
Date: December 10, 2007

	Uncontrolled Emissions			Controlled / Limited Emissions		
	VOC	PM	HAPs (Styrene)	VOC	PM	HAPs (Styrene)
Spa Manufacturing	99.91	142.44	99.91	99.91	10.55	99.91
Clean-up Resin	3.47	0.00	0.00	3.47	0.00	0.00
Mold Construction	4.34	0.00	4.34	4.34	0.00	4.34
Spa Assembly / Cleanup	34.97	0.01	0.00	34.97	0.01	0.00
Wood Skirting	0.39	0.01	0.00	0.39	0.01	0.00
Urethane Foam Air Gun Booths	0.13	0.00	0.00	0.13	0.0	0.00
	143.21	**142.46**	**104.25**	**143.21**	**10.57**	**104.25**

Appendix A: Emissions Calculations
Form DD: Reinforced Plastics and Composites
Open Molding Operations*
Resin and Gel Usage
Company Name: MasterSpas, Inc.
Address City IN Zip: 6927 Lincoln Parkway, Fort Wayne, Indiana 46804
CP: T003-21678-00249
Plt ID: 003-00249
Reviewer: Summer Keown
Date: December 10, 2007

Emission Unit ID	Material (Resin or Gel Name)	Density (lb/gal)	Weight% Monomer	Gal of Mat. (gal/unit)	Maximum usage (unit/hour)	UEF (LBS monomer/ton resin or gel)	Weight % Solids	Potential VOC (pounds per day)	Potential VOC (tons per day)	Potential Styrene (tons per year)	Transfer Efficiency	Potential PM (tons/year)
Spa Manufacturing	Polyester Resin (33%) Flow Coater Applied	10.84	33.00%	9.2420	4.033	71.00	67.00%	344.24	62.82	62.82	90.00%	**118.57**
	Polyester Resin (33%) Roller Applied	10.84	33.00%	9.2420	4.033	83.00	67.00%	**402.42**	**73.44**	**73.44**	100.00%	0.00
	Vinylester Resin (47.5%) Flow Coater Applied	9.41	47.50%	2.7350	4.033	116.45	52.50%	**145.04**	**26.47**	**26.47**	90.00%	**23.87**
	Cadox L-50a Clear	8.33	100.00%	0.0004	4.033	2.00	0.00%	0.00	0.00	0.00	90.00%	0.00
	Para Sil Silicone	8.58	100.00%	0.0004	4.033	100.00	0.00%	0.02	0.00	0.00	90.00%	0.00
								Totals for Spa Manufacturing:	**99.91**	**99.91**		**142.44**
Clean-up Resin	Acetone	6.61	0.00%	0.1480	4.033	100.00	0.00%	4.73	0.86	0.00	100.00%	0.00
	280 Super Flush	8.86	100.00%	0.2420	4.033	100.00	0.00%	10.38	1.89	0.00	100.00%	0.00
	Super Blue	8.51	6.40%	0.0950	4.033	100.00	10.10%	3.91	0.71	0.00	100.00%	0.00
								Totals for Clean-up Resin:	**3.47**	**0.00**		**0.00**
Mold Construction	Corrosion ISO Resin (hand apply)	10.82	49.00%	0.0000	0.001	174.00	51.00%	0.00	0.00	0.00	100.00%	0.00
	Corrosion ISO Resin (flow coater apply)	10.82	49.00%	0.0000	0.002	121.00	51.00%	0.00	0.00	0.00	100.00%	0.00
	Clear Marble (38%) Mech. Non-Atom	9.09	38.00%	0.0170	0.021	86.00	62.00%	0.00	0.00	0.00	90.00%	0.00
	Tangering Tooling Gel (Non-Atom Spray)	9.17	48.00%	0.0000	0	331.00	52.00%	0.00	0.00	0.00	90.00%	0.00
	Milky Clear	7.33	79.00%	0.2990	4.033	100.00	21.00%	10.61	1.94	1.94	100.00%	0.00
	Green Trans	7.83	88.00%	0.3470	4.033	100.00	12.00%	13.15	2.40	2.40	100.00%	0.00
	Orange Crush	8.45	0.00%	0.0000	4.033	100.00	100.00%	0.00	0.00	0.00	100.00%	0.00
	LHA-2900 Low HAP Gel Coat White (Roller Applied)	11.7	24.00%	0.0000	0.002	60.48	76.00%	0.00	0.00	0.00	100.00%	0.00
	LHA-2900 Low HAP Gel Coat White (Mech. Nonatomized)	11.7	24.00%	0.0000	0.002	81.12	76.00%	0.00	0.00	0.00	100.00%	0.00
								Totals for Mold Construction:	**4.34**	**4.34**		**0.00**
								Total VOC/HAP and PM from Resin and Gel Use before dry filters:	**107.72**	**104.25**		**142.44**
								Total VOC/HAP and PM from Resin and Gel Use after dry filters:	**107.72**	**104.25**		**14.24**

* Open Molding Operations include the following: manual application, mechanical application, gel coat application, and filament application
**PM emissions after controls calculated using an efficiency of 90%

METHODOLOGY

Assume all of the monomer is styrene.
Use the standard VOC emissions calculation spreadsheet to calculate catalyst emissions and cleaning emissions (assume that 100% of the VOC and/or HAP in the catalysts and solvents used is emitted).
Use the emission factors based on the type of application from "Unified Emission Factors for Open Molding of Composites," Composites Fabricators Association (April 1999) to calculate resin and gelcoat emissions.
UEF: The United Emission Factor is the emission factor for the resin or gel styrene content that can be determined using the UEF Table. An interpolation calculator is provided on the next page for those styrene contents between the values given in the table that are not
Potential VOC (lb/day) for resins or gels = Density (lb material /gal material) * Gal. of material (gal material/unit) * Maximum usage (unit/hr) * UEF (lb styrene/ton material) * 24 hrs/day * 1 ton material/2000 lbs material
Potential VOC (ton/year) = Potential VOC (lb/day) * 365 days/year * (1 ton/2000 lb)
Potential PM (ton/year) = Density * (1 - Weight % monomer or VOC) * Gal. of Material * Maximum Usage * (1 - transfer efficiency) * 24 hrs/day * 365 days/year * (1 ton/2000 lb)

Appendix A
Surface Coating and Cleanup Operations
Company Name: MasterSpas, Inc.
Address City IN Zip: 6927 Lincoln Parkway, Fort Wayne, Indiana 46804
CP: T003-21678-00249
Plt ID: 003-00249
Reviewer: Summer Keown
Date: December 10, 2007

Assembly/Cleanup, Maintenance, and Wood Skirting Materials:

Material	Density (Lb/Gal)	Weight % Volatile (H20 & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	**Potential VOC tons per year**	**Particulate Potential (ton/yr)**	lb VOC/gal solids	Transfer Efficiency
Spa Assembly and Cleanup																
Spa Assembly / Cleanup																
Weld On P-68	7.03	73.00%	27.00%	46.0%	22.79%	27.00%	0.09800	4.033	4.19	3.23	1.28	30.67	5.60	0.00	11.98	100%
Weld On 795	7.86	90.00%	0.00%	90.0%	0.00%	10.00%	0.15400	4.033	7.07	7.07	4.39	105.44	19.24	0.00	70.74	100%
PC-64	6.77	100.00%	38.00%	62.0%	30.88%	0.00%	0.01700	4.033	6.07	4.20	0.29	6.91	1.26	0.00	0.00	100%
Rakoll Adhesive	9.40	59.00%	58.77%	0.2%	66.32%	41.00%	0.06300	4.033	0.06	0.02	0.01	0.13	0.02	0.00	0.05	100%
Subfloor Adhesive	9.16	36.20%	0.00%	36.2%	0.00%	63.80%	0.00500	4.033	3.32	3.32	0.07	1.60	0.29	0.00	5.20	100%
Isopropanol	6.53	100.00%	0.00%	100.0%	0.00%	0.00%	0.07300	4.033	6.53	6.53	1.92	46.14	8.42	0.00	0.00	100%
Throat Seal Liquid	9.70	0.00%	0.00%	0.0%	0.00%	100.00%	0.00030	4.033	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%
Yellow Wax	8.16	16.00%	0.00%	16.0%	0.00%	84.00%	0.00000	0.003	1.31	1.31	0.00	0.00	0.00	0.00	1.55	100%
Tooling Resin (Mech. Non Atom)	9.17	48.00%	0.00%	48.0%	0.00%	52.00%	2.32470	0.003	4.40	4.40	0.03	0.74	0.13	0.01	8.46	90%
Low HAP Gel Coat (Mech Non Atom)	8.34	47.00%	0.00%	47.0%	0.00%	53.00%	0.00030	0.003	3.92	3.92	0.00	0.00	0.00	0.00	7.40	90%
												Total for Spa Assembly/Cleanup:	**34.97**	**0.01**		
Wood Skirting Airless Spray Application																
Wood Skirting																
UV Sunblock Deck Clear Base	8.31	89.00%	0.00%	89.0%	0.00%	11.00%	0.00300	4.033	7.40	7.40	0.09	2.15	0.39	0.01	67.24	75%
Flat Black Latex Paint	9.63	81.00%	0.00%	81.0%	0.00%	19.00%	0.00000	4.033	7.80	7.80	0.00	0.00	0.00	0.00	41.05	75%
												Total for Wood Skirting:	**0.39**	**0.01**		
Insignificant Activity: Urethane Foam Air Gun Booths (S3 and S16)																
Foam Process																
FSI Form Part A	10.33	5.00%	5.00%	0.0%	6.20%	95.00%	0.29900	4.033	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%
FSI Foam Part B	9.75	10.00%	10.00%	0.0%	11.70%	90.00%	0.34700	4.033	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%
Foam Process Cleanup																
Foam Cleaner	7.98	95.80%	0.00%	95.8%	0.00%	4.20%	0.00200	1.000	7.64	7.64	0.02	0.37	0.07	0.00	182.02	75%
												Total for one Air Gun Booth:	0.07	0.00		
												Total for both Urethane Foam Air Gun Booths:	**0.13**	**0.00**		

METHODOLOGY

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)

Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)

Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)

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

Pounds VOC per Gallon of Solids = (Density (lbs/gal) * Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

Control efficiency of 90% used for PM