INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
*We Protect Hoosiers and Our Environment.*
100 N. Senate Avenue • Indianapolis, IN 46204
(800) 451-6027 • (317) 232-8603 • www.idem.IN.gov

**Michael R. Pence**
*Governor*

**Thomas W. Easterly**
*Commissioner*

TO: Interested Parties / Applicant

DATE: July 11, 2013

RE: Goldshield Fiberglass, Inc. / 001-33316-00043

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 13-17-3-4 and 326 IAC 2, this approval 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 13-15-7-3 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 Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

Enclosures
FNPER-MOD.dot 6/13/2013

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**Michael R. Pence**
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July 11, 2013

Ms. Tara Tinnel
Goldshield Fiberglass, Inc.
2004 Patterson St.
Decatur, IN 46733

Re: T001-33316-00043
Minor Source Modification to
Part 70 Renewal No.: T 001-32298-00043

Dear Ms. Tinnel:

Goldshield Fiberglass, Inc. was issued a Part 70 Operating Permit Renewal No. T 001-32298-00043, issued on March 8, 2013 for a stationary custom molded fiberglass reinforced products source located at 2004 Patterson Street, 2709 Patterson Street, and 1903 Patterson Street, Decatur, Indiana 46733. An application requested to construct the spray booth was received on June 17, 2013. Pursuant to the provisions of 326 IAC 2-7-10.5, a minor source modification to this permit is hereby approved as described in the attached Technical Support Document.

Pursuant to 326 IAC 2-7-10.5, the following emission unit is approved for construction at the source:

One (1) spray booth, identified as PC2-UP, approved for construction in 2013, using a high volume, low pressure (HVLP) spray gun, with a maximum capacity of 100 plastic parts or 0.62 gallons of Urethane Primer per hour.

Under NESHAP 40 CFR 63 Subparts PPPP this source is considered an existing affected source.

The following construction conditions are applicable to the proposed modification:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ).

2. This approval to construct does not relieve the Permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.

Commenced Construction

4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(j), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.

5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.

6. Pursuant to 326 IAC 2-7-10.5(m), the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.

7. Operating conditions are incorporated into the Part 70 operating permit as a minor permit modification in accordance with 326 IAC 2-7-10.5(m)(2) and 326 IAC 2-7-12 (Permit Modification).

A copy of the permit is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.

If you have any questions on this matter, please contact Ms. Renee Traivaranon, of my staff, at 317-234-5615 or 1-800-451-6027, and ask for extension 4-5615.

Sincerely,

Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Updated Permit
Technical Support Documents
Appendix A

CT/rt

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

IDEM

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**Michael R. Pence**
*Governor*

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*Commissioner*

# Minor Source Modification to a Part 70 Source

# OFFICE OF AIR QUALITY

## Goldshield Fiberglass, Inc.
## 2004 Patterson Street, 2709 Patterson Street & 1903 Patterson Street
## Decatur, Indiana 46733

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

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.
This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-7-10.5, applicable to those conditions

| | |
|---|---|
| Minor Source Modification No.: T001-33316-00043 | |
| Issued by:<br>Iryn Calilung, Section Chief<br>Permits Branch<br>Office of Air Quality | Issuance Date: July 11, 2013 |

# TABLE OF CONTENTS

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

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

**Compliance Requirements [326 IAC 2-1.1-11]**

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

**Corrective Actions and Response Steps [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]**

**Stratospheric Ozone Protection**

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

**Compliance Determination Requirements**

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

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

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

**Compliance Determination Requirements**

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

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

## 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(14)][326 IAC 2-7-1(22)]

The Permittee owns and operates a stationary custom molded fiberglass reinforced products.

| | |
|---|---|
| Source Address: | 2004 Patterson Street, 2709 Patterson Street & 1903 Patterson Street, Decatur, Indiana 46733 |
| General Source Phone Number: | 260-728-2476 |
| SIC Code: | 3089 (Plastics Products, Not Elsewhere Classified) |
| County Location: | Adams |
| Source Location Status: | Attainment for all criteria pollutants |
| Source Status: | Part 70 Operating Permit Program<br>Major Source, under PSD<br>Major Source, Section 112 of the Clean Air Act<br>Not 1 of 28 Source Categories |

### A.2 Part 70 Source Definition [326 IAC 2-7-1 (22)

This custom molded fiberglass reinforced products company consists of three (3) plants:

(a) Plant 43-2 is located at 2004 Patterson Street, Decatur, Indiana;

(b) Plant 43-1 is located at 2709 Patterson Street, Decatur, Indiana; and

(c) Plant 43-3 is located at 1903 Patterson Street, Decatur, Indiana.

These plants are located on one or more contiguous properties, have the same two-digit SIC code, and are under common ownership. Therefore, they are considered one (1) major source, as defined by 326 IAC 2-7-1(22).

### A.3 Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

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

**Building 43-1**

(a) One (1) spray booth, identified as PC1, constructed in 1994, using gel coat, lamination, and spray equipment and equipped with dry filters as overspray control, exhausting to Stacks B-1-1 through B-1-3, capacity: 375 square feet of resin per hour. Under NESHAP 40 CFR 63 Subpart VVVV this source is considered an existing affected source.

(b) One (1) spray booth, with dry filters as overspray control, exhausting to Stacks B-1-1 through B-1-3, consisting of the following operations which are mutually exclusive:

  (1) identified as PC2, constructed in 1982, using gel coat, lamination, and spray equipment, with a maximum capacity of 375 square feet of fiberglass parts per hour.

  Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

(2) identified as PC2-UP, approved for construction in 2013, using a high volume, low pressure (HVLP) spray gun, with a maximum capacity of 100 plastic parts or 0.62 gallons of Urethane Primer per hour.

Under NESHAP 40 CFR 63 Subparts PPPP this source is considered an existing affected source.

(c) One (1) spray booth, identified as GB2, constructed in 1982, using gel coat, lamination, and spray equipment and equipped with dry filters as overspray control, exhausting to Stacks B-1-9 and B-1-11, capacity: 1,200 square feet of fiberglass parts per hour. Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

(d) One (1) spray booth, identified as LB1, constructed in 1982, using gel coat, lamination and spray equipment and equipped with dry filters as overspray control, exhausting to Stacks B-1-12 through B-1-14, capacity: 1,200 square feet of material per hour. Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

(e) One (1) spray booth, identified as SB1, constructed in 1993, using high volume, low pressure (HVLP) spray equipment and equipped with dry filters for overspray control, exhausting to Stacks C-1-1 through C-1-3, capacity: 69 square feet of fiberglass parts per hour. Under NESHAP 40 CFR 63 Subparts MMMM and PPPP this source is considered an existing affected source.

(f) One (1) paint booth, identified as P1, constructed in 1995, using high volume, low pressure (HVLP) spray equipment and equipped with dry filters for overspray control, exhausting to Stack P1, capacity: 69 square feet of fiberglass parts per hour. Under NESHAP 40 CFR 63 Subparts MMMM and PPPP this source is considered an existing affected source.

(g) One (1) resin transfer molding operation, constructed in 2001, identified as RTM, with a maximum capacity of 459 pounds of resin per hour, and with emissions venting inside. Under NESHAP 40 CFR 63 Subpart VVVV this source is considered an existing affected source.

**Building 43-2:**

(h) Three (3) spray booths, identified as GB1, GB2, and GB3, installed in 1985, using gel coat, lamination and spray equipment and equipped with dry filters as overspray control, exhausting to stacks B-1-1 through B-1-6, capacity: 1250 square feet of fiberglass parts per hour, each. Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

(i) Four (4) spray booths, identified as CB1, CB2, CB3 and CB4, installed in 1985, using gel coat, lamination and spray equipment and equipped with dry filters as overspray control, exhausting to stacks B-2-1 through B-2-14, capacity: 1250 square feet of fiberglass parts per hour, each. Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

(j) One (1) paint system, identified as PS, installed in 1994, equipped with a water wash system as overspray control and consisting of the following equipment:

(1) One (1) tack-off booth, exhausting to stack C-2, capacity: 1250 square feet of fiberglass parts per hour.

(2) One (1) paint booth 1, equipped with high volume, low pressure (HVLP) spray guns, exhausting to stacks C-3-1 and C-3-2, capacity: 1250 square feet of fiberglass parts per hour.

(3) One (1) flash-off room, exhausting to stack C-3-3, capacity: 1250 square feet of fiberglass parts per hour.

(4) One (1) paint booth 2, equipped with high volume, low pressure (HVLP) spray guns, exhausting to stacks C-3-4 and C-3-5, capacity: 1250 square feet of fiberglass parts per hour.

(5) One (1) flash-off room, exhausting to stack C-3-6, capacity: 1250 square feet of fiberglass parts per hour.

(6) One (1) cure oven, fired by natural gas, exhausting to stack C-4, capacity: 1250 square feet of fiberglass parts per hour and 4.15 million British thermal units per hour.

(7) One (1) recirculation type dust blow-off booth with no external exhaust, equipped with an internal recirculation exhaust system with an air flow rate of 25,000 dry standard cubic feet per minute.

(8) One (1) new electric paint drying/baking oven with three (3) double-element radiant heaters at 8,000 Watts per heater for a total of 24,000 Watts exhausting to stack C-3-6. This drying oven is capable of drying a maximum of 10 parts or 800 square feet per hour.

Under the NESHAP 40 CFR 63 Subparts MMMM and PPPP the facilities listed above are considered parts of an existing affected source.

(k) One (1) paint booth, identified as PB1, installed in 1985, using high volume, low pressure (HVLP) spray guns and equipped with dry filters for overspray control, exhausting to stack B-4-1, capacity: 1250 square feet of fiberglass parts per hour. Under NESHAP 40 CFR 63 Subparts MMMM and PPPP this source is considered an existing affected source.

(l) One (1) foam spraying process, identified as F-1, installed in 2009, consisting of product tanks and one spray gun, with a capacity of 1.75 parts per hour, exhausting to the general building ventilation. Under NESHAP 40 CFR 63 Subparts MMMM and PPPP this source is considered an existing affected source.

(m) One (1) filament winding process, identified as FWP, installed in 2009, with a capacity of 100 pounds of resin per hour, exhausting to general building ventilation. Under NESHAP 40 CFR 63 Subpart WWWW, this source is considered an existing affected source.

(n) Three (3) dust booths, identified as D-1, D-2, and D-3, installed in 1994, equipped with dry filters, exhausting to stacks D-1-1, D-1-2, and D-2-1 through D-2-4, capacity: 1250 square feet of fiberglass parts per hour, each.

## A.4 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(14)]

This stationary source contains the following insignificant activities, as defined in 326 IAC 2-7-1(21):

(a) Machining where an aqueous cutting coolant continuously floods the machining interface.

(b) The following equipment related to manufacturing activities not resulting in the emission of HAPs: brazing equipment, cutting torches, soldering equipment, welding equipment.

(c) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone. [326 IAC 6-3-2]

(d) An emission unit or activity whose potential uncontrolled emissions are less than three (3) pounds per hour or fifteen (15) pounds per day of VOC and less than five (5) pounds per hour or twenty-five (25) pounds per day of PM10 including:

(1) Repair areas. Under NESHAP 40 CFR 63 Subparts PPPP and WWWW, these areas are considered part of an existing affected source.

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

(1) In building 43-1, six (6) air makeup units, total capacity: 17 million British thermal units per hour.

(2) In building 43-2, air makeup units, total capacity: 43.44 million British thermal units per hour.

(f) Closed loop heating and cooling systems.

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

(h) Paved and unpaved roads and parking lots with public access.

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

(j) One (1) infrared gel oven, identified as Gel Oven, installed in 1985, exhausting to stacks B-1-7 and B-1-8, capacity: 1250 square feet of fiberglass parts per hour.

(k) One (1) infrared chop oven, identified as Oven, installed in 1985, exhausting to stacks B-2-15 and B-2-16, capacity: 1250 square feet of fiberglass parts per hour.

## A.5 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, T001-32298-00043, 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] [IC 13-17-12]

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

### B.5 Severability [326 IAC 2-7-5(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. 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) A certification required by this permit meets the requirements of 326 IAC 2-7-6(1) if:

(1) it contains a certification by a "responsible official" as defined by 326 IAC 2-7-1(34), and

(2) the certification states that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

(b) The Permittee may use the attached Certification Form, or its equivalent with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.

(c) 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 and Enforcement 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

## B.10 Preventive Maintenance Plan [326 IAC 2-7-5(12)][326 IAC 1-6-3]

(a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

The Permittee shall implement the PMPs.

(b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:

(1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;

(2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and

(3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

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

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

The PMP extension notification does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

The Permittee shall implement the PMPs.

(c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions. The PMPs and their submittal do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

(d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

## B.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 and Enforcement Branch), or
Telephone Number: 317-233-0178 (ask for Office of Air Quality,
Compliance and Enforcement Branch)
Facsimile Number: 317-233-6865

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

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

within two (2) working days of the time when emission limitations were exceeded due to the emergency.

The notice fulfills the requirement of 326 IAC 2-7-5(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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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)(8) 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.

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 T001-32298-00043 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 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.16 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

Request for renewal shall be submitted to:

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

(b) A timely renewal application is one that is:

(1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and

(2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 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, pursuant to 326 IAC 2-7-4(a)(2)(D), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

### B.17 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.18 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 or notice 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.19 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) or (c) without a prior permit revision, if each of the following conditions is met:

(1) The changes are not modifications under any provision of Title I of the Clean Air Act;

(2) Any 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

and

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

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

(5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b)(1) and (c)(1). 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) and (c)(1).

(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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.20 Source Modification Requirement [326 IAC 2-7-10.5]

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

### B.21 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.22 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
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

Any such application does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.23 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.24 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 5-1-1 (Applicability) and 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:

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

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

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

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

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

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

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

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

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted. The provisions of 326 IAC 1-7-1(3), 326 IAC 1-7-2, 326 IAC 1-7-3(c) and (d), 326 IAC 1-7-4, and 326 IAC 1-7-5(a), (b), and (d) are not federally enforceable.

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

(a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.

(b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

  (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or

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

    (A) Asbestos removal or demolition start date;

    (B) Removal or demolition contractor; or

    (C) Waste disposal site.

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

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

All required notifications shall be submitted to:

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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 Licensed Asbestos Inspector
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

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

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

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.9 Compliance Requirements [326 IAC 2-1.1-11]

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

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

### C.10 Compliance Monitoring [326 IAC 2-7-5(3)][326 IAC 2-7-6(1)][40 CFR 64][326 IAC 3-8]

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

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

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

The notification which shall be submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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.

(b) For monitoring required by CAM, at all times, the Permittee shall maintain the monitoring, including but not limited to, maintaining necessary parts for routine repairs of the monitoring equipment.

(c) For monitoring required by CAM, except for, as applicable, monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), the Permittee shall conduct all monitoring in continuous operation (or shall collect data at all required intervals) at all times that the pollutant-specific emissions unit is operating. Data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities shall not be used for purposes of this part, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. The owner or operator shall use all the data collected during all other periods in assessing the operation of the control device and associated control system. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

### 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. The analog instrument shall be capable of measuring values outside of the normal range.

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

## Corrective Actions and Response Steps [326 IAC 2-7-5][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 shall maintain the most recently submitted written emergency reduction plans (ERPs) consistent with safe operating procedures.

(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 [40 CFR 64][326 IAC 3-8][326 IAC 2-7-5] [326 IAC 2-7-6]

(I) Upon detecting an excursion where a response step is required by the D Section, or an exceedance of a limitation, not subject to CAM, in this permit:

(a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.

(b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:

(1) initial inspection and evaluation;

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

(3) any necessary follow-up actions to return operation to normal or usual manner of operation.

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

(1) monitoring results;

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

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

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

(e) The Permittee shall record the reasonable response steps taken.

(II)

(a) CAM *Response to excursions or exceedances.*

(1) Upon detecting an excursion or exceedance, subject to CAM, the Permittee shall restore operation of the pollutant-specific emissions unit (including the 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. 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). Such actions may include initial inspection and evaluation, recording that operations returned to normal without operator action (such as through response by a computerized distribution control system), or 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.

(2) 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, monitoring results, review of operation and maintenance procedures and records, and inspection of the control device, associated capture system, and the process.

(b) If the Permittee identifies a failure to achieve compliance with an emission limitation, subject to CAM, or standard, subject to CAM, for which the approved monitoring did not provide an indication of an excursion or exceedance while providing valid data, or the results of compliance or performance testing document a need to modify the existing indicator ranges or designated conditions, the Permittee shall promptly notify the IDEM, OAQ and, if necessary, submit a proposed significant permit modification to this permit to address the necessary monitoring changes. Such a modification may include, but is not limited to, reestablishing indicator ranges or designated conditions, modifying the frequency of conducting monitoring and collecting data, or the monitoring of additional parameters.

(c) Based on the results of a determination made under paragraph (II)(a)(2) of this condition, the EPA or IDEM, OAQ may require the Permittee to develop and implement a QIP. The Permittee shall develop and implement a QIP if notified to in writing by the EPA or IDEM, OAQ.

(d) Elements of a QIP:
The Permittee shall maintain a written QIP, if required, and have it available for inspection. The plan shall conform to 40 CFR 64.8 b (2).

(e) If a QIP is required, the Permittee shall develop and implement a QIP as expeditiously as practicable and shall notify the IDEM, OAQ if the period for completing the improvements contained in the QIP exceeds 180 days from the date on which the need to implement the QIP was determined.

(f) Following implementation of a QIP, upon any subsequent determination pursuant to paragraph (II)(a)(2) of this condition the EPA or the IDEM, OAQ may require that the Permittee make reasonable changes to the QIP if the QIP is found to have:

(1) Failed to address the cause of the control device performance problems; or

(2) Failed to provide adequate procedures for correcting control device performance problems as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.

(g) Implementation of a QIP shall not excuse the Permittee from compliance with any existing emission limitation or standard, or any existing monitoring, testing, reporting or recordkeeping requirement that may apply under federal, state, or local law, or any other applicable requirements under the Act.

(h) *CAM recordkeeping requirements.*

(1) The Permittee shall maintain records of monitoring data, monitor performance data, corrective actions taken, any written quality improvement plan required pursuant to paragraph (II)(a)(2) of this condition and any activities undertaken to implement a quality improvement plan, and other supporting information required to be maintained under this condition (such as data used to document the adequacy of monitoring, or records of monitoring maintenance or corrective actions). Section C - General Record Keeping Requirements of this permit contains the Permittee's obligations with regard to the records required by this condition.

(2) Instead of paper records, the owner or operator may maintain records on alternative media, such as microfilm, computer files, magnetic tape disks, or microfiche, provided that the use of such alternative media allows for expeditious inspection and review, and does not conflict with other applicable recordkeeping requirements

## 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 submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.

(b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline

(c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "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]

Pursuant to 326 IAC 2-6-3(a)(1), the Permittee shall submit by July 1 of each year 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 a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34).

### 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. Support information includes the following, where applicable:
    (AA) All calibration and maintenance records.
    (BB) All original strip chart recordings for continuous monitoring instrumentation.
    (CC) Copies of all reports required by the Part 70 permit.
Records of required monitoring information include the following, where applicable:
    (AA) The date, place, as defined in this permit, and time of sampling or measurements.
    (BB) The dates analyses were performed.
    (CC) The company or entity that performed the analyses.
    (DD) The analytical techniques or methods used.
    (EE) The results of such analyses.
    (FF) The operating conditions as existing at the time of sampling or measurement.
These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.

(b) Unless otherwise specified in this permit, for all record keeping requirements not already legally required, the Permittee shall be allowed up to ninety (90) days from the date of permit issuance or the date of initial start-up, whichever is later, to begin such record keeping.

## C.18 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11] [40 CFR 64][326 IAC 3-8]

(a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of this paragraph. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported except that a deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. This report shall be submitted not later than thirty (30) days after the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official" as defined by 326 IAC 2-7-1(34). A deviation is an exceedance of a permit limitation or a failure to comply with a requirement of the permit.

(b) The address for report submittal is:

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

(c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

(d) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

## Stratospheric Ozone Protection

## C.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 applicable standards for recycling and emissions reduction.

## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

**Emissions Unit Description:**

**Building 43-1**

(a) One (1) spray booth, identified as PC1, constructed in 1994, using gel coat, lamination, and spray equipment and equipped with dry filters as overspray control, exhausting to Stacks B-1-1 through B-1-3, capacity: 375 square feet of resin per hour. Under NESHAP 40 CFR 63 Subpart VVVV this source is considered an existing affected source.

(b) One (1) spray booth, with dry filters as overspray control, exhausting to Stacks B-1-1 through B-1-3, consisting of the following operations which are mutually exclusive:

(1) identified as PC2, constructed in 1982, using gel coat, lamination, and spray equipment, with a maximum capacity of 375 square feet of fiberglass parts per hour.

Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

(2) identified as PC2-UP, approved for construction in 2013, using a high volume, low pressure (HVLP) spray gun, with a maximum capacity of 100 plastic parts or 0.62 gallons of Urethane Primer per hour.

Under NESHAP 40 CFR 63 Subparts PPPP this source is considered an existing affected source.

(c) One (1) spray booth, identified as GB2, constructed in 1982, using gel coat, lamination, and spray equipment and equipped with dry filters as overspray control, exhausting to Stacks B-1-9 and B-1-11, capacity: 1,200 square feet of fiberglass parts per hour. Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

(d) One (1) spray booth, identified as LB1, constructed in 1982, using gel coat, lamination and spray equipment and equipped with dry filters as overspray control, exhausting to Stacks B-1-12 through B-1-14, capacity: 1,200 square feet of material per hour. Under NESHAP 40 CFR 63
Subparts VVVV and WWWW this source is considered an existing affected source.

(e) One (1) spray booth, identified as SB1, constructed in 1993, using high volume, low pressure (HVLP) spray equipment and equipped with dry filters for overspray control, exhausting to Stacks C-1-1 through C-1-3, capacity: 69 square feet of fiberglass parts per hour. Under NESHAP 40 CFR 63 Subparts MMMM and PPPP this source is considered an existing affected source.

(f) One (1) paint booth, identified as P1, constructed in 1995, using high volume, low pressure (HVLP) spray equipment and equipped with dry filters for overspray control, exhausting to Stack P1, capacity: 69 square feet of fiberglass parts per hour. Under NESHAP 40 CFR 63 Subparts MMMM and PPPP this source is considered an existing affected source.

(g) One (1) resin transfer molding operation, constructed in 2001, identified as RTM, with a maximum capacity of 459 pounds of resin per hour, and with emissions venting inside. Under NESHAP 40 CFR 63 Subpart VVVV this source is considered an existing affected source.

**Building 43-2:**

(h) Three (3) spray booths, identified as GB1, GB2, and GB3, installed in 1985, using gel coat, lamination and spray equipment and equipped with dry filters as overspray control, exhausting to stacks B-1-1 through B-1-6, capacity: 1250 square feet of fiberglass parts per hour, each.

Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

(i) Four (4) spray booths, identified as CB1, CB2, CB3 and CB4, installed in 1985, using gel coat, lamination and spray equipment and equipped with dry filters as overspray control, exhausting to stacks B-2-1 through B-2-14, capacity: 1250 square feet of fiberglass parts per hour, each. Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

(j) One (1) paint system, identified as PS, installed in 1994, equipped with a water wash system as overspray control and consisting of the following equipment:

(1) One (1) tack-off booth, exhausting to stack C-2, capacity: 1250 square feet of fiberglass parts per hour.

(2) One (1) paint booth 1, equipped with high volume, low pressure (HVLP) spray guns, exhausting to stacks C-3-1 and C-3-2, capacity: 1250 square feet of fiberglass parts per hour.

(3) One (1) flash-off room, exhausting to stack C-3-3, capacity: 1250 square feet of fiberglass parts per hour.

(4) One (1) paint booth 2, equipped with high volume, low pressure (HVLP) spray guns, exhausting to stacks C-3-4 and C-3-5, capacity: 1250 square feet of fiberglass parts per hour.

(5) One (1) flash-off room, exhausting to stack C-3-6, capacity: 1250 square feet of fiberglass parts per hour.

(6) One (1) cure oven, fired by natural gas, exhausting to stack C-4, capacity: 1250 square feet of fiberglass parts per hour and 4.15 million British thermal units per hour.

(7) One (1) recirculation type dust blow-off booth with no external exhaust, equipped with an internal recirculation exhaust system with an air flow rate of 25,000 dry standard cubic feet per minute.

(8) One (1) new electric paint drying/baking oven with three (3) double-element radiant heaters at 8,000 Watts per heater for a total of 24,000 Watts exhausting to stack C-3-6. This drying oven is capable of drying a maximum of 10 parts or 800 square feet per hour.

Under the NESHAP 40 CFR 63 Subparts MMMM and PPPP the facilities listed above are considered parts of an existing affected source.

(k) One (1) paint booth, identified as PB1, installed in 1985, using high volume, low pressure (HVLP) spray guns and equipped with dry filters for overspray control, exhausting to stack B-4-1, capacity: 1250 square feet of fiberglass parts per hour. Under NESHAP 40 CFR 63 Subparts MMMM and PPPP this source is considered an existing affected source.

(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 (VOC) [326 IAC 2-2] [326 IAC 8-1-6]

(a) Pursuant to the 326 IAC 8-1-6 (Best Available Control Technology) for VOC emissions from resin and gel coat application operations at the two (2) lamination and gel coat booths at Plant 43-1 (PC1 and PC2), one (1) spray booth at Plant 43-1 (GB2), one (1) spray booth

(LB1) at Plant 43-1, one (1) spray booth (SB1) at Plant 43-1, three (3) spray booths (GB1, GB2 and GB3) at Plant 43-2, and four (4) spray booths (CB1, CB2, CB3 and CB4) at Plant 43-2, the Permittee shall comply with the following conditions:

(1) Pursuant to CP 001-4127-00037, issued on October 17, 1995, the use of gel coats, resins, solvents and coatings shall be limited such that the potential to emit (PTE) VOCs from the total source, excluding FWP, F-1, combustion and RTM, shall be no more than 724.0 tons per twelve (12) consecutive month period. These VOC emissions shall be calculated on a daily basis with the weekly average, based on a six working day week, not to exceed the daily emission rate of 2.41 tons per day. Compliance with this limit shall be determined based upon the following criteria:

(A) Weekly usage by weight, monomer content that is VOC, method of application, and other emission reduction techniques for each gel coat and resin shall be recorded. Volatile organic compound emissions shall be calculated by multiplying the usage of each gel coat and resin by the emission factor that is appropriate for the monomer content, method of application and other emission reduction techniques 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.

(B) 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 23, 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.

(2) 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 |

[1] Production refers to the manufacture of parts.
[2] Tooling refers to the manufacture of the molds from which parts are manufactured.

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

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

(Emissions from higher than compliant HAP monomer content resin or gel coat) - (Emissions from compliant resin or gel coat) $\leq$ (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.

(3) 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.

(4) 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.

(5) The listed work practices shall be followed:

(A) To the extent possible, non-VOC, non-HAP solvent shall be used for cleanup.

(B) 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.

(C) All material storage containers shall be kept covered when not in use.

(b) Pursuant to CP 001-3261-00010, issued on March 11, 1994, BACT for the paint system at Plant 43-2, identified as PS, shall be the use of high volume, low pressure (HVLP) spray guns, and use of coatings with a solid content not less than 49.6% by volume and no more than 3.59 pounds VOC per gallon of coating, less water.

(c) Pursuant to CP 001-4127-00037, issued on October 17, 1995, the spray booth (P1) of Building 43-1, originally planned for construction at Building 43-3, shall utilize high-volume, low-pressure (HVLP) spray application with relatively high solids, low VOC coatings. HVLP application shall be considered achieved provided that the pressure of the applicators does not exceed 10 psi. Further, these coating operations shall be limited such that the solids content of the coating as applied shall not be less than 49.6% by volume, and the coating as applied shall not contain more than 5.5 lb VOC per gallon coating less water.

(d) Pursuant to Permit No. 001-25023-00043, the one (1) paint booth (PB1) at Plant 43-1 shall utilize high-volume, low-pressure (HVLP) spray application with relatively high solids, low VOC coatings. HVLP application shall be considered achieved provided that the pressure of the applicators does not exceed 10 psi. Further, these coating operations shall be limited such that the solids content of the coating as applied shall not be less than 49.6% by volume, and the coating as applied shall not contain more than 5.5 lb VOC per gallon coating less water.

## D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(d), the particulate emission rate the two (2) lamination and gel coat booths at Plant 43-1 (PC1 and PC2), one plastic coating (PC2-UP), one (1) spray booth at Plant 43-1 (GB2), one (1) spray booth (LB1) at Plant 43-1, two (2) spray booths (SB1 and P1) at Plant 43-1, three (3) spray booths (GB1, GB2 and GB3) at Plant 43-2, four (4) spray booths (CB1, CB2, CB3 and CB4) at Plant 43-2, one (1) paint system (PS) at Plant 43-2, consisting of two (2) prime booths, and one (1) paint booth (PB1) at Plant 43-2 shall be controlled by a dry particulate filter or waterwash, the Permittee shall operate the control device in accordance with the manufacturer's specifications.

## D.1.3 Emission Standards for Hazardous Air Pollutants for Boat Manufacturing [326 IAC 20-48]

(a) Pursuant to 326 IAC 20-48-2, when performing boat manufacturing operations, in addition to alternative organic HAP content requirements for open molding resin operations contained in Table 2 to Subpart VVVV, 40 CFR 63, the alternative HAP content requirements for gel coat operations are as follows:

| Gel Coat Application | | |
|---|---|---|
| Operation | Application Method | The weighted average HAP content shall not exceed |
| Pigmented gel coat | Atomized (spray) | 33% |
| Clear gel coat operations | Atomized (spray) | 48% |
| Tooling gel coat | Atomized (spray) | 40% |
| Pigmented gel coat | Nonatomized (nonspray) | 40% |
| Clear gel coat | Nonatomized (nonspray) | 55% |
| Tooling gel coat | Nonatomized (nonspray) | 54% |

(b) Pursuant to 326 IAC 20-48-3, the Permittee shall operate the Building 43-1 units PC1, PC2, GB2, and LB1 and the Building 43-2 units GB1, GB2, GB3, CB1, CB2, CB3, and CB4 in accordance with the following work practice standards:

(1) Nonatomizing spray equipment shall not be operated at pressures that atomize the material during the application process.

(2) Solvents sprayed during cleanup and resin changes shall be directed into solvent collection containers.

(3) For routine flushing of resin and gel coat application equipment, such as spray guns, flow coaters, brushes, rollers, and squeegees, owners or operators must use a cleaning solvent that contains no hazardous air pollutants (HAP). However, recycled cleaning solvents that contain less than or equal to five (5) percent HAP by weight are considered to contain no HAP for the purposes of this condition. For removing cured resin or gel coat from application equipment, no organic HAP limit applies.

(4) Clean-up rags with solvent shall be stored in closed containers.

(5) Closed containers shall be used for the storage of the following:

(A) All production and tooling resins that contain HAP.

(B) All production and tooling gel coats that contain HAP.

(C) Waste resins and gel coats that contain HAP.

(D) Cleaning materials, including waste cleaning materials.

(E) Other materials that contain HAP.

The covers of the closed containers must have no visible gaps and must be in place at all times, except when equipment is placed in or removed from the container.

(c) Pursuant to 326 IAC 20-48-4 (Operator Training), the Permittee shall comply with following operator training requirements:

(1) Train all new and existing personnel, including contract personnel, who are involved in resin and gel coat spraying and applications that could result in excess emissions if performed improperly according to the following schedule:

(A) All personnel hired shall be trained within fifteen (15) days of hiring.

(B) To ensure training goals listed in paragraph (c)(2) of this condition are maintained, all personnel shall be given refresher training annually.

(C) Personnel who have been trained by another owner or operator subject to this rule are exempt from paragraph (c)(1)(A) of this condition if written documentation that the employee's training is current is provided to the new employer.

(2) The lesson plans shall cover, for the initial and refresher training, at a minimum, all of the following topics:

(A) Appropriate application techniques.

(B) Appropriate equipment cleaning procedures.

(C) Appropriate equipment setup and adjustment to minimize material usage and overspray.

(3) Maintain the following training records on site and available for inspection and review:

(A) A copy of the current training program.

(B) 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.

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

### D.1.4 Reinforced Plastics Composites Production [326 IAC 20-56-2]

Pursuant to 326 IAC 20-56-2, the Permittee shall comply with the following requirements.

(a) Operator Training. Each owner or operator shall train all new and existing personnel, including contract personnel, who are involved in resin and gel coating 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 (30) days of hiring.

(2) To ensure training goals listed in subsection (b) are maintained, all personnel shall be given refresher training annually.

(3) Personnel who have been trained by another owner or operator subject to this rule are exempt from subdivision (1) if written documentation that the employee’s training is current is provided to the new employer.

(b) The lesson plans shall cover, for the initial and refresher training, at a minimum, all of the following topics:

(1) Appropriate application techniques.

(2) Appropriate equipment cleaning procedures.

(3) Appropriate equipment setup and adjustment to minimize material usage and overspray.

(c) The owner or operator shall maintain the following training records on site and make them available for inspection and review:

(1) A copy of the current training program.

(2) A list of the following:

(A) All current personnel, by name, that are required to be trained.

(B) The date the person was trained or date of the most recent refresher training, whichever is later.

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

### D.1.5 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

## Compliance Determination Requirements

### D.1.6 Volatile Organic Compounds (VOC)

Compliance with the VOC 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, and by Conditions D.1.1(a)(1) and (2). IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

### D.1.7 Particulate Matter (PM)

(a) Pursuant to CP 001-4127-00037, issued on October 17, 1995, the recirculation-type dust blow-off booth shall be operated at all times so that no PM escapes from the two (2) prime spray booths into the sanding room or into the ambient air. This shall be achieved by the use of replacement filters in the exhaust plenums, air recirculation and maintenance of negative pressure inside the dust blow off booth.

(b) In order to comply with Condition D.1.2, the dry filters for particulate control shall be in operation and control emissions from the plastic coating PC2-UP, at all times when the plastic coating booth, PC2-UP is in operation.

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

### D.1.8 Monitoring [40 CFR 64]

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the two (2) lamination and gel coat booths at Plant 43-1 (PC1, and PC2), one (1) spray booth at Plant 43-1 (GB2), one (1) spray booth (LB1) at Plant 43-1, two (2) spray booths (SB1 and P1) at Plant 43-1, three (3) spray booths (GB1, GB2 and GB3) at Plant 43-2, four (4) spray booths (CB1, CB2, CB3 and CB4) at Plant 43-2, and one (1) paint booth (PB1) at Plant 43-2, stacks (At Plant 43-1: B-1-1 through B-1-3, B-1-9, B-1-11 through B-1-14, C-1-1 through C-1-3, and P1; At Plant 43-2: B-1-1 through B-1-6, B-2-1 through B-2-14, C-3-1, C-3-2, C-3-4, C-3-5, B-4-1) while one or more of the booths are in operation. If a condition exists which should result in a response step, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

(b) The Permittee shall perform daily checks of the water curtain and flow sheets for proper flow with no visible gaps. 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 from this permit.

(c) Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground. When there is a noticeable change in overspray emission, or evidence when evidence of overspray emission 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.

## D.1.9 Monitoring

(a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the PC2-UP, while the plastic coating (PC2-UP) is in operation. If a condition exists which should result in a response steps, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

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

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

## D.1.10 Record Keeping Requirements

(a) To document the compliance status with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (7) below. Records maintained for (1) through (7) shall be taken daily and shall be complete and sufficient to establish compliance with the VOC usage limits and the VOC content limits established in Condition D.1.1. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.

(1) The amount, VOC content of each resin, gel coat, coating and solvent.

(a) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.

(b) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;

(2) A log of the dates of use;

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

(4) The cleanup solvent usage for each month;

(5) The total VOC usage for each month;

(6) The average daily weight of VOCs emitted based on calculated weekly emissions and of a six-day working week; and

(7) The VOCs emitted for each compliance period.

(b) To document the compliance status with Conditions D.1.7, D.1.8 and D.1.9, the Permittee shall maintain a log of weekly overspray observations, daily checks of water curtains and flow sheets, daily and monthly inspections.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

## D.1.11 Reporting Requirements

A quarterly summary of the information to document the compliance status with Condition D.1.1 shall be submitted using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition. The report submitted by the Permittee does require a certification that meets the requirements of 326 IAC 2-7-6(1) by a "responsible official," as defined by 326 IAC 2-7-1(34).

## SECTION D.2 FACILITY OPERATION CONDITIONS

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

(n) Three (3) dust booths, identified as D-1, D-2, and D-3, installed in 1994, using dry filters, exhausting to stacks D-1-1, D-1-2, and D-2-1 through D-2-4, capacity: 1250 square feet of fiberglass parts per hour, each.

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

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

D.2.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from each of the three (3) dust booths shall not exceed 3.65 pounds per hour when operating at a process weight rate of 1,680 pounds per hour (0.84 tons per hour).

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

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

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

D.2.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

### Compliance Determination Requirement

D.2.3 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the dust booths exhausting to the filters are in operation.

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

D.2.4 Visible Emissions Notations [40 CFR 64]

(a) Visible emission notations of stack exhausts (D-1-1, D-1-2, D-2-1, D-2-2, D-2-3, and D-2-4) shall be performed. These notations shall be taken once per day during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.

(b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.

(c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.

(d) A trained employee, including trained personnel under contract with the source, is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

(e) If abnormal emissions are observed, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances, shall be considered a deviation from this permit.

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

### D.2.5 Record Keeping Requirements

(a) To document the compliance requirement with Condition D.2.4, the Permittee shall maintain daily records of the visible emission notations of the dust booths (identified as D-1, D-2, and D-3) stack exhaust. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation (e.g. the process did not operate that day).

(b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

## SECTION D.3 FACILITY OPERATION CONDITIONS

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

(c) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone. [326 IAC 6-3-2]

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

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

D.3.1 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from the insignificant trimming shall not exceed 0.551 pounds per hour, when operating at a process weight rate of less than 100 pounds per hour.

### Compliance Determination Requirement

D.3.2 Particulate Matter (PM)

The control devices for PM control shall be in operation at all times when the facilities exhausting to the control devices are in operation.

## SECTION E.1 National Emission Standards for Hazardous Air Pollutants (NESHAP) Requirements [326 IAC 2-7-5(1)][326 IAC 20-80-1][40 CFR 63, Subpart MMMM]

**Emissions Unit Description:**

Plant 43 -1

(e) One (1) spray booth, identified as SB1, constructed in 1993, using high volume, low pressure (HVLP) spray equipment and equipped with dry filters for overspray control, exhausting to Stacks C-1-1 through C-1-3, capacity: 69 square feet of fiberglass parts per hour. Under NESHAP 40 CFR 63 Subparts MMMM and PPPP this source is considered an existing affected source.

(f) One (1) paint booth, identified as P1, constructed in 1995, using high volume, low pressure (HVLP) spray equipment and equipped with dry filters for overspray control, exhausting to Stack P1, capacity: 69 square feet of fiberglass parts per hour. Under NESHAP 40 CFR 63 Subparts MMMM and PPPP this source is considered an existing affected source.

Plant 43-2

(j) One (1) paint system, identified as PS, installed in 1994, equipped with a water wash system as overspray control and consisting of the following equipment:

(1) One (1) tack-off booth, exhausting to stack C-2, capacity: 1250 square feet of fiberglass parts per hour.

(2) One (1) paint booth 1, equipped with high volume, low pressure (HVLP) spray guns, exhausting to stacks C-3-1 and C-3-2, capacity: 1250 square feet of fiberglass parts per hour.

(3) One (1) flash-off room, exhausting to stack C-3-3, capacity: 1250 square feet of fiberglass parts per hour.

(4) One (1) paint booth 2, equipped with high volume, low pressure (HVLP) spray guns, exhausting to stacks C-3-4 and C-3-5, capacity: 1250 square feet of fiberglass parts per hour.

(5) One (1) flash-off room, exhausting to stack C-3-6, capacity: 1250 square feet of fiberglass parts per hour.

(6) One (1) cure oven, fired by natural gas, exhausting to stack C-4, capacity: 1250 square feet of fiberglass parts per hour and 4.15 million British thermal units per hour.

(7) One (1) recirculation type dust blow-off booth with no external exhaust, equipped with an internal recirculation exhaust system with an air flow rate of 25,000 dry standard cubic feet per minute.

(8) One (1) new electric paint drying/baking oven with three (3) double-element radiant heaters at 8,000 Watts per heater for a total of 24,000 Watts exhausting to stack C-3-6. This drying oven is capable of drying a maximum of 10 parts or 800 square feet per hour.

Under the NESHAP 40 CFR 63 Subparts MMMM and PPPP the facilities listed above are considered parts of an existing affected source.

(k) One (1) paint booth, identified as PB1, installed in 1985, using high volume, low pressure (HVLP) spray guns and equipped with dry filters for overspray control, exhausting to stack B-4-1, capacity: 1250 square feet of fiberglass parts per hour. Under NESHAP 40 CFR 63

Subparts MMMM and PPPP this source is considered an existing affected source.

(l) One (1) foam spraying process, identified as F-1, installed in 2009, consisting of product tanks and one spray gun, with a capacity of 1.75 parts per hour, exhausting to the general building ventilation. Under NESHAP 40 CFR 63 Subparts MMMM and PPPP this source is considered an existing affected source.

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

## E.1.1 General Provisions Relating to National Emission Standards for Hazardous Air Pollutants under 40 CFR Part 63 [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.3901, 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 for the surface coating operations, as specified in Table 2 of 40 CFR 63, Subpart MMMM in accordance with schedule in 40 CFR 63 Subpart MMMM.

## E.1.2 Miscellaneous Metal Part and Products Surface Coating Requirements [326 IAC 20-80-1][40 CFR Part 63, Subpart MMMM]

The Permittee which engages in the surface coating of miscellaneous metal parts and products shall comply with the following provisions of 40 CFR 63, Subpart MMMM (included as Attachment A of this permit):

(1) 40 CFR 63.3880
(2) 40 CFR 63.3881 (a)-(c)(e)(1)-(2)
(3) 40 CFR 63.3882 (a)(b)(e)
(4) 40 CFR 63.3883 (b)(d)
(5) 40 CFR 63.3890 (b)(c)
(6) 40 CFR 63.3891 (a)(b)
(7) 40 CFR 63.3892 (a)
(8) 40 CFR 63.3893 (a)
(9) 40 CFR 63.3900 (a)(1)(b)
(10) 40 CFR 63.3901 (e)(2)
(11) 40 CFR 63.3910 (a)-(c)(8)(ii)(c)(10)
(12) 40 CFR 63.3920 (a)(1)-(6)
(13) 40 CFR 63.3930 (a)-(c)(3)(d)-(g)(j)
(14) 40 CFR 63.3931
(15) 40 CFR 63.3940
(16) 40 CFR 63.3941
(17) 40 CFR 63.3942
(18) 40 CFR 63.3950
(19) 40 CFR 63.3951
(20) 40 CFR 63.3952
(21) 40 CFR 63.3980
(22) 40 CFR 63.3981
(23) Table 2
(24) Table 3
(25) Table 4

## SECTION E.2 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) REQUIREMENTS [326 IAC 2-7-5(1)] [326 IAC 20-81-1] [40 CFR 63, Subpart PPPP]

**Emissions Unit Description:**

Plant 43-1

(b) One (1) spray booth, with dry filters as overspray control, exhausting to Stacks B-1-1 through B-1-3, consisting of the following operations which are mutually exclusive:

(2) identified as PC2-UP, approved for construction in 2013, using a high volume, low pressure (HVLP) spray gun, with a maximum capacity of 100 plastic parts or 0.62 gallons of Urethane Primer per hour.

Under NESHAP 40 CFR 63 Subparts PPPP this source is considered an existing affected source.

(e) One (1) spray booth, identified as SB1, constructed in 1993, using high volume, low pressure (HVLP) spray equipment and equipped with dry filters for overspray control, exhausting to Stacks C-1-1 through C-1-3, capacity: 69 square feet of fiberglass parts per hour. Under NESHAP 40 CFR 63 Subparts MMMM and PPPP this source is considered an existing affected source.

(f) One (1) paint booth, identified as P1, constructed in 1995, using high volume, low pressure (HVLP) spray equipment and equipped with dry filters for overspray control, exhausting to Stack P1, capacity: 69 square feet of fiberglass parts per hour. Under NESHAP 40 CFR 63 Subparts MMMM and PPPP this source is considered an existing affected source.

Plant 43-2

(j) One (1) paint system, identified as PS, installed in 1994, equipped with a water wash system as overspray control and consisting of the following equipment:

(1) One (1) tack-off booth, exhausting to stack C-2, capacity: 1250 square feet of fiberglass parts per hour.

(2) One (1) paint booth 1, equipped with high volume, low pressure (HVLP) spray guns, exhausting to stacks C-3-1 and C-3-2, capacity: 1250 square feet of fiberglass parts per hour.

(3) One (1) flash-off room, exhausting to stack C-3-3, capacity: 1250 square feet of fiberglass parts per hour.

(4) One (1) paint booth 2, equipped with high volume, low pressure (HVLP) spray guns, exhausting to stacks C-3-4 and C-3-5, capacity: 1250 square feet of fiberglass parts per hour.

(5) One (1) flash-off room, exhausting to stack C-3-6, capacity: 1250 square feet of fiberglass parts per hour.

(6) One (1) cure oven, fired by natural gas, exhausting to stack C-4, capacity: 1250 square feet of fiberglass parts per hour and 4.15 million British thermal units per hour.

(7) One (1) recirculation type dust blow-off booth with no external exhaust, equipped with an internal recirculation exhaust system with an air flow rate of 25,000 dry standard cubic feet per minute.

(8) One (1) new electric paint drying/baking oven with three (3) double-element radiant

heaters at 8,000 Watts per heater for a total of 24,000 Watts exhausting to stack C-3-6. This drying oven is capable of drying a maximum of 10 parts or 800 square feet per hour.

Under NESHAP 40 CFR 63 Subparts MMMM and PPPP the facilities listed above are considered parts of an existing affected source.

(k) One (1) paint booth, identified as PB1, installed in 1985, using high volume, low pressure (HVLP) spray guns and equipped with dry filters for overspray control, exhausting to stack B-4-1, capacity: 1250 square feet of fiberglass parts per hour. Under NESHAP 40 CFR 63 Subparts MMMM and PPPP this source is considered an existing affected source.

(l) One (1) foam spraying process, identified as F-1, installed in 2009, consisting of product tanks and one spray gun, with a capacity of 1.75 parts per hour, exhausting to the general building ventilation. Under NESHAP 40 CFR 63 Subparts MMMM and PPPP this source is considered an existing affected source.

Insignificant Activities:

(e) An emission unit or activity whose potential uncontrolled emissions are less than three (3) pounds per hour or fifteen (15) pounds per day of VOC and less than five (5) pounds per hour or twenty-five (25) pounds per day of PM10 including:

   (1) Repair areas. Under NESHAP 40 CFR 63 Subparts PPPP and WWWW, these areas are considered part of an existing affected source.

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

## E.2.1 General Provisions Relating to NESHAP PPPP [326 IAC 20-1] [40 CFR Part 63, Subpart A]

Pursuant to 40 CFR 63.4480, 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 40 CFR Part 63, Subpart PPPP in accordance with schedule in 40 CFR 63 Subpart PPPP.

## E.2.2 Coating of Plastic Parts and Products NESHAP [326 IAC 20-81-1][40 CFR Part 63, Subpart PPPP]

The Permittee which engages in the surface coating of plastic parts and products shall comply with the following provisions of 40 CFR 63, Subpart PPPP (included as Attachment B of this permit):

(1) 40 CFR 63.4480
(2) 40 CFR 63.4481(a)(1)(2)(5)(b)(c)(d)(e)
(3) 40 CFR 63.4482
(4) 40 CFR 63.4483(b)(d)
(5) 40 CFR 63.4490(b)(c)
(6) 40 CFR 63.4491(a)(b)
(7) 40 CFR 63.4492(a)
(8) 40 CFR 63.4493(a)
(9) 40 CFR 63.4500(a)(1)(b)
(10) 40 CFR 63.4501
(11) 40 CFR 63.4510
(12) 40 CFR 63.4520 (a)
(13) 40 CFR 63.4530(a)(b)(c)(1)-(3)(d)(f)(h)
(14) 40 CFR 63.4531
(15) 40 CFR 63.4540
(16) 40 CFR 63.4541
(17) 40 CFR 63.4542
(18) 40 CFR 63.4550
(19) 40 CFR 63.4551

| | |
|---|---|
| (20) | 40 CFR 63.4552 |
| (21) | 40 CFR 63.4580 |
| (22) | 40 CFR 63.4581 |
| (23) | Table 2 |
| (24) | Table 3 |
| (25) | Table 4 |
| (26) | Appendix A |

## SECTION E.3 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) REQUIREMENTS [326 IAC 2-7-5(1)] [326 IAC 20-48] [40 CFR 63, Subpart VVVV]

**Emissions Unit Description:**

Plant 43-1

(a) One (1) spray booth, identified as PC1, constructed in 1994, using gel coat, lamination, and spray equipment and equipped with dry filters as overspray control, exhausting to Stacks B-1-1 through B-1-3, capacity: 375 square feet of resin per hour. Under NESHAP 40 CFR 63 Subpart VVVV this source is considered an existing affected source.

(b) One (1) spray booth, with dry filters as overspray control, exhausting to Stacks B-1-1 through B-1-3, consisting of the following operations which are mutually exclusive:

(1) identified as PC2, constructed in 1982, using gel coat, lamination, and spray equipment, with a maximum capacity of 375 square feet of fiberglass parts per hour.

Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

(c) One (1) spray booth, identified as GB2, constructed in 1982, using gel coat, lamination, and spray equipment and equipped with dry filters as overspray control, exhausting to Stacks B-1-9 and B-1-11, capacity: 1,200 square feet of fiberglass parts per hour. Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

(d) One (1) spray booth, identified as LB1, constructed in 1982, using gel coat, lamination and spray equipment and equipped with dry filters as overspray control, exhausting to Stacks B-1-12 through B-1-14, capacity: 1,200 square feet of material per hour. Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

(g) One (1) resin transfer molding operation, constructed in 2001, identified as RTM, with a maximum capacity of 459 pounds of resin per hour, and with emissions venting inside. Under NESHAP 40 CFR 63 Subpart VVVV this source is considered an existing affected source.

Plant 43-2

(h) Three (3) spray booths, identified as GB1, GB2, and GB3, installed in 1985, using gel coat, lamination and spray equipment and equipped with dry filters as overspray control, exhausting to stacks B-1-1 through B-1-6, capacity: 1250 square feet of fiberglass parts per hour, each. Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

(i) Four (4) spray booths, identified as CB1, CB2, CB3 and CB4, installed in 1985, using gel coat, lamination and spray equipment and equipped with dry filters as overspray control, exhausting to stacks B-2-1 through B-2-14, capacity: 1250 square feet of fiberglass parts per hour, each. Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

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

### E.3.1 General Provisions Relating to NESHAP VVVV [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.5680, 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 40 CFR Part 63, Subpart VVVV in accordance with schedule in 40 CFR 63 Subpart VVVV.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

### E.3.2 Boat Manufacturing NESHAP [326 IAC 20-48][40 CFR Part 63, Subpart VVVV]

The Permittee which engages in boat manufacturing shall comply with the following provisions of 40 CFR 63, Subpart VVVV (included as Attachment C of this permit):

(1) 40 CFR 63.5680
(2) 40 CFR 63.5683
(3) 40 CFR 63.5689
(4) 40 CFR 63.5692(b)
(5) 40 CFR 63.5695
(6) 40 CFR 63.5698(a)(b)(d)
(7) 40 CFR 63.5701(a)(b)
(8) 40 CFR 63.5704(a)(b)
(9) 40 CFR 63.5707
(10) 40 CFR 63.5710
(11) 40 CFR 63.5713
(12) 40 CFR 63.5714
(13) 40 CFR 63.5728(a)
(14) 40 CFR 63.5731
(15) 40 CFR 63.5743
(16) 40 CFR 63.5746
(17) 40 CFR 63.5749
(18) 40 CFR 63.5752
(19) 40 CFR 63.5753
(20) 40 CFR 63.5755
(21) 40 CFR 63.5758
(22) 40 CFR 63.5761
(23) 40 CFR 63.5764 (a)(b)(c)
(24) 40 CFR 63.5767 (a)(b)(c)
(25) 40 CFR 63.5770
(26) 40 CFR 63.5773
(27) 40 CFR 63.5776
(28) 40 CFR 63.5779
(29) Table 1
(30) Table 2
(31) Table 3
(32) Table 5
(33) Table 6
(34) Table 7
(35) Table 8

## SECTION E.4 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) REQUIREMENTS [326 IAC 2-7-5(1)] [326 IAC 20-25] [40 CFR 63, Subpart WWWW]

**Emissions Unit Description:**

Plant 43-1

(a) One (1) spray booth, identified as PC1, constructed in 1994, using gel coat, lamination, and spray equipment and equipped with dry filters as overspray control, exhausting to Stacks B-1-1 through B-1-3, capacity: 375 square feet of resin per hour. Under NESHAP 40 CFR 63 Subpart VVVV this source is considered an existing affected source.

(b) One (1) spray booth, with dry filters as overspray control, exhausting to Stacks B-1-1 through B-1-3, consisting of the following operations which are mutually exclusive:

(1) identified as PC2, constructed in 1982, using gel coat, lamination, and spray equipment, with a maximum capacity of 375 square feet of fiberglass parts per hour.

Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

(c) One (1) spray booth, identified as GB2, constructed in 1982, using gel coat, lamination, and spray equipment and equipped with dry filters as overspray control, exhausting to Stacks B-1-9 and B-1-11, capacity: 1,200 square feet of fiberglass parts per hour. Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

(d) One (1) spray booth, identified as LB1, constructed in 1982, using gel coat, lamination and spray equipment and equipped with dry filters as overspray control, exhausting to Stacks B-1-12 through B-1-14, capacity: 1,200 square feet of material per hour. Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

Plant 43-2

(h) Three (3) spray booths, identified as GB1, GB2, and GB3, installed in 1985, using gel coat, lamination and spray equipment and equipped with dry filters as overspray control, exhausting to stacks B-1-1 through B-1-6, capacity: 1250 square feet of fiberglass parts per hour, each. Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

(i) Four (4) spray booths, identified as CB1, CB2, CB3 and CB4, installed in 1985, using gel coat, lamination and spray equipment and equipped with dry filters as overspray control, exhausting to stacks B-2-1 through B-2-14, capacity: 1250 square feet of fiberglass parts per hour, each. Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

(m) One (1) filament winding process, identified as FWP, installed in 2009, with a capacity of 100 pounds of resin per hour, exhausting to general building ventilation. Under NESHAP 40 CFR 63 Subpart WWWW, this source is considered an existing affected source.

Insignificant Activities

(d) An emission unit or activity whose potential uncontrolled emissions are less than three (3) pounds per hour or fifteen (15) pounds per day of VOC and less than five (5) pounds per hour or twenty-five (25) pounds per day of PM10 including:

(1) Repair areas. Under NESHAP 40 CFR 63 Subparts PPPP and WWWW, these areas are considered part of an existing affected source.

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

### E.4.1 General Provisions Relating to NESHAP WWWW [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) Pursuant to 40 CFR 63.5780, 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 40 CFR Part 63, Subpart WWWW in accordance with schedule in 40 CFR 63 Subpart WWWW.

(b) Pursuant to 40 CFR 63.10, the Permittee shall submit all required notifications and reports 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

### E.4.2 Reinforced Plastic Composites Production NESHAP [326 IAC 20-25][40 CFR Part 63, Subpart WWWW]

The Permittee which engages in reinforced plastic composites production shall comply with the following provisions of 40 CFR 63, Subpart WWWW (included as Attachment D of this permit):

(1) 40 CFR 63.5780
(2) 40 CFR 63.5785
(3) 40 CFR 63.5787 (c)(d)
(4) 40 CFR 63.5790
(5) 40 CFR 63.5795 (b)
(6) 40 CFR 63.5796
(7) 40 CFR 63.5797
(8) 40 CFR 63.5798
(9) 40 CFR 63.5799 (b)(c)
(10) 40 CFR 63.5800
(11) 40 CFR 63.5805 (b)(g)
(12) 40 CFR 63.5810 (a)(b)
(13) 40 CFR 63.5835 (a)(b)(c)
(14) 40 CFR 63.5840
(15) 40 CFR 63.5860 (a)
(16) 40 CFR 63.5895 (b)(c)(d)
(17) 40 CFR 63.5900 (a)(2)-(4)(b)(c)
(18) 40 CFR 63.5905
(19) 40 CFR 63.5910 (a)-(d)(f)(g)(i)
(20) 40 CFR 63.5915 (a)(c)(d)
(21) 40 CFR 63.5920
(22) 40 CFR 63. 5925
(23) 40 CFR 63.5930
(24) 40 CFR 63.5935
(25) Table 1
(26) Table 2
(27) Table 3
(28) Table 4
(29) Table 5
(30) Table 7

(31) Table 8
(32) Table 9
(33) Table 13
(34) Table 14
(35) Table 15

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
# OFFICE OF AIR QUALITY
# COMPLIANCE AND ENFORCEMENT BRANCH
# PART 70 OPERATING PERMIT
# CERTIFICATION

| | |
|---|---|
| Source Name: | Goldshield Fiberglass, Inc. |
| Source Address: | 2004 Patterson Street, 2709 Patterson Street & 1903 Patterson Street, Decatur, Indiana 46733 |
| Part 70 Permit No.: | T001-32298-00043 |

**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 AND ENFORCEMENT 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: Goldshield Fiberglass, Inc.
Source Address: 2004 Patterson Street, 2709 Patterson Street & 1903 Patterson Street, Decatur, Indiana 46733
Part 70 Permit No.: T001-32298-00043

**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: ________________________________________

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

## Part 70 Usage Report

(Submit Report Quarterly)

| | |
|---|---|
| Source Name: | Goldshield Fiberglass, Inc. |
| Source Address: | 2004 Patterson Street, 2709 Patterson Street & 1903 Patterson Street, Decatur,, Decatur, Indiana 46733 |
| Part 70 Permit No.: | T001-32298-00043 |
| Facility: | Entire source (Plants 43-1 and 43-2), excluding FWP, F-1, combustion and RTM units |
| Parameter: | Total VOC emissions |
| Limit: | Average daily emissions of 2.41 tons per day based on weekly VOC emissions and a six (6) -day week |

Month: ____________ Year: ________

| Day | Month 1 VOC Emissions (tons) | Month 2 VOC Emissions (tons) | Month 3 VOC Emissions (tons) | Day | Month 1 VOC Emissions (tons) | Month 2 VOC Emissions (tons) | Month 3 VOC Emissions (tons) |
|---|---|---|---|---|---|---|---|
| 1 | | | | 17 | | | |
| 2 | | | | 18 | | | |
| 3 | | | | 19 | | | |
| 4 | | | | 20 | | | |
| 5 | | | | 21 | | | |
| 6 | | | | 22 | | | |
| 7 | | | | 23 | | | |
| 8 | | | | 24 | | | |
| 9 | | | | 25 | | | |
| 10 | | | | 26 | | | |
| 11 | | | | 27 | | | |
| 12 | | | | 28 | | | |
| 13 | | | | 29 | | | |
| 14 | | | | 30 | | | |
| 15 | | | | 31 | | | |
| 16 | | | | | | | |

☐ No deviation occurred in this month.

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

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

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

## Part 70 Quarterly Report

| | |
|---|---|
| Source Name: | Goldshield Fiberglass, Inc. |
| Source Address: | 2004 Patterson Street, 2709 Patterson Street & 1903 Patterson Street, Decatur, Indiana 46733 |
| Part 70 Permit No.: | T001-32298-00043 |
| Facility: | Entire source (Plants 43-1 and 43-2), excluding combustion and RTM units |
| Parameter: | Total VOC emissions |
| Limit: | Less than 724 tons per twelve (12) consecutive month period |

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 month.

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

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

# OFFICE OF AIR QUALITY
# COMPLIANCE AND ENFORCEMENT BRANCH
# PART 70 OPERATING PERMIT
# QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

| | |
|---|---|
| Source Name: | Goldshield Fiberglass, Inc. |
| Source Address: | 2004 Patterson Street, 2709 Patterson Street & 1903 Patterson Street, Decatur, Indiana 46733 |
| Part 70 Permit No.: | T001-32298-00043 |

**Months: ________ to __________ Year: ___________**

Page 1 of 2

| | |
|---|---|
| This report shall be submitted quarterly based on a calendar year. Proper notice submittal under Section B –Emergency Provisions satisfies the reporting requirements of paragraph (a) of Section C-General Reporting. Any deviation from the requirements of this permit, the date(s) of each deviation, the probable cause of the deviation, and the response steps taken must be reported. A deviation required to be reported pursuant to an applicable requirement that exists independent of the permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked "No deviations occurred this reporting period". | |
| ☐ 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:** | |

Page 2 of 2

| | |
|---|---|
| **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: __________________________________________

# Attachment A

# Goldshield Fiberglass, Inc.

# Part 70 Operating Permit Renewal

## 40 CFR 63 Subpart MMMM—National Emission Standards for Hazardous Air Pollutants for Surface Coating of Miscellaneous Metal Parts and Products

**Source:** 69 FR 157, Jan. 2, 2004, unless otherwise noted.

### What This Subpart Covers

### § 63.3880 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for miscellaneous metal parts and products surface coating facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

### § 63.3881 Am I subject to this subpart?

(a) Miscellaneous metal parts and products include, but are not limited to, metal components of the following types of products as well as the products themselves: motor vehicle parts and accessories, bicycles and sporting goods, recreational vehicles, extruded aluminum structural components, railroad cars, heavy duty trucks, medical equipment, lawn and garden equipment, electronic equipment, magnet wire, steel drums, industrial machinery, metal pipes, and numerous other industrial, household, and consumer products. Except as provided in paragraph (c) of this section, the source category to which this subpart applies is the surface coating of any miscellaneous metal parts or products, as described in paragraph (a)(1) of this section, and it includes the subcategories listed in paragraphs (a)(2) through (6) of this section.

(1) Surface coating is the application of coating to a substrate using, for example, spray guns or dip tanks. When application of coating to a substrate occurs, then surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage. However, these activities do not comprise surface coating if they are not directly related to the application of the coating. Coating application with handheld, non-refillable aerosol containers, touch-up markers, marking pens, or the application of paper film or plastic film which may be pre-coated with an adhesive by the manufacturer are not coating operations for the purposes of this subpart.

(2) The general use coating subcategory includes all surface coating operations that are not high performance, magnet wire, rubber-to-metal, or extreme performance fluoropolymer coating operations.

(3) The high performance coating subcategory includes surface coating operations that are performed using coatings that meet the definition of high performance architectural coating or high temperature coating in §63.3981.

(4) The magnet wire coating subcategory includes surface coating operations that are performed using coatings that meet the definition of magnet wire coatings in §63.3981.

(5) The rubber-to-metal coatings subcategory includes surface coating operations that are performed using coatings that meet the definition of rubber-to-metal coatings in §63.3981.

(6) The extreme performance fluoropolymer coatings subcategory includes surface coating operations that are performed using coatings that meet the definition of extreme performance fluoropolymer coatings in §63.3981.

(b) You are subject to this subpart if you own or operate a new, reconstructed, or existing affected source, as defined in §63.3882, that uses 946 liters (250 gallons (gal)) per year, or more, of coatings that contain hazardous air pollutants (HAP) in the surface coating of miscellaneous metal parts and products defined in paragraph (a) of this section; and that is a major source, is located at a major source, or is part of a major source of emissions of HAP. A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (Mg) (10 tons) or more per year or any combination of HAP at a rate of 22.68 Mg (25 tons) or more per year. You do not need to include coatings that meet the definition of non-HAP coating contained in §63.3981 in determining whether you use 946 liters (250 gal) per year, or more, of coatings in the surface coating of miscellaneous metal parts and products.

(c) This subpart does not apply to surface coating or a coating operation that meets any of the criteria of paragraphs (c)(1) through (17) of this section.

(1) A coating operation conducted at a facility where the facility uses only coatings, thinners and other additives, and cleaning materials that contain no organic HAP, as determined according to §63.3941(a).

(2) Surface coating operations that occur at research or laboratory facilities, or is part of janitorial, building, and facility maintenance operations, or that occur at hobby shops that are operated for noncommercial purposes.

(3) Coatings used in volumes of less than 189 liters (50 gal) per year, provided that the total volume of coatings exempt under this paragraph does not exceed 946 liters (250 gal) per year at the facility.

(4) The surface coating of metal parts and products performed on-site at installations owned or operated by the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State) or the National Aeronautics and Space Administration, or the surface coating of military munitions manufactured by or for the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State).

(5) Surface coating where plastic is extruded onto metal wire or cable or metal parts or products to form a coating.

(6) Surface coating of metal components of wood furniture that meet the applicability criteria for wood furniture manufacturing (subpart JJ of this part).

(7) Surface coating of metal components of large appliances that meet the applicability criteria for large appliance surface coating (subpart NNNN of this part).

(8) Surface coating of metal components of metal furniture that meet the applicability criteria for metal furniture surface coating (subpart RRRR of this part).

(9) Surface coating of metal components of wood building products that meet the applicability criteria for wood building products surface coating (subpart QQQQ of this part).

(10) Surface coating of metal components of aerospace vehicles that meet the applicability criteria for aerospace manufacturing and rework (40 CFR part 63, subpart GG).

(11) Surface coating of metal parts intended for use in an aerospace vehicle or component using specialty coatings as defined in appendix A to subpart GG of this part.

(12) Surface coating of metal components of ships that meet the applicability criteria for shipbuilding and ship repair (subpart II of this part).

(13) Surface coating of metal using a web coating process that meets the applicability criteria for paper and other web coating (subpart JJJJ of this part).

(14) Surface coating of metal using a coil coating process that meets the applicability criteria for metal coil coating (subpart SSSS of this part).

(15) Surface coating of boats or metal parts of boats (including, but not limited to, the use of assembly adhesives) where the facility meets the applicability criteria for boat manufacturing facilities (subpart VVVV of this part), except where the surface coating of the boat is a metal coating operation performed on personal watercraft or parts of personal watercraft. This subpart does apply to metal coating operations performed on personal watercraft and parts of personal watercraft.

(16) Surface coating of assembled on-road vehicles that meet the applicability criteria for the assembled on-road vehicle subcategory in plastic parts and products surface coating (40 CFR part 63, subpart PPPP).

(17) Surface coating of metal components of automobiles and light-duty trucks that meets the applicability criteria in §63.3082(b) for the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) at a facility that meets the applicability criteria in §63.3081(b).

(d) If your facility meets the applicability criteria in §63.3081(b) of the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII), and you perform surface coating of metal parts or products that meets both the applicability criteria in §63.3082(c) and the applicability criteria of the Surface Coating of Miscellaneous Metal Parts and Products (40 CFR part 63, subpart MMMM), then for the surface coating of any or all of your metal parts or products that meets the applicability criteria in §63.3082(c), you may choose to comply with the requirements of subpart IIII of this part in lieu of complying with the Surface Coating of Miscellaneous Metal Parts and Products NESHAP. Surface coating operations on metal parts or products (e.g., parts for motorcycles or lawnmowers) not intended for use in automobiles, light-duty trucks, or other motor vehicles as defined in §63.3176 cannot be made part of your affected source under subpart IIII of this part.

(e) If you own or operate an affected source that meets the applicability criteria of this subpart and at the same facility you also perform surface coating that meets the applicability criteria of any other final surface coating NESHAP in this part you may choose to comply as specified in paragraph (e)(1), (2), or (3) of this section.

(1) You may have each surface coating operation that meets the applicability criteria of a separate NESHAP comply with that NESHAP separately.

(2) You may comply with the emission limitation representing the predominant surface coating activity at your facility, as determined according to paragraphs (e)(2)(i) and (ii) of this section. However, you may not establish high performance, rubber-to-metal, or extreme performance fluoropolymer coating operations as the predominant activity. You must not consider any surface coating activity that is subject to the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) in determining the predominant surface coating activity at your facility.

(i) If a surface coating operation accounts for 90 percent or more of the surface coating activity at your facility (that is, the predominant activity), then compliance with the emission limitations of the predominant activity for all surface coating operations constitutes compliance with these and other applicable surface coating NESHAP. In determining predominant activity, you must include coating activities that meet the applicability criteria of other surface coating NESHAP and constitute more than 1 percent of total coating activities at your facility. Coating activities that meet the applicability criteria of other surface coating NESHAP but comprise less than 1 percent of coating activities need not be included in the determination of predominant activity but must be included in the compliance calculation.

(ii) You must use liters (gal) of solids used as a measure of relative surface coating activity over a representative period of operation. You may estimate the relative volume of coating solids used from parameters other than coating consumption and volume solids content (e.g., design specifications for the parts or products coated and the number of items produced). The determination of predominant activity must accurately reflect current and projected coating operations and must be verifiable through appropriate documentation. The use of parameters other than coating consumption and volume solids content must be approved by the Administrator. You may use data for any reasonable time period of at least 1 year in determining the relative amount of coating activity, as long as they represent the way the source will continue to operate in the future and are approved by the Administrator. You must determine the predominant activity at your facility and submit the results of that determination with the initial notification required by §63.3910(b). You must also determine predominant activity annually and include the determination in the next semi-annual compliance report required by §63.3920(a).

(3) You may comply with a facility-specific emission limit calculated from the relative amount of coating activity that is subject to each emission limit. If you elect to comply using the facility-specific emission limit alternative, then compliance with the facility-specific emission limit and the emission limitations in this subpart for all surface coating operations constitutes compliance with this and other applicable surface coating NESHAP. The procedures for calculating the facility-specific emission limit are specified in §63.3890. In calculating a facility-specific emission limit, you must include coating activities that meet the applicability criteria of other surface coating NESHAP and constitute more than 1 percent of total coating activities at your facility. You must not consider any surface coating activity that is subject to the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) in determining a facility-specific emission limit for your facility. Coating activities that meet the applicability criteria of other surface coating NESHAP but comprise less than 1 percent of total coating activities need not be included in the calculation of the facility-specific emission limit but must be included in the compliance calculations.

[69 FR 157, Jan. 2, 2004, as amended at 69 FR 22660, Apr. 26, 2004; 71 FR 76927, Dec. 22, 2006]

### § 63.3882 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, and existing affected source within each of the four subcategories listed in §63.3881(a).

(b) The affected source is the collection of all of the items listed in paragraphs (b)(1) through (4) of this section that are used for surface coating of miscellaneous metal parts and products within each subcategory.

(1) All coating operations as defined in §63.3981;

(2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;

(3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and

(4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

(c) An affected source is a new affected source if you commenced its construction after August 13, 2002 and the construction is of a completely new miscellaneous metal parts and products surface coating facility where previously no miscellaneous metal parts and products surface coating facility had existed.

(d) An affected source is reconstructed if it meets the criteria as defined in §63.2.

(e) An affected source is existing if it is not new or reconstructed.

### § 63.3883 When do I have to comply with this subpart?

The date by which you must comply with this subpart is called the compliance date. The compliance date for each type of affected source is specified in paragraphs (a) through (c) of this section. The compliance date begins the initial compliance period during which you conduct the initial compliance demonstration described in §§63.3940, 63.3950, and 63.3960.

(a) For a new or reconstructed affected source, the compliance date is the applicable date in paragraph (a)(1) or (2) of this section:

(1) If the initial startup of your new or reconstructed affected source is before January 2, 2004, the compliance date is January 2, 2004.

(2) If the initial startup of your new or reconstructed affected source occurs after January 2, 2004, the compliance date is the date of initial startup of your affected source.

(b) For an existing affected source, the compliance date is the date 3 years after January 2, 2004.

(c) For an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP emissions, the compliance date is specified in paragraphs (c)(1) and (2) of this section.

(1) For any portion of the source that becomes a new or reconstructed affected source subject to this subpart, the compliance date is the date of initial startup of the affected source or January 2, 2004, whichever is later.

(2) For any portion of the source that becomes an existing affected source subject to this subpart, the compliance date is the date 1 year after the area source becomes a major source or 3 years after January 2, 2004, whichever is later.

(d) You must meet the notification requirements in §63.3910 according to the dates specified in that section and in subpart A of this part. Some of the notifications must be submitted before the compliance dates described in paragraphs (a) through (c) of this section.

## Emission Limitations

### § 63.3890 What emission limits must I meet?

(a) For a new or reconstructed affected source, you must limit organic HAP emissions to the atmosphere from the affected source to the applicable limit specified in paragraphs (a)(1) through (5) of this section, except as specified in paragraph (c) of this section, determined according to the requirements in §63.3941, §63.3951, or §63.3961.

(1) For each new general use coating affected source, limit organic HAP emissions to no more than 0.23 kilograms (kg) (1.9 pound (lb)) organic HAP per liter (gal) coating solids used during each 12-month compliance period.

(2) For each new high performance coating affected source, limit organic HAP emissions to no more than 3.3 kg (27.5 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.

(3) For each new magnet wire coating affected source, limit organic HAP emissions to no more than 0.050 kg (0.44 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.

(4) For each new rubber-to-metal coating affected source, limit organic HAP emissions to no more than 0.81 kg (6.8 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.

(5) For each new extreme performance fluoropolymer coating affected source, limit organic HAP emissions to no more than 1.5 kg (12.4 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.

(b) For an existing affected source, you must limit organic HAP emissions to the atmosphere from the affected source to the applicable limit specified in paragraphs (b)(1) through (5) of this section, except as specified in paragraph (c) of this section, determined according to the requirements in §63.3941, §63.3951, or §63.3961.

(1) For each existing general use coating affected source, limit organic HAP emissions to no more than 0.31 kg (2.6 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.

(2) For each existing high performance coating affected source, limit organic HAP emissions to no more than 3.3 kg (27.5 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.

(3) For each existing magnet wire coating affected source, limit organic HAP emissions to no more than 0.12 kg (1.0 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.

(4) For each existing rubber-to-metal coating affected source, limit organic HAP emissions to no more than 4.5 kg (37.7 lb) organic HAP per liter (gal) coating solids used during each 12-month compliance period.

(5) For each existing extreme performance fluoropolymer coating affected source, limit organic HAP emissions to no more than 1.5 kg (12.4 lbs) organic HAP per liter (gal) coating solids used during each 12-month compliance period.

(c) If your facility's surface coating operations meet the applicability criteria of more than one of the subcategory emission limits specified in paragraphs (a) or (b) of this section, you may comply separately with each subcategory emission limit or comply using one of the alternatives in paragraph (c)(1) or (2) of this section.

(1) If the general use or magnet wire surface coating operations subject to only one of the emission limits specified in paragraphs (a)(1), (3), (b)(1), or (3) of this section account for 90 percent or more of the surface coating activity at your facility ( *i.e.,* it is the predominant activity at your facility), then compliance with that one emission limitations in this subpart for all surface coating operations constitutes compliance with the other applicable emission limits. You must use liters (gal) of solids used as a measure of relative surface coating activity over a representative period of operation. You may estimate the relative volume of coating solids used from parameters other than coating consumption and volume solids content (e.g*.,* design specifications for the parts or products coated and the number of items produced). The determination of predominant activity must accurately reflect current and projected coating operations and must be verifiable through appropriate documentation. The use of parameters other than coating consumption and volume solids content must be approved by the Administrator. You may use data for any reasonable time period of at least 1 year in determining the relative amount of coating activity, as long as they represent the way the source will continue to operate in the future and are approved by the Administrator. You must determine the predominant activity at your facility and submit the results of that determination with the initial notification required by §63.3910(b). Additionally, you must determine the facility's predominant activity annually and include the determination in the next semi-annual compliance report required by §63.3920(a).

(2) You may calculate and comply with a facility-specific emission limit as described in paragraphs (c)(2)(i) through (iii) of this section. If you elect to comply using the facility-specific emission limit alternative, then compliance with the facility-specific emission limit and the emission limitations in this subpart for all surface coating operations constitutes compliance with this and other applicable surface coating NESHAP. In calculating a facility-specific emission limit, you must include coating activities that meet the applicability criteria of the other subcategories and constitute more than 1 percent of total coating activities. Coating activities that meet the applicability criteria of other surface coating NESHAP but comprise less than 1 percent of coating activities need not be included in the determination of predominant activity but must be included in the compliance calculation.

(i) You are required to calculate the facility-specific emission limit for your facility when you submit the notification of compliance status required in §63.3910(c), and on a monthly basis afterward using the coating data for the relevant 12-month compliance period.

(ii) Use Equation 1 of this section to calculate the facility-specific emission limit for your surface coating operations for each 12-month compliance period.

$$\textit{Facility-Specific}\ \text{Emission Limit} = \frac{\sum_{i=1}^{n} (\text{Limit}_i)(\textit{Solids}_i)}{\sum_{i=1}^{n} (\textit{Solids}_i)} \qquad (\textit{Eq}.\ 1)$$

Where:

Facility-specific emission limit = Facility-specific emission limit for each 12-month compliance period, kg (lb) organic HAP per kg (lb) coating solids used.

$\text{Limit}_i$= The new source or existing source emission limit applicable to coating operation, i, included in the facility-specific emission limit, converted to kg (lb) organic HAP per kg (lb) coating solids used, if the emission limit is not already in those units. All emission limits included in the facility-specific emission limit must be in the same units.

$\text{Solids}_i$= The liters (gal) of solids used in coating operation, i, in the 12-month compliance period that is subject to emission limit, i. You may estimate the volume of coating solids used from parameters other than coating consumption and volume solids content (e.g., design specifications for the parts or products coated and the number of items produced). The use of parameters other than coating consumption and volume solids content must be approved by the Administrator.

n = The number of different coating operations included in the facility-specific emission limit.

(iii) If you need to convert an emission limit in another surface coating NESHAP from kg (lb) organic HAP per kg (lb) coating solids used to kg (lb) organic HAP per liter (gal) coating solids used, you must use the default solids density of 1.26 kg solids per liter coating solids (10.5 lb solids per gal solids).

### § 63.3891 What are my options for meeting the emission limits?

You must include all coatings (as defined in §63.3981), thinners and/or other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in §63.3890. To make this determination, you must use at least one of the three compliance options listed in paragraphs (a) through (c) of this section. You may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. You may use different compliance options for different coating operations, or at different times on the same coating operation. You may employ different compliance options when different coatings are applied to the same part, or when the same coating is applied to different parts. However, you may not use different compliance options at the same time on the same coating operation. If you switch between compliance options for any coating operation or group of coating operations, you must document this switch as required by §63.3930(c), and you must report it in the next semiannual compliance report required in §63.3920.

(a) *Compliant material option.* Demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable emission limit in §63.3890, and that each thinner and/or other additive, and cleaning material used contains no organic HAP. You must meet all the requirements of §§63.3940, 63.3941, and 63.3942 to demonstrate compliance with the applicable emission limit using this option.

(b) *Emission rate without add-on controls option.* Demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in §63.3890, calculated as a rolling 12-month emission rate and determined on a monthly basis. You must meet all the requirements of §§63.3950, 63.3951, and 63.3952 to demonstrate compliance with the emission limit using this option.

(c) *Emission rate with add-on controls option.* Demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), and the emissions reductions achieved by emission capture systems and add-on controls, the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in §63.3890, calculated as a rolling 12-month emission rate and determined on a monthly basis. If you use this compliance option, you must also demonstrate that all emission capture systems and add-on control devices for the coating operation(s) meet the operating limits required in §63.3892, except for solvent recovery systems for which you conduct liquid-liquid material balances according to §63.3961(j), and that you meet the work practice standards required in §63.3893. You must meet all the requirements of §§63.3960 through 63.3968 to demonstrate compliance with the emission limits, operating limits, and work practice standards using this option.

### § 63.3892 What operating limits must I meet?

(a) For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any operating limits.

(b) For any controlled coating operation(s) on which you use the emission rate with add-on controls option, except those for which you use a solvent recovery system and conduct a liquid-liquid material balance according to §63.3961(j), you must meet the operating limits specified in Table 1 to this subpart. These operating limits apply to the emission capture and control systems on the coating operation(s) for which you use this option, and you must establish the operating limits during the performance test according to the requirements in §63.3967. You must meet the operating limits at all times after you establish them.

(c) If you use an add-on control device other than those listed in Table 1 to this subpart, or wish to monitor an alternative parameter and comply with a different operating limit, you must apply to the Administrator for approval of alternative monitoring under §63.8(f).

### § 63.3893 What work practice standards must I meet?

(a) For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any work practice standards.

(b) If you use the emission rate with add-on controls option, you must develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners and/or other additives, and cleaning materials used in, and waste materials generated by the controlled coating operation(s) for which you use this option; or you must meet an alternative standard as provided in paragraph (c) of this section. The plan must specify practices and procedures to ensure that, at a minimum, the elements specified in paragraphs (b)(1) through (5) of this section are implemented.

(1) All organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be stored in closed containers.

(2) Spills of organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be minimized.

(3) Organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.

(4) Mixing vessels which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.

(5) Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.

(c) As provided in §63.6(g), we, the U.S. Environmental Protection Agency, may choose to grant you permission to use an alternative to the work practice standards in this section.

## General Compliance Requirements

### § 63.3900 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations in this subpart as specified in paragraphs (a)(1) and (2) of this section.

(1) Any coating operation(s) for which you use the compliant material option or the emission rate without add-on controls option, as specified in §63.3891(a) and (b), must be in compliance with the applicable emission limit in §63.3890 at all times.

(2) Any coating operation(s) for which you use the emission rate with add-on controls option, as specified in §63.3891(c), must be in compliance with the emission limitations as specified in paragraphs (a)(2)(i) through (iii) of this section.

(i) The coating operation(s) must be in compliance with the applicable emission limit in §63.3890 at all times except during periods of startup, shutdown, and malfunction.

(ii) The coating operation(s) must be in compliance with the operating limits for emission capture systems and add-on control devices required by §63.3892 at all times except during periods of startup, shutdown, and malfunction, and except for solvent recovery systems for which you conduct liquid-liquid material balances according to §63.3961(j).

(iii) The coating operation(s) must be in compliance with the work practice standards in §63.3893 at all times.

(b) You must always operate and maintain your affected source, including all air pollution control and monitoring equipment you use for purposes of complying with this subpart, according to the provisions in §63.6(e)(1)(i).

(c) If your affected source uses an emission capture system and add-on control device, you must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). The plan must address the startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The plan must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures.

[69 FR 157, Jan. 2, 2004, as amended at 71 FR 20465, Apr. 20, 2006]

### § 63.3901 What parts of the General Provisions apply to me?

Table 2 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

## Notifications, Reports, and Records

### § 63.3910 What notifications must I submit?

(a) *General.* You must submit the notifications in §§63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to you by the dates specified in those sections, except as provided in paragraphs (b) and (c) of this section.

(b) *Initial Notification.* You must submit the initial notification required by §63.9(b) for a new or reconstructed affected source no later than 120 days after initial startup or 120 days after January 2, 2004, whichever is later. For an existing affected source, you must submit the initial notification no later than 1 year after January 2, 2004. If you are using compliance with the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (subpart IIII of this part) as provided for under §63.3881(d) to constitute compliance with this subpart for any or all of your metal parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those metal parts coating operations. If you are complying with another NESHAP that constitutes the predominant activity at your facility under §63.3881(e)(2) to constitute compliance with this subpart for your metal parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those metal parts coating operations.

(c) *Notification of compliance status.* You must submit the notification of compliance status required by §63.9(h) no later than 30 calendar days following the end of the initial compliance period described in §§63.3940, 63.3950, or 63.3960 that applies to your affected source. The notification of compliance status must contain the information specified in paragraphs (c)(1) through (11) of this section and in §63.9(h).

(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. The reporting period is the initial compliance period described in §§63.3940, 63.3950, or 63.3960 that applies to your affected source.

(4) Identification of the compliance option or options specified in §63.3891 that you used on each coating operation in the affected source during the initial compliance period.

(5) Statement of whether or not the affected source achieved the emission limitations for the initial compliance period.

(6) If you had a deviation, include the information in paragraphs (c)(6)(i) and (ii) of this section.

(i) A description and statement of the cause of the deviation.

(ii) If you failed to meet the applicable emission limit in §63.3890, include all the calculations you used to determine the kg (lb) of organic HAP emitted per liter (gal) coating solids used. You do not need to submit information provided by the materials' suppliers or manufacturers, or test reports.

(7) For each of the data items listed in paragraphs (c)(7)(i) through (iv) of this section that is required by the compliance option(s) you used to demonstrate compliance with the emission limit, include an example of how you determined the value, including calculations and supporting data. Supporting data may include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the results of testing conducted according to §63.3941(a), (b), or (c). You do not need to submit copies of any test reports.

(i) Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one cleaning material.

(ii) Volume fraction of coating solids for one coating.

(iii) Density for one coating, one thinner and/or other additive, and one leaning material, except that if you use the compliant material option, only the example coating density is required.

(iv) The amount of waste materials and the mass of organic HAP contained in the waste materials for which you are claiming an allowance in Equation 1 of §63.3951.

(8) The calculation of kg (lb) of organic HAP emitted per liter (gal) coating solids used for the compliance option(s) you used, as specified in paragraphs (c)(8)(i) through (iii) of this section.

(i) For the compliant material option, provide an example calculation of the organic HAP content for one coating, using Equation 2 of §63.3941.

(ii) For the emission rate without add-on controls option, provide the calculation of the total mass of organic HAP emissions for each month; the calculation of the total volume of coating solids used each month; and the calculation of the 12-month organic HAP emission rate using Equations 1 and 1A through 1C, 2, and 3, respectively, of §63.3951.

(iii) For the emission rate with add-on controls option, provide the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month, using Equations 1 and 1A through 1C of §63.3951; the calculation of the total volume of coating solids used each month using Equation 2 of §63.3951; the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of §63.3961 and Equations 2, 3, and 3A through 3C of §63.3961 as applicable; the calculation of the total mass of organic HAP emissions each month using Equation 4 of §63.3961; and the calculation of the 12-month organic HAP emission rate using Equation 5 of §63.3961.

(9) For the emission rate with add-on controls option, you must include the information specified in paragraphs (c)(9)(i) through (iv) of this section, except that the requirements in paragraphs (c)(9)(i) through (iii) of this section do not apply to solvent recovery systems for which you conduct liquid-liquid material balances according to §63.3961(j).

(i) For each emission capture system, a summary of the data and copies of the calculations supporting the determination that the emission capture system is a permanent total enclosure (PTE) or a measurement of the emission capture system efficiency. Include a description of the protocol followed for measuring capture efficiency, summaries of any capture efficiency tests conducted, and any calculations supporting the capture efficiency determination. If you use the data quality objective (DQO) or lower confidence limit (LCL) approach, you must also include the statistical calculations to show you meet the DQO or LCL criteria in appendix A to subpart KK of this part. You do not need to submit complete test reports.

(ii) A summary of the results of each add-on control device performance test. You do not need to submit complete test reports.

(iii) A list of each emission capture system's and add-on control device's operating limits and a summary of the data used to calculate those limits.

(iv) A statement of whether or not you developed and implemented the work practice plan required by §63.3893.

(10) If you are complying with a single emission limit representing the predominant activity under §63.3890(c)(1), include the calculations and supporting information used to demonstrate that this emission limit represents the predominant activity as specified in §63.3890(c)(1).

(11) If you are complying with a facility-specific emission limit under §63.3890(c)(2), include the calculation of the facility-specific emission limit and any supporting information as specified in §63.3890(c)(2).

[69 FR 157, Jan. 2, 2004, as amended at 69 FR 22660, Apr. 26, 2004]

### § 63.3920 What reports must I submit?

(a) *Semiannual compliance reports.* You must submit semiannual compliance reports for each affected source according to the requirements of paragraphs (a)(1) through (7) of this section. The semiannual compliance reporting requirements may be satisfied by reports required under other parts of the Clean Air Act (CAA), as specified in paragraph (a)(2) of this section.

(1) *Dates.* Unless the Administrator has approved or agreed to a different schedule for submission of reports under §63.10(a), you must prepare and submit each semiannual compliance report according to the dates

specified in paragraphs (a)(1)(i) through (iv) of this section. Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

(i) The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period described in §63.3940, §63.3950, or §63.3960 that applies to your affected source and ends on June 30 or December 31, whichever date is the first date following the end of the initial compliance period.

(ii) Each subsequent semiannual compliance report must cover the subsequent semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(iii) Each semiannual 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.

(iv) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 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 date specified in paragraph (a)(1)(iii) of this section.

(2) *Inclusion with title V report.* Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a semiannual compliance report pursuant to this section along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the semiannual compliance report includes all required information concerning deviations from any emission limitation in this subpart, its submission will be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a semiannual compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority.

(3) *General requirements.* The semiannual compliance report must contain the information specified in paragraphs (a)(3)(i) through (vii) of this section, and the information specified in paragraphs (a)(4) through (7) and (c)(1) of this section that is applicable to your affected source.

(i) Company name and address.

(ii) 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.

(iii) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

(iv) Identification of the compliance option or options specified in §63.3891 that you used on each coating operation during the reporting period. If you switched between compliance options during the reporting period, you must report the beginning and ending dates for each option you used.

(v) If you used the emission rate without add-on controls or the emission rate with add-on controls compliance option (§63.3891(b) or (c)), the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period.

(vi) If you used the predominant activity alternative (§63.3890(c)(1)), include the annual determination of predominant activity if it was not included in the previous semi-annual compliance report.

(vii) If you used the facility-specific emission limit alternative (§63.3890(c)(2)), include the calculation of the facility-specific emission limit for each 12-month compliance period during the 6-month reporting period.

(4) *No deviations.* If there were no deviations from the emission limitations in §§63.3890, 63.3892, and 63.3893 that apply to you, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. If you used the emission rate with add-on controls option and there were no periods during which the continuous parameter monitoring systems (CPMS) were out-of-control as specified in §63.8(c)(7), the semiannual compliance report must include a statement that there were no periods during which the CPMS were out-of-control during the reporting period.

(5) *Deviations: Compliant material option.* If you used the compliant material option and there was a deviation from the applicable organic HAP content requirements in §63.3890, the semiannual compliance report must contain the information in paragraphs (a)(5)(i) through (iv) of this section.

(i) Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used.

(ii) The calculation of the organic HAP content (using Equation 2 of §63.3941) for each coating identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation (e.g*.,* information provided by coating suppliers or manufacturers, or test reports).

(iii) The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation (e.g*.,* information provided by material suppliers or manufacturers, or test reports).

(iv) A statement of the cause of each deviation.

(6) *Deviations: Emission rate without add-on controls option.* If you used the emission rate without add-on controls option and there was a deviation from the applicable emission limit in §63.3890, the semiannual compliance report must contain the information in paragraphs (a)(6)(i) through (iii) of this section.

(i) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in §63.3890.

(ii) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. You must submit the calculations for Equations 1, 1A through 1C, 2, and 3 of §63.3951; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4). You do not need to submit background data supporting these calculations (e.g*.,* information provided by materials suppliers or manufacturers, or test reports).

(iii) A statement of the cause of each deviation.

(7) *Deviations: Emission rate with add-on controls option.* If you used the emission rate with add-on controls option and there was a deviation from an emission limitation (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), the semiannual compliance report must contain the information in paragraphs (a)(7)(i) through (xiv) of this section. This includes periods of startup, shutdown, and malfunction during which deviations occurred.

(i) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in §63.3890.

(ii) The calculations used to determine the 12-month organic HAP emission rate for each compliance period in which a deviation occurred. You must provide the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1 and 1A through 1C of §63.3951; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4); the calculation of the total volume of coating solids used each month using Equation 2 of §63.3951; the calculation of the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of §63.3961, and Equations 2, 3, and 3A through 3C of §63.3961, as applicable; the calculation of the total mass of organic HAP emissions each month using Equation 4 of §63.3961; and the calculation of the 12-month organic HAP emission rate using Equation 5 of §63.3961. You do not need to submit the background data supporting these calculations (e.g*.,* information provided by materials suppliers or manufacturers, or test reports).

(iii) The date and time that each malfunction started and stopped.

(iv) A brief description of the CPMS.

(v) The date of the latest CPMS certification or audit.

(vi) The date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks.

(vii) The date, time, and duration that each CPMS was out-of-control, including the information in §63.8(c)(8).

(viii) The date and time period of each deviation from an operating limit in Table 1 to this subpart; date and time period of any bypass of the add-on control device; and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(ix) A summary of the total duration of each deviation from an operating limit in Table 1 to this subpart and each bypass of the add-on control device during the semiannual reporting period, and the total duration as a percent of the total source operating time during that semiannual reporting period.

(x) A breakdown of the total duration of the deviations from the operating limits in Table 1 of this subpart and bypasses of the add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(xi) A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that semiannual reporting period.

(xii) A description of any changes in the CPMS, coating operation, emission capture system, or add-on control device since the last semiannual reporting period.

(xiii) For each deviation from the work practice standards, a description of the deviation, the date and time period of the deviation, and the actions you took to correct the deviation.

(xiv) A statement of the cause of each deviation.

(b) *Performance test reports.* If you use the emission rate with add-on controls option, you must submit reports of performance test results for emission capture systems and add-on control devices no later than 60 days after completing the tests as specified in §63.10(d)(2).

(c) *Startup, shutdown, malfunction reports.* If you used the emission rate with add-on controls option and you had a startup, shutdown, or malfunction during the semiannual reporting period, you must submit the reports specified in paragraphs (c)(1) and (2) of this section.

(1) If your actions were consistent with your startup, shutdown, and malfunction plan, you must include the information specified in §63.10(d) in the semiannual compliance report required by paragraph (a) of this section.

(2) If your actions were not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report as described in paragraphs (c)(2)(i) and (ii) of this section.

(i) You must describe the actions taken during the event in a report delivered by facsimile, telephone, or other means to the Administrator within 2 working days after starting actions that are inconsistent with the plan.

(ii) You must submit a letter to the Administrator within 7 working days after the end of the event, unless you have made alternative arrangements with the Administrator as specified in §63.10(d)(5)(ii). The letter must contain the information specified in §63.10(d)(5)(ii).

### § 63.3930 What records must I keep?

You must collect and keep records of the data and information specified in this section. Failure to collect and keep these records is a deviation from the applicable standard.

(a) A copy of each notification and report that you submitted to comply with this subpart, and the documentation supporting each notification and report. If you are using the predominant activity alternative under §63.3890(c), you must keep records of the data and calculations used to determine the predominant activity. If you are using the facility-specific emission limit alternative under §63.3890(c), you must keep records of the data used to calculate the facility-specific emission limit for the initial compliance demonstration. You must also keep records of any data used in each annual predominant activity determination and in the calculation of the facility-specific emission limit for each 12-month compliance period included in the semi-annual compliance reports.

(b) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the volume fraction of coating solids for each coating. If you conducted testing to determine mass fraction of organic HAP, density, or volume fraction of coating solids, you must keep a copy of the complete test report. If you use information provided to you by the manufacturer or supplier of the material that was based on testing, you must keep the summary sheet of results provided to you by the manufacturer or supplier. You are not required to obtain the test report or other supporting documentation from the manufacturer or supplier.

(c) For each compliance period, the records specified in paragraphs (c)(1) through (4) of this section.

(1) A record of the coating operations on which you used each compliance option and the time periods (beginning and ending dates and times) for each option you used.

(2) For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 2 of §63.3941.

(3) For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1, 1A through 1C, and 2 of §63.3951; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4); the calculation of the total volume of coating solids used each month using Equation 2 of §63.3951; and the calculation of each 12-month organic HAP emission rate using Equation 3 of §63.3951.

(4) For the emission rate with add-on controls option, records of the calculations specified in paragraphs (c)(4)(i) through (v) of this section.

(i) The calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1 and 1A through 1C of §63.3951 and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.3951(e)(4);

(ii) The calculation of the total volume of coating solids used each month using Equation 2 of §63.3951;

(iii) The calculation of the mass of organic HAP emission reduction by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of §63.3961 and Equations 2, 3, and 3A through 3C of §63.3961, as applicable;

(iv) The calculation of each month's organic HAP emission rate using Equation 4 of §63.3961; and

(v) The calculation of each 12-month organic HAP emission rate using Equation 5 of §63.3961.

(d) A record of the name and volume of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If you are using the compliant material option for all coatings at the source, you may maintain purchase records for each material used rather than a record of the volume used.

(e) A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period unless the material is tracked by weight.

(f) A record of the volume fraction of coating solids for each coating used during each compliance period.

(g) If you use either the emission rate without add-on controls or the emission rate with add-on controls compliance option, the density for each coating, thinner and/or other additive, and cleaning material used during each compliance period.

(h) If you use an allowance in Equation 1 of §63.3951 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to §63.3951(e)(4), you must keep records of the information specified in paragraphs (h)(1) through (3) of this section.

(1) The name and address of each TSDF to which you sent waste materials for which you use an allowance in Equation 1 of §63.3951; a statement of which subparts under 40 CFR parts 262, 264, 265, and 266 apply to the facility; and the date of each shipment.

(2) Identification of the coating operations producing waste materials included in each shipment and the month or months in which you used the allowance for these materials in Equation 1 of §63.3951.

(3) The methodology used in accordance with §63.3951(e)(4) to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment.

(i) [Reserved]

(j) You must keep records of the date, time, and duration of each deviation.

(k) If you use the emission rate with add-on controls option, you must keep the records specified in paragraphs (k)(1) through (8) of this section.

(1) For each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction.

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) The records required to show continuous compliance with each operating limit specified in Table 1 to this subpart that applies to you.

(4) For each capture system that is a PTE, the data and documentation you used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and has a capture efficiency of 100 percent, as specified in §63.3965(a).

(5) For each capture system that is not a PTE, the data and documentation you used to determine capture efficiency according to the requirements specified in §§63.3964 and 63.3965(b) through (e), including the records specified in paragraphs (k)(5)(i) through (iii) of this section that apply to you.

(i) *Records for a liquid-to-uncaptured gas protocol using a temporary total enclosure or building enclosure.* Records of the mass of total volatile hydrocarbon (TVH) as measured by Method 204A or 204F of appendix M to 40 CFR part 51 for each material used in the coating operation, and the total TVH for all materials used during each capture efficiency test run, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run, as measured by Method 204D or 204E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.

(ii) *Records for a gas-to-gas protocol using a temporary total enclosure or a building enclosure.* Records of the mass of TVH emissions captured by the emission capture system as measured by Method 204B or 204C of appendix M to 40 CFR part 51 at the inlet to the add-on control device, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run as measured by Method 204D or 204E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.

(iii) *Records for an alternative protocol.* Records needed to document a capture efficiency determination using an alternative method or protocol as specified in §63.3965(e), if applicable.

(6) The records specified in paragraphs (k)(6)(i) and (ii) of this section for each add-on control device organic HAP destruction or removal efficiency determination as specified in §63.3966.

(i) Records of each add-on control device performance test conducted according to §§63.3964 and 63.3966.

(ii) Records of the coating operation conditions during the add-on control device performance test showing that the performance test was conducted under representative operating conditions.

(7) Records of the data and calculations you used to establish the emission capture and add-on control device operating limits as specified in §63.3967 and to document compliance with the operating limits as specified in Table 1 to this subpart.

(8) A record of the work practice plan required by §63.3893 and documentation that you are implementing the plan on a continuous basis.

### § 63.3931 In what form and for how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database.

(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 on-site 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 may keep the records off-site for the remaining 3 years.

**Compliance Requirements for the Compliant Material Option**

### § 63.3940 By what date must I conduct the initial compliance demonstration?

You must complete the initial compliance demonstration for the initial compliance period according to the requirements in §63.3941. The initial compliance period begins on the applicable compliance date specified in §63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through that month plus the next 12 months. The initial compliance demonstration includes the calculations according to §63.3941 and supporting documentation showing that during the initial compliance period, you used no coating with an organic HAP content that exceeded the applicable emission limit in §63.3890, and that you used no thinners and/or other additives, or cleaning materials that contained organic HAP as determined according to §63.3941(a).

### § 63.3941 How do I demonstrate initial compliance with the emission limitations?

You may use the compliant material option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. You must use either the emission rate without add-on controls option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the compliant material option, the coating operation or group of coating operations must use no coating with an organic HAP content that exceeds the applicable emission limits in §63.3890 and must use no thinner and/or other additive, or cleaning material that contains organic HAP as determined according to this section. Any coating operation for which you use the compliant material option is not required to meet the operating limits or work practice standards required in §§63.3892 and 63.3893, respectively. You must conduct a separate initial compliance demonstration for each general use, high performance, magnet wire, rubber-to-metal, and extreme performance fluoropolymer coating operation unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of this section. Use the procedures in this section on each coating, thinner and/or other additive, and cleaning material in the condition it is in when it is received from its manufacturer or supplier and prior to any alteration. You do not need to redetermine the organic HAP content of coatings, thinners and/or other additives, and cleaning materials that are reclaimed on-site (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coating operation for which you use the compliant material option, provided these materials in their condition as received were demonstrated to comply with the compliant material option.

(a) *Determine the mass fraction of organic HAP for each material used.* You must determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during the compliance period by using one of the options in paragraphs (a)(1) through (5) of this section.

(1) *Method 311 (appendix A to 40 CFR part 63).* You may use Method 311 for determining the mass fraction of organic HAP. Use the procedures specified in paragraphs (a)(1)(i) and (ii) of this section when performing a Method 311 test.

(i) Count each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, you do not have to count it. Express the mass fraction of each organic HAP you count as a value truncated to four places after the decimal point (e.g.*,* 0.3791).

(ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point ( *e.g.,* 0.763).

(2) *Method 24 (appendix A to 40 CFR part 60).* For coatings, you may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP.

For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may use the alternative method contained in appendix A to subpart PPPP of this part, rather than Method 24. You may use the volatile fraction that is emitted, as measured by the alternative method in appendix A to subpart PPPP of this part, as a substitute for the mass fraction of organic HAP.

(3) *Alternative method.* You may use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. You must follow the procedure in §63.7(f) to submit an alternative test method for approval.

(4) *Information from the supplier or manufacturer of the material.* You may rely on information other than that generated by the test methods specified in paragraphs (a)(1) through (3) of this section, such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, you do not have to count it. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. If there is a disagreement between such information and results of a test conducted according to paragraphs (a)(1) through (3) of this section, then the test method results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(5) *Solvent blends.* Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, you may use the default values for the mass fraction of organic HAP in these solvent blends listed in Table 3 or 4 to this subpart. If you use the tables, you must use the values in Table 3 for all solvent blends that match Table 3 entries according to the instructions for Table 3, and you may use Table 4 only if the solvent blends in the materials you use do not match any of the solvent blends in Table 3 and you know only whether the blend is aliphatic or aromatic. However, if the results of a Method 311 (appendix A to 40 CFR part 63) test indicate higher values than those listed on Table 3 or 4 to this subpart, the Method 311 results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(b) *Determine the volume fraction of coating solids for each coating.* You must determine the volume fraction of coating solids (liters (gal) of coating solids per liter (gal) of coating) for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in paragraphs (b)(1) through (4) of this section. If test results obtained according to paragraph (b)(1) of this section do not agree with the information obtained under paragraph (b)(3) or (4) of this section, the test results will take precedence unless, after consultation, you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(1) *ASTM Method D2697–86 (Reapproved 1998) or ASTM Method D6093–97 (Reapproved 2003).* You may use ASTM Method D2697–86 (Reapproved 1998), “Standard Test Method for Volume Nonvolatile Matter in Clear or Pigmented Coatings” (incorporated by reference, see §63.14), or ASTM Method D6093–97 (Reapproved 2003), “Standard Test Method for Percent Volume Nonvolatile Matter in Clear or Pigmented Coatings Using a Helium Gas Pycnometer” (incorporated by reference, see §63.14), to determine the volume fraction of coating solids for each coating. Divide the nonvolatile volume percent obtained with the methods by 100 to calculate volume fraction of coating solids.

(2) *Alternative method.* You may use an alternative test method for determining the solids content of each coating once the Administrator has approved it. You must follow the procedure in §63.7(f) to submit an alternative test method for approval.

(3) *Information from the supplier or manufacturer of the material.* You may obtain the volume fraction of coating solids for each coating from the supplier or manufacturer.

(4) *Calculation of volume fraction of coating solids.* You may determine the volume fraction of coating solids using Equation 1 of this section:

$$V_s = 1 - \frac{m_{volatiles}}{D_{avg}} \qquad (Eq.\ 1)$$

Where:

$V_s$= Volume fraction of coating solids, liters (gal) coating solids per liter (gal) coating.

$m_{volatiles}$= Total volatile matter content of the coating, including HAP, volatile organic compounds (VOC), water, and exempt compounds, determined according to Method 24 in appendix A of 40 CFR part 60, grams volatile matter per liter coating.

$D_{avg}$= Average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determined from test results using ASTM Method D1475–98, “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products” (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475–98 test results and other information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(c) *Determine the density of each coating.* Determine the density of each coating used during the compliance period from test results using ASTM Method D1475–98, “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products” (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or specific gravity data for pure chemicals. If there is disagreement between ASTM Method D1475–98 test results and the supplier's or manufacturer's information, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(d) *Determine the organic HAP content of each coating.* Calculate the organic HAP content, kg (lb) of organic HAP emitted per liter (gal) coating solids used, of each coating used during the compliance period using Equation 2 of this section:

$$H_c = \frac{(D_c)(W_c)}{V_s} \qquad (Eq.\ 2)$$

Where:

$H_c$= Organic HAP content of the coating, kg organic HAP emitted per liter (gal) coating solids used.

$D_c$= Density of coating, kg coating per liter (gal) coating, determined according to paragraph (c) of this section.

$W_c$= Mass fraction of organic HAP in the coating, kg organic HAP per kg coating, determined according to paragraph (a) of this section.

$V_s$= Volume fraction of coating solids, liter (gal) coating solids per liter (gal) coating, determined according to paragraph (b) of this section.

(e) *Compliance demonstration.* The calculated organic HAP content for each coating used during the initial compliance period must be less than or equal to the applicable emission limit in §63.3890; and each thinner and/or other additive, and cleaning material used during the initial compliance period must contain no organic HAP, determined according to paragraph (a) of this section. You must keep all records required by §§63.3930 and 63.3931. As part of the notification of compliance status required in §63.3910, you must identify the coating operation(s) for which you used the compliant material option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because you used no coatings for which the organic HAP content exceeded the applicable emission limit in §63.3890, and you used no thinners and/or other additives, or cleaning materials that contained organic HAP, determined according to the procedures in paragraph (a) of this section.

### § 63.3942 How do I demonstrate continuous compliance with the emission limitations?

(a) For each compliance period to demonstrate continuous compliance, you must use no coating for which the organic HAP content (determined using Equation 2 of §63.3941) exceeds the applicable emission limit in §63.3890, and use no thinner and/or other additive, or cleaning material that contains organic HAP, determined according to §63.3941(a). A compliance period consists of 12 months. Each month, after the end of the initial compliance period described in §63.3940, is the end of a compliance period consisting of that month and the preceding 11 months. If you are complying with a facility-specific emission limit under §63.3890(c), you must also perform the calculation using Equation 1 in §63.3890(c)(2) on a monthly basis using the data from the previous 12 months of operation.

(b) If you choose to comply with the emission limitations by using the compliant material option, the use of any coating, thinner and/or other additive, or cleaning material that does not meet the criteria specified in paragraph (a) of this section is a deviation from the emission limitations that must be reported as specified in §§63.3910(c)(6) and 63.3920(a)(5).

(c) As part of each semiannual compliance report required by §63.3920, you must identify the coating operation(s) for which you used the compliant material option. If there were no deviations from the applicable emission limit in §63.3890, submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because you used no coatings for which the organic HAP content exceeded the applicable emission limit in §63.3890, and you used no thinner and/or other additive, or cleaning material that contained organic HAP, determined according to §63.3941(a).

(d) You must maintain records as specified in §§63.3930 and 63.3931.

## Compliance Requirements for the Emission Rate Without Add-On Controls Option

### § 63.3950 By what date must I conduct the initial compliance demonstration?

You must complete the initial compliance demonstration for the initial compliance period according to the requirements of §63.3951. The initial compliance period begins on the applicable compliance date specified in §63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. You must determine the mass of organic HAP emissions and volume of coating solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the calculations according to §63.3951 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in §63.3890.

### § 63.3951 How do I demonstrate initial compliance with the emission limitations?

You may use the emission rate without add-on controls option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. You must use either the compliant material option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the emission rate without add-on controls option, the coating operation or group of coating operations must meet the applicable emission limit in §63.3890, but is not required to meet the operating limits or work practice standards in §§63.3892 and 63.3893, respectively. You must conduct a separate initial compliance demonstration for each general use, magnet wire, rubber-to-metal, and extreme performance fluoropolymer coating operation unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of this section. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which you use the compliant material option or the emission rate with add-on controls option. You do not need to redetermine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coating operation for which you use the emission rate without add-on controls option. If you use coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.

(a) *Determine the mass fraction of organic HAP for each material.* Determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each month according to the requirements in §63.3941(a).

(b) *Determine the volume fraction of coating solids.* Determine the volume fraction of coating solids (liter (gal) of coating solids per liter (gal) of coating) for each coating used during each month according to the requirements in §63.3941(b).

(c) *Determine the density of each material.* Determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475–98, “Standard Test Method for Density of Liquid Coatings, Inks, and Related Products” (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If you are including powder coatings in the compliance determination, determine the density of powder coatings, using ASTM Method D5965–02, “Standard Test Methods for Specific Gravity of Coating Powders” (incorporated by reference, see §63.14), or information from the supplier. If there is disagreement between ASTM Method D1475–98 or ASTM Method D5965–02 test results and other such information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of this section.

(d) *Determine the volume of each material used.* Determine the volume (liters) of each coating, thinner and/or other additive, and cleaning material used during each month by measurement or usage records. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine the volume of each material used. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, and 1C of this section.

(e) *Calculate the mass of organic HAP emissions.* The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using Equation 1 of this section.

$$H_e = A + \mathrm{B} + \mathrm{C} - R_w \qquad (Eq.\ 1)$$

Where:

$H_e$= Total mass of organic HAP emissions during the month, kg.

A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A of this section.

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg, as calculated in Equation 1B of this section.

C = Total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 1C of this section.

$R_w$= Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to paragraph (e)(4) of this section. (You may assign a value of zero to $R_w$ if you do not wish to use this allowance.)

(1) Calculate the kg organic HAP in the coatings used during the month using Equation 1A of this section:

$$A = \sum_{i=1}^{m} \left(Vol_{c,i}\right)\left(D_{c,i}\right)\left(W_{c,i}\right) \qquad (Eq.\ 1\mathrm{A})$$

Where:

A = Total mass of organic HAP in the coatings used during the month, kg.

$Vol_{c,i}$= Total volume of coating, i, used during the month, liters.

$D_{c,i}$= Density of coating, i, kg coating per liter coating.

$W_{c,i}$= Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.

m = Number of different coatings used during the month.

(2) Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 1B of this section:

$$B = \sum_{j=1}^{n} \left(Vol_{t,j}\right)\left(D_{t,j}\right)\left(W_{t,j}\right) \qquad (Eq.\ 1\mathrm{B})$$

Where:

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.

$Vol_{t,j}$= Total volume of thinner and/or other additive, j, used during the month, liters.

$D_{t,j}$= Density of thinner and/or other additive, j, kg per liter.

$W_{t,j}$= Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.

n = Number of different thinners and/or other additives used during the month.

(3) Calculate the kg organic HAP in the cleaning materials used during the month using Equation 1C of this section:

$$C = \sum_{k=1}^{p} \left(Vol_{s,k}\right)\left(D_{s,k}\right)\left(W_{s,k}\right) \qquad (Eq.\ 1\mathrm{C})$$

Where:

C = Total mass of organic HAP in the cleaning materials used during the month, kg.

$Vol_{s,k}$= Total volume of cleaning material, k, used during the month, liters.

$D_{s,k}$= Density of cleaning material, k, kg per liter.

$W_{s,k}$= Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material.

p = Number of different cleaning materials used during the month.

(4) If you choose to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 1 of this section, then you must determine the mass according to paragraphs (e)(4)(i) through (iv) of this section.

(i) You may only include waste materials in the determination that are generated by coating operations in the affected source for which you use Equation 1 of this section and that will be treated or disposed of by a facility that is regulated as a TSDF under 40 CFR part 262, 264, 265, or 266. The TSDF may be either off-site or on-site. You may not include organic HAP contained in wastewater.

(ii) You must determine either the amount of the waste materials sent to a TSDF during the month or the amount collected and stored during the month and designated for future transport to a TSDF. Do not include in your determination any waste materials sent to a TSDF during a month if you have already included them in the amount collected and stored during that month or a previous month.

(iii) Determine the total mass of organic HAP contained in the waste materials specified in paragraph (e)(4)(ii) of this section.

(iv) You must document the methodology you use to determine the amount of waste materials and the total mass of organic HAP they contain, as required in §63.3930(h). If waste manifests include this information, they may be used as part of the documentation of the amount of waste materials and mass of organic HAP contained in them.

(f) *Calculate the total volume of coating solids used.* Determine the total volume of coating solids used, liters, which is the combined volume of coating solids for all the coatings used during each month, using Equation 2 of this section:

$$V_{st} = \sum_{i=1}^{m} \left(Vol_{c,i}\right)\left(V_{s,i}\right) \qquad (Eq.\ 2)$$

Where:

$V_{st}$= Total volume of coating solids used during the month, liters.

$Vol_{c,i}$= Total volume of coating, i, used during the month, liters.

$V_{s,i}$= Volume fraction of coating solids for coating, i, liter solids per liter coating, determined according to §63.3941(b).

m = Number of coatings used during the month.

(g) *Calculate the organic HAP emission rate.* Calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per liter (gal) coating solids used, using Equation 3 of this section:

$$H_{yr} = \frac{\sum_{y=1}^{n} H_e}{\sum_{y=1}^{n} V_{st}} \qquad (Eq.\ 3)$$

Where:

$H_{yr}$= Average organic HAP emission rate for the compliance period, kg organic HAP emitted per liter coating solids used.

$H_e$= Total mass of organic HAP emissions from all materials used during month, y, kg, as calculated by Equation 1 of this section.

$V_{st}$= Total volume of coating solids used during month, y, liters, as calculated by Equation 2 of this section.

y = Identifier for months.

n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

(h) *Compliance demonstration.* The organic HAP emission rate for the initial compliance period calculated using Equation 3 of this section must be less than or equal to the applicable emission limit for each subcategory in §63.3890 or the predominant activity or facility-specific emission limit allowed in §63.3890(c). You must keep all records as required by §§63.3930 and 63.3931. As part of the notification of compliance status required by §63.3910, you must identify the coating operation(s) for which you used the emission rate without add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in §63.3890, determined according to the procedures in this section.

### § 63.3952 How do I demonstrate continuous compliance with the emission limitations?

(a) To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to §63.3951(a) through (g), must be less than or equal to the applicable emission limit in §63.3890. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in §63.3950 is the end of a compliance period consisting of that month and the preceding 11 months. You must perform the calculations in §63.3951(a) through (g) on a monthly basis using data from the previous 12 months of operation. If you are complying with a facility-specific emission limit under §63.3890(c), you must also perform the calculation using Equation 1 in §63.3890(c)(2) on a monthly basis using the data from the previous 12 months of operation.

(b) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in §63.3890, this is a deviation from the emission limitation for that compliance period and must be reported as specified in §§63.3910(c)(6) and 63.3920(a)(6).

(c) As part of each semiannual compliance report required by §63.3920, you must identify the coating operation(s) for which you used the emission rate without add-on controls option. If there were no deviations from the emission limitations, you must submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in §63.3890, determined according to §63.3951(a) through (g).

(d) You must maintain records as specified in §§63.3930 and 63.3931.

## Compliance Requirements for the Emission Rate With Add-On Controls Option

### § 63.3960 By what date must I conduct performance tests and other initial compliance demonstrations?

(a) *New and reconstructed affected sources.* For a new or reconstructed affected source, you must meet the requirements of paragraphs (a)(1) through (4) of this section.

(1) All emission capture systems, add-on control devices, and CPMS must be installed and operating no later than the applicable compliance date specified in §63.3883. Except for solvent recovery systems for which you conduct liquid-liquid material balances according to §63.3961(j), you must conduct a performance test of each capture system and add-on control device according to §§63.3964, 63.3965, and 63.3966 and establish the operating limits required by §63.3892 no later than 180 days after the applicable compliance date specified in §63.3883. For a solvent recovery system for which you conduct liquid-liquid material balances according to §63.3961(j), you must initiate the first material balance no later than the applicable compliance date specified in §63.3883. For magnet wire coating operations you may, with approval, conduct a performance test of one representative magnet wire coating machine for each group of identical or very similar magnet wire coating machines.

(2) You must develop and begin implementing the work practice plan required by §63.3893 no later than the compliance date specified in §63.3883.

(3) You must complete the initial compliance demonstration for the initial compliance period according to the requirements of §63.3961. The initial compliance period begins on the applicable compliance date specified in §63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. You must determine the mass of organic HAP emissions and volume of coatings solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §§63.3964, 63.3965, and 63.3966; results of liquid-liquid material balances conducted according to §63.3961(j); calculations according to §63.3961 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in §63.3890; the operating limits established during the performance tests and the results of the continuous parameter monitoring required by §63.3968; and documentation of whether you developed and implemented the work practice plan required by §63.3893.

(4) You do not need to comply with the operating limits for the emission capture system and add-on control device required by §63.3892 until after you have completed the performance tests specified in paragraph (a)(1) of this section. Instead, you must maintain a log detailing the operation and maintenance of the emission capture system, add-on control device, and continuous parameter monitors during the period between the compliance date and the performance test. You must begin complying with the operating limits for your affected source on the date you complete the performance tests specified in paragraph (a)(1) of this section. For magnet wire coating operations, you must begin complying with the operating limits for all identical or very similar magnet wire coating machines on the date you complete the performance test of a representative magnet wire coating machine. The requirements in this paragraph (a)(4) do not apply to solvent recovery systems for which you conduct liquid-liquid material balances according to the requirements in §63.3961(j).

(b) *Existing affected sources.* For an existing affected source, you must meet the requirements of paragraphs (b)(1) through (3) of this section.

(1) All emission capture systems, add-on control devices, and CPMS must be installed and operating no later than the applicable compliance date specified in §63.3883. Except for magnet wire coating operations and solvent recovery systems for which you conduct liquid-liquid material balances according to §63.3961(j), you must conduct a performance test of each capture system and add-on control device according to the procedures in §§63.3964, 63.3965, and 63.3966 and establish the operating limits required by §63.3892 no later than the compliance date specified in §63.3883. For magnet wire coating operations, you may, with approval, conduct a performance test of a single magnet wire coating machine that represents identical or

very similar magnet wire coating machines. For a solvent recovery system for which you conduct liquid-liquid material balances according to §63.3961(j), you must initiate the first material balance no later than the compliance date specified in §63.3883.

(2) You must develop and begin implementing the work practice plan required by §63.3893 no later than the compliance date specified in §63.3883.

(3) You must complete the initial compliance demonstration for the initial compliance period according to the requirements of §63.3961. The initial compliance period begins on the applicable compliance date specified in §63.3883 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. You must determine the mass of organic HAP emissions and volume of coatings solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §§63.3964, 63.3965, and 63.3966; results of liquid-liquid material balances conducted according to §63.3961(j); calculations according to §63.3961 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in §63.3890; the operating limits established during the performance tests and the results of the continuous parameter monitoring required by §63.3968; and documentation of whether you developed and implemented the work practice plan required by §63.3893.

(c) You are not required to conduct an initial performance test to determine capture efficiency or destruction efficiency of a capture system or control device if you receive approval to use the results of a performance test that has been previously conducted on that capture system or control device. Any such previous tests must meet the conditions described in paragraphs (c)(1) through (3) of this section.

(1) The previous test must have been conducted using the methods and conditions specified in this subpart.

(2) Either no process or equipment changes have been made since the previous test was performed or the owner or operator must be able to demonstrate that the results of the performance test, reliably demonstrate compliance despite process or equipment changes.

(3) Either the required operating parameters were established in the previous test or sufficient data were collected in the previous test to establish the required operating parameters.

### § 63.3961 How do I demonstrate initial compliance?

(a) You may use the emission rate with add-on controls option for any coating operation, for any group of coating operations in the affected source, or for all of the coating operations in the affected source. You may include both controlled and uncontrolled coating operations in a group for which you use this option. You must use either the compliant material option or the emission rate without add-on controls option for any coating operation in the affected source for which you do not use the emission rate with add-on controls option. To demonstrate initial compliance, the coating operation(s) for which you use the emission rate with add-on controls option must meet the applicable emission limitations in §§63.3890, 63.3892, and 63.3893. You must conduct a separate initial compliance demonstration for each general use, magnet wire, rubber-to-metal, and extreme performance fluoropolymer coating operation, unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.3890(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of this section. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which you use the compliant material option or the emission rate without add-on controls option. You do not need to redetermine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed onsite (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coatings operation(s) for which you use the emission rate with add-on controls option. If you use coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.

(b) *Compliance with operating limits.* Except as provided in §63.3960(a)(4), and except for solvent recovery systems for which you conduct liquid-liquid material balances according to the requirements of paragraph (j) of this section, you must establish and demonstrate continuous compliance during the initial compliance period with the operating limits required by §63.3892, using the procedures specified in §§63.3967 and 63.3968.

(c) *Compliance with work practice requirements.* You must develop, implement, and document your implementation of the work practice plan required by §63.3893 during the initial compliance period, as specified in §63.3930.

(d) *Compliance with emission limits.* You must follow the procedures in paragraphs (e) through (n) of this section to demonstrate compliance with the applicable emission limit in §63.3890 for each affected source in each subcategory.

(e) *Determine the mass fraction of organic HAP, density, volume used, and volume fraction of coating solids.* Follow the procedures specified in §63.3951(a) through (d) to determine the mass fraction of organic HAP, density, and volume of each coating, thinner and/or other additive, and cleaning material used during each month; and the volume fraction of coating solids for each coating used during each month.

(f) *Calculate the total mass of organic HAP emissions before add-on controls.* Using Equation 1 of §63.3951, calculate the total mass of organic HAP emissions before add-on controls from all coatings, thinners and/or other additives, and cleaning materials used during each month in the coating operation or group of coating operations for which you use the emission rate with add-on controls option.

(g) *Calculate the organic HAP emission reduction for each controlled coating operation.* Determine the mass of organic HAP emissions reduced for each controlled coating operation during each month. The emission reduction determination quantifies the total organic HAP emissions that pass through the emission capture system and are destroyed or removed by the add-on control device. Use the procedures in paragraph (h) of this section to calculate the mass of organic HAP emission reduction for each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances. For each controlled coating operation using a solvent recovery system for which you conduct a liquid-liquid material balance, use the procedures in paragraph (j) of this section to calculate the organic HAP emission reduction.

(h) *Calculate the organic HAP emission reduction for each controlled coating operation not using liquid-liquid material balance.* Use Equation 1 of this section to calculate the organic HAP emission reduction for each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances. The calculation applies the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coatings, thinners and/or other additives, and cleaning materials that are used in the coating operation served by the emission capture system and add-on control device during each month. You must assume zero efficiency for the emission capture system and add-on control device for any period of time a deviation specified in §63.3963(c) or (d) occurs in the controlled coating operation, including a deviation during a period of startup, shutdown, or malfunction, unless you have other data indicating the actual efficiency of the emission capture system and add-on control device and the use of these data is approved by the Administrator. Equation 1 of this section treats the materials used during such a deviation as if they were used on an uncontrolled coating operation for the time period of the deviation.

$$H_C = \left(A_C + B_C + C_C - R_W - H_{UNC}\right)\left(\frac{CE}{100} \times \frac{DRE}{100}\right) \qquad (Eq.\ 1)$$

Where:

$H_C$= Mass of organic HAP emission reduction for the controlled coating operation during the month, kg.

$A_C$= Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg, as calculated in Equation 1A of this section.

$B_C$= Total mass of organic HAP in the thinners and/or other additives used in the controlled coating operation during the month, kg, as calculated in Equation 1B of this section.

$C_C$= Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg, as calculated in Equation 1C of this section.

$R_W$= Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the compliance period, kg, determined according to §63.3951(e)(4). (You may assign a value of zero to $R_W$ if you do not wish to use this allowance.)

$H_{UNC}$= Total mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used during all deviations specified in §63.3963(c) and (d) that occurred during the month in the controlled coating operation, kg, as calculated in Equation 1D of this section.

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent. Use the test methods and procedures specified in §§63.3964 and 63.3965 to measure and record capture efficiency.

DRE = Organic HAP destruction or removal efficiency of the add-on control device, percent. Use the test methods and procedures in §§63.3964 and 63.3966 to measure and record the organic HAP destruction or removal efficiency.

(1) Calculate the mass of organic HAP in the coatings used in the controlled coating operation, kg (lb), using Equation 1A of this section:

$$A_C = \sum_{i=1}^{m} (Vol_{c,i})(D_{c,i})(W_{c,i}) \qquad (Eq.\ 1A)$$

Where:

$A_C$= Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg.

$Vol_{c,i}$= Total volume of coating, i, used during the month, liters.

$D_{c,i}$= Density of coating, i, kg per liter.

$W_{c,i}$= Mass fraction of organic HAP in coating, i, kg per kg. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.

m = Number of different coatings used.

(2) Calculate the mass of organic HAP in the thinners and/or other additives used in the controlled coating operation, kg (lb), using Equation 1B of this section:

$$B_C = \sum_{j=1}^{n} (Vol_{t,j})(D_{t,j})(W_{t,j}) \qquad (Eq.\ 1B)$$

Where:

$B_C$= Total mass of organic HAP in the thinners and/or other additives used in the controlled coating operation during the month, kg.

$Vol_{t,j}$= Total volume of thinner and/or other additive, j, used during the month, liters.

$D_{t,j}$= Density of thinner and/or other additive, j, kg per liter.

$W_{t,j}$= Mass fraction of organic HAP in thinner and/or other additive, j, kg per kg. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.

n = Number of different thinners and/or other additives used.

(3) Calculate the mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg (lb), using Equation 1C of this section:

$$C_C = \sum_{k=1}^{p} \left(Vol_{s,k}\right)\left(D_{s,k}\right)\left(W_{s,k}\right) \qquad (Eq.\ 1C)$$

Where:

$C_C$= Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg.

$Vol_{s,k}$= Total volume of cleaning material, k, used during the month, liters.

$D_{s,k}$= Density of cleaning material, k, kg per liter.

$W_{s,k}$= Mass fraction of organic HAP in cleaning material, k, kg per kg.

p = Number of different cleaning materials used.

(4) Calculate the mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used in the controlled coating operation during deviations specified in §63.3963(c) and (d), using Equation 1D of this section:

$$H_{UNC} = \sum_{h=1}^{q} \left(Vol_h\right)\left(D_h\right)\left(W_h\right) \qquad (Eq.\ 1D)$$

Where:

$H_{UNC}$= Total mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used during all deviations specified in §63.3963(c) and (d) that occurred during the month in the controlled coating operation, kg.

$Vol_h$= Total volume of coating, thinner and/or other additive, or cleaning material, h, used in the controlled coating operation during deviations, liters.

$D_h$= Density of coating, thinner and/or other additives, or cleaning material, h, kg per liter.

$W_h$= Mass fraction of organic HAP in coating, thinner and/or other additives, or cleaning material, h, kg organic HAP per kg coating. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.

q = Number of different coatings, thinners and/or other additives, and cleaning materials used.

(i) [Reserved]

(j) *Calculate the organic HAP emission reduction for each controlled coating operation using liquid-liquid material balances.* For each controlled coating operation using a solvent recovery system for which you conduct liquid-liquid material balances, calculate the organic HAP emission reduction by applying the volatile organic matter collection and recovery efficiency to the mass of organic HAP contained in the coatings, thinners and/or other additives, and cleaning materials that are used in the coating operation controlled by the solvent recovery system during each month. Perform a liquid-liquid material balance for each month as specified in paragraphs (j)(1) through (6) of this section. Calculate the mass of organic HAP emission reduction by the solvent recovery system as specified in paragraph (j)(7) of this section.

(1) For each solvent recovery system, install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile organic matter recovered by the solvent recovery system each month. The device must be initially certified by the manufacturer to be accurate to within ±2.0 percent of the mass of volatile organic matter recovered.

(2) For each solvent recovery system, determine the mass of volatile organic matter recovered for the month, based on measurement with the device required in paragraph (j)(1) of this section.

(3) Determine the mass fraction of volatile organic matter for each coating, thinner and/or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, kg volatile organic matter per kg coating. You may determine the volatile organic matter mass fraction using Method 24 of 40 CFR part 60, appendix A, or an EPA approved alternative method, or you may use information provided by the manufacturer or supplier of the coating. In the event of any inconsistency between information provided by the manufacturer or supplier and the results of Method 24 of 40 CFR part 60, appendix A, or an approved alternative method, the test method results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(4) Determine the density of each coating, thinner and/or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, kg per liter, according to §63.3951(c).

(5) Measure the volume of each coating, thinner and/or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, liters.

(6) Each month, calculate the solvent recovery system's volatile organic matter collection and recovery efficiency, using Equation 2 of this section:

$$R_V = 100 \frac{M_{VR}}{\sum_{i=1}^{m} Vol_i D_i WV_{c,i} + \sum_{j=1}^{n} Vol_j D_j WV_{t,j} + \sum_{k=1}^{p} Vol_k D_k WV_{s,k}} \qquad (Eq.\ 2)$$

Where:

$R_V$= Volatile organic matter collection and recovery efficiency of the solvent recovery system during the month, percent.

$M_{VR}$= Mass of volatile organic matter recovered by the solvent recovery system during the month, kg.

$Vol_i$= Volume of coating, i, used in the coating operation controlled by the solvent recovery system during the month, liters.

$D_i$= Density of coating, i, kg per liter.

$WV_{c,i}$= Mass fraction of volatile organic matter for coating, i, kg volatile organic matter per kg coating. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.

$Vol_j$= Volume of thinner and/or other additive, j, used in the coating operation controlled by the solvent recovery system during the month, liters.

$D_j$= Density of thinner and/or other additive, j, kg per liter.

$WV_{t,j}$= Mass fraction of volatile organic matter for thinner and/or other additive, j, kg volatile organic matter per kg thinner and/or other additive. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.

$Vol_k$= Volume of cleaning material, k, used in the coating operation controlled by the solvent recovery system during the month, liters.

$D_k$= Density of cleaning material, k, kg per liter.

$WV_{s,k}$= Mass fraction of volatile organic matter for cleaning material, k, kg volatile organic matter per kg cleaning material.

m = Number of different coatings used in the coating operation controlled by the solvent recovery system during the month.

n = Number of different thinners and/or other additives used in the coating operation controlled by the solvent recovery system during the month.

p = Number of different cleaning materials used in the coating operation controlled by the solvent recovery system during the month.

(7) Calculate the mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system during the month, using Equation 3 of this section and according to paragraphs (j)(7)(i) through (iii) of this section:

$$H_{CSR} = \left(A_{CSR} + B_{CSR} + C_{CSR}\right)\left(\frac{R_V}{100}\right) \qquad (Eq.\ 3)$$

Where:

$H_{CSR}$= Mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system using a liquid-liquid material balance during the month, kg.

$A_{CSR}$= Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3A of this section.

$B_{CSR}$= Total mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3B of this section.

$C_{CSR}$= Total mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3C of this section.

$R_V$= Volatile organic matter collection and recovery efficiency of the solvent recovery system, percent, from Equation 2 of this section.

(i) Calculate the mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, kg, using Equation 3A of this section.

$$A_{CSR} = \sum_{i=1}^{m} (Vol_{c,i})(D_{c,i})(W_{c,i}) \qquad (Eq.\ 3A)$$

Where:

$A_{CSR}$= Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system during the month, kg.

$Vol_{c,i}$= Total volume of coating, i, used during the month in the coating operation controlled by the solvent recovery system, liters.

$D_{c,i}$= Density of coating, i, kg per liter.

$W_{c,i}$= Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.

m = Number of different coatings used.

(ii) Calculate the mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system, kg, using Equation 3B of this section:

$$B_{CSR} = \sum_{j=1}^{n} (Vol_{t,j})(D_{t,j})(W_{t,j}) \qquad (Eq.\ 3B)$$

Where:

$B_{CSR}$= Total mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system during the month, kg.

$Vol_{t,j}$= Total volume of thinner and/or other additive, j, used during the month in the coating operation controlled by the solvent recovery system, liters.

$D_{t,j}$= Density of thinner and/or other additive, j, kg per liter.

$W_{t,j}$= Mass fraction of organic HAP in thinner and/or other additive, j, kg lb organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in §63.3981, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to subpart PPPP of this part.

n = Number of different thinners and/or other additives used.

(iii) Calculate the mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system during the month, kg, using Equation 3C of this section:

$$C_{CSR} = \sum_{k=1}^{p} (Vol_{s,k})(D_{s,k})(W_{s,k}) \qquad (Eq.\ 3C)$$

Where:

$C_{CSR}$= Total mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system during the month, kg.

$Vol_{s,k}$= Total volume of cleaning material, k, used during the month in the coating operation controlled by the solvent recovery system, liters.

$D_{s,k}$= Density of cleaning material, k, kg per liter.

$W_{s,k}$= Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg cleaning material.

p = Number of different cleaning materials used.

(k) *Calculate the total volume of coating solids used.* Determine the total volume of coating solids used, liters, which is the combined volume of coating solids for all the coatings used during each month in the coating operation or group of coating operations for which you use the emission rate with add-on controls option, using Equation 2 of §63.3951.

(l) *Calculate the mass of organic HAP emissions for each month.* Determine the mass of organic HAP emissions, kg, during each month, using Equation 4 of this section:

$$H_{HAP} = H_e - \sum_{i=1}^{q}\left(H_{c,i}\right) - \sum_{j=1}^{r}\left(H_{CSR,j}\right) \qquad (Eq.\ 4)$$

where:

$H_{HAP}$= Total mass of organic HAP emissions for the month, kg.

$H_e$= Total mass of organic HAP emissions before add-on controls from all the coatings, thinners and/or other additives, and cleaning materials used during the month, kg, determined according to paragraph (f) of this section.

$H_{C,i}$= Total mass of organic HAP emission reduction for controlled coating operation, i, not using a liquid-liquid material balance, during the month, kg, from Equation 1 of this section.

$H_{CSR,j}$= Total mass of organic HAP emission reduction for coating operation, j, controlled by a solvent recovery system using a liquid-liquid material balance, during the month, kg, from Equation 3 of this section.

q = Number of controlled coating operations not controlled by a solvent recovery system using a liquid-liquid material balance.

r = Number of coating operations controlled by a solvent recovery system using a liquid-liquid material balance.

(m) *Calculate the organic HAP emission rate for the compliance period.* Determine the organic HAP emission rate for the compliance period, kg (lb) of organic HAP emitted per liter (gal) coating solids used, using Equation 5 of this section:

$$H_{annual} = \frac{\sum_{y=1}^{n} H_{HAP,y}}{\sum_{y=1}^{n} V_{st,y}} \qquad (Eq.\ 5)$$

Where:

$H_{annual}$= Organic HAP emission rate for the compliance period, kg organic HAP emitted per liter coating solids used.

$H_{HAP,y}$= Organic HAP emissions for month, y, kg, determined according to Equation 4 of this section.

$V_{st,y}$= Total volume of coating solids used during month, y, liters, from Equation 2 of §63.3951.

y = Identifier for months.

n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

(n) *Compliance demonstration.* The organic HAP emission rate for the initial compliance period, calculated using Equation 5 of this section, must be less than or equal to the applicable emission limit for each subcategory in §63.3890 or the predominant activity or facility-specific emission limit allowed in §63.3890(c). You must keep all records as required by §§63.3930 and 63.3931. As part of the notification of compliance status required by §63.3910, you must identify the coating operation(s) for which you used the emission rate with add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in §63.3890, and you achieved the operating limits required by §63.3892 and the work practice standards required by §63.3893.

### § 63.3962 [Reserved]

### § 63.3963 How do I demonstrate continuous compliance with the emission limitations?

(a) To demonstrate continuous compliance with the applicable emission limit in §63.3890, the organic HAP emission rate for each compliance period, determined according to the procedures in §63.3961, must be equal to or less than the applicable emission limit in §63.3890. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in §63.3960 is the end of a compliance period consisting of that month and the preceding 11 months. You must perform the calculations in §63.3961 on a monthly basis using data from the previous 12 months of operation. If you are complying with a facility-specific emission limit under §63.3890(c), you must also perform the calculation using Equation 1 in §63.3890(c)(2) on a monthly basis using the data from the previous 12 months of operation.

(b) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in §63.3890, this is a deviation from the emission limitation for that compliance period that must be reported as specified in §§63.3910(c)(6) and 63.3920(a)(7).

(c) You must demonstrate continuous compliance with each operating limit required by §63.3892 that applies to you, as specified in Table 1 to this subpart, when the coating line is in operation.

(1) If an operating parameter is out of the allowed range specified in Table 1 to this subpart, this is a deviation from the operating limit that must be reported as specified in §§63.3910(c)(6) and 63.3920(a)(7).

(2) If an operating parameter deviates from the operating limit specified in Table 1 to this subpart, then you must assume that the emission capture system and add-on control device were achieving zero efficiency

during the time period of the deviation, unless you have other data indicating the actual efficiency of the emission capture system and add-on control device and the use of these data is approved by the Administrator.

(d) You must meet the requirements for bypass lines in §63.3968(b) for controlled coating operations for which you do not conduct liquid-liquid material balances. If any bypass line is opened and emissions are diverted to the atmosphere when the coating operation is running, this is a deviation that must be reported as specified in §§63.3910(c)(6) and 63.3920(a)(7). For the purposes of completing the compliance calculations specified in §§63.3961(h), you must treat the materials used during a deviation on a controlled coating operation as if they were used on an uncontrolled coating operation for the time period of the deviation as indicated in Equation 1 of §63.3961.

(e) You must demonstrate continuous compliance with the work practice standards in §63.3893. If you did not develop a work practice plan, or you did not implement the plan, or you did not keep the records required by §63.3930(k)(8), this is a deviation from the work practice standards that must be reported as specified in §§63.3910(c)(6) and 63.3920(a)(7).

(f) As part of each semiannual compliance report required in §63.3920, you must identify the coating operation(s) for which you used the emission rate with add-on controls option. If there were no deviations from the emission limitations, submit a statement that you were in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in §63.3890, and you achieved the operating limits required by §63.3892 and the work practice standards required by §63.3893 during each compliance period.

(g)—(i) [Reserved]

(j) You must maintain records as specified in §§63.3930 and 63.3931.

[69 FR 157, Jan. 2, 2004, as amended at 71 FR 20465, Apr. 20, 2006]

### § 63.3964 What are the general requirements for performance tests?

(a) You must conduct each performance test required by §63.3960 according to the requirements in §63.7(e)(1) and under the conditions in this section, unless you obtain a waiver of the performance test according to the provisions in §63.7(h).

(1) *Representative coating operation operating conditions.* You must conduct the performance test under representative operating conditions for the coating operation. Operations during periods of startup, shutdown, or malfunction and during periods of nonoperation do not constitute representative conditions. You must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation.

(2) *Representative emission capture system and add-on control device operating conditions.* You must conduct the performance test when the emission capture system and add-on control device are operating at a representative flow rate, and the add-on control device is operating at a representative inlet concentration. You must record information that is necessary to document emission capture system and add-on control device operating conditions during the test and explain why the conditions represent normal operation.

(b) You must conduct each performance test of an emission capture system according to the requirements in §63.3965. You must conduct each performance test of an add-on control device according to the requirements in §63.3966.

### § 63.3965 How do I determine the emission capture system efficiency?

You must use the procedures and test methods in this section to determine capture efficiency as part of the performance test required by §63.3960.

(a) *Assuming 100 percent capture efficiency.* You may assume the capture system efficiency is 100 percent if both of the conditions in paragraphs (a)(1) and (2) of this section are met:

(1) The capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and directs all the exhaust gases from the enclosure to an add-on control device.

(2) All coatings, thinners and/or other additives, and cleaning materials used in the coating operation are applied within the capture system; coating solvent flash-off, curing, and drying occurs within the capture system; and the removal or evaporation of cleaning materials from the surfaces they are applied to occurs within the capture system. For example, this criterion is not met if parts enter the open shop environment when being moved between a spray booth and a curing oven.

(b) *Measuring capture efficiency.* If the capture system does not meet both of the criteria in paragraphs (a)(1) and (2) of this section, then you must use one of the three protocols described in paragraphs (c), (d), and (e) of this section to measure capture efficiency. The capture efficiency measurements use TVH capture efficiency as a surrogate for organic HAP capture efficiency. For the protocols in paragraphs (c) and (d) of this section, the capture efficiency measurement must consist of three test runs. Each test run must be at least 3 hours duration or the length of a production run, whichever is longer, up to 8 hours. For the purposes of this test, a production run means the time required for a single part to go from the beginning to the end of the production, which includes surface preparation activities and drying and curing time.

(c) *Liquid-to-uncaptured-gas protocol using a temporary total enclosure or building enclosure.* The liquid-to-uncaptured-gas protocol compares the mass of liquid TVH in materials used in the coating operation to the mass of TVH emissions not captured by the emission capture system. Use a temporary total enclosure or a building enclosure and the procedures in paragraphs (c)(1) through (6) of this section to measure emission capture system efficiency using the liquid-to-uncaptured-gas protocol.

(1) Either use a building enclosure or construct an enclosure around the coating operation where coatings, thinners and/or other additives, and cleaning materials are applied, and all areas where emissions from these applied coatings and materials subsequently occur, such as flash-off, curing, and drying areas. The areas of the coating operation where capture devices collect emissions for routing to an add-on control device, such as the entrance and exit areas of an oven or spray booth, must also be inside the enclosure. The enclosure must meet the applicable definition of a temporary total enclosure or building enclosure in Method 204 of appendix M to 40 CFR part 51.

(2) Use Method 204A or 204F of appendix M to 40 CFR part 51 to determine the mass fraction of TVH liquid input from each coating, thinner and/or other additive, and cleaning material used in the coating operation during each capture efficiency test run. To make the determination, substitute TVH for each occurrence of the term VOC in the methods.

(3) Use Equation 1 of this section to calculate the total mass of TVH liquid input from all the coatings, thinners and/or other additives, and cleaning materials used in the coating operation during each capture efficiency test run:

$$TVH_{used} = \sum_{i=1}^{n} (TVH_i)(Vol_i)(D_i) \qquad (Eq.\ 1)$$

Where:

$TVH_{used}$= Mass of liquid TVH in materials used in the coating operation during the capture efficiency test run, kg.

$TVH_i$= Mass fraction of TVH in coating, thinner and/or other additive, or cleaning material, i, that is used in the coating operation during the capture efficiency test run, kg TVH per kg material.

$Vol_i$= Total volume of coating, thinner and/or other additive, or cleaning material, i, used in the coating operation during the capture efficiency test run, liters.

$D_i$= Density of coating, thinner and/or other additive, or cleaning material, i, kg material per liter material.

n = Number of different coatings, thinners and/or other additives, and cleaning materials used in the coating operation during the capture efficiency test run.

(4) Use Method 204D or 204E of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions that are not captured by the emission capture system. They are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) Use Method 204D of appendix M to 40 CFR part 51 if the enclosure is a temporary total enclosure.

(ii) Use Method 204E of appendix M to 40 CFR 51 if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the coating operation for which capture efficiency is being determined, must be shut down, but all fans and blowers must be operating normally.

(5) For each capture efficiency test run, determine the percent capture efficiency of the emission capture system using Equation 2 of this section:

$$CE = \frac{\left(TVH_{used} - TVH_{uncaptured}\right)}{TVH_{used}} \times 100 \qquad \text{(Eq. 2)}$$

Where:

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent.

$TVH_{used}$= Total mass of TVH liquid input used in the coating operation during the capture efficiency test run, kg.

$TVH_{uncaptured}$= Total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, kg.

(6) Determine the capture efficiency of the emission capture system as the average of the capture efficiencies measured in the three test runs.

(d) *Gas-to-gas protocol using a temporary total enclosure or a building enclosure.* The gas-to-gas protocol compares the mass of TVH emissions captured by the emission capture system to the mass of TVH emissions not captured. Use a temporary total enclosure or a building enclosure and the procedures in paragraphs (d)(1) through (5) of this section to measure emission capture system efficiency using the gas-to-gas protocol.

(1) Either use a building enclosure or construct an enclosure around the coating operation where coatings, thinners and/or other additives, and cleaning materials are applied, and all areas where emissions from these applied coatings and materials subsequently occur, such as flash-off, curing, and drying areas. The areas of the coating operation where capture devices collect emissions generated by the coating operation for routing to an add-on control device, such as the entrance and exit areas of an oven or a spray booth, must also be inside the enclosure. The enclosure must meet the applicable definition of a temporary total enclosure or building enclosure in Method 204 of appendix M to 40 CFR part 51.

(2) Use Method 204B or 204C of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions captured by the emission capture system during each capture efficiency test run as measured at the inlet to the add-on control device. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) The sampling points for the Method 204B or 204C measurement must be upstream from the add-on control device and must represent total emissions routed from the capture system and entering the add-on control device.

(ii) If multiple emission streams from the capture system enter the add-on control device without a single common duct, then the emissions entering the add-on control device must be simultaneously measured in each duct and the total emissions entering the add-on control device must be determined.

(3) Use Method 204D or 204E of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions that are not captured by the emission capture system; they are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) Use Method 204D of appendix M to 40 CFR part 51 if the enclosure is a temporary total enclosure.

(ii) Use Method 204E of appendix M to 40 CFR part 51 if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the coating operation for which capture efficiency is being determined, must be shut down, but all fans and blowers must be operating normally.

(4) For each capture efficiency test run, determine the percent capture efficiency of the emission capture system using Equation 3 of this section:

$$CE = \frac{TVH_{captured}}{\left(TVH_{captured} + \mathrm{TVH}_{\mathrm{uncaptured}}\right)} \times 100 \qquad \text{(Eq. 3)}$$

Where:

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent.

$\mathrm{TVH}_{\mathrm{captured}}$= Total mass of TVH captured by the emission capture system as measured at the inlet to the add-on control device during the emission capture efficiency test run, kg.

$\mathrm{TVH}_{\mathrm{uncaptured}}$= Total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, kg.

(5) Determine the capture efficiency of the emission capture system as the average of the capture efficiencies measured in the three test runs.

(e) *Alternative capture efficiency protocol.* As an alternative to the procedures specified in paragraphs (c) and (d) of this section and subject to the approval of the Administrator, you may determine capture efficiency using any other capture efficiency protocol and test methods that satisfy the criteria of either the DQO or LCL approach as described in appendix A to subpart KK of this part.

### § 63.3966 How do I determine the add-on control device emission destruction or removal efficiency?

You must use the procedures and test methods in this section to determine the add-on control device emission destruction or removal efficiency as part of the performance test required by §63.3960. You must conduct three test runs as specified in §63.7(e)(3) and each test run must last at least 1 hour. If the source is a magnet wire coating machine, you may use the procedures in section 3.0 of appendix A to this subpart as an alternative.

(a) For all types of add-on control devices, use the test methods specified in paragraphs (a)(1) through (5) of this section.

(1) Use Method 1 or 1A of appendix A to 40 CFR part 60, as appropriate, to select sampling sites and velocity traverse points.

(2) Use Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate.

(3) Use Method 3, 3A, or 3B of appendix A to 40 CFR part 60, as appropriate, for gas analysis to determine dry molecular weight.

(4) Use Method 4 of appendix A to 40 CFR part 60, to determine stack gas moisture.

(5) Methods for determining gas volumetric flow rate, dry molecular weight, and stack gas moisture must be performed, as applicable, during each test run.

(b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously, using either Method 25 or 25A of appendix A to 40 CFR part 60.

(1) Use Method 25 if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be more than 50 parts per million (ppm) at the control device outlet.

(2) Use Method 25A if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be 50 ppm or less at the control device outlet.

(3) Use Method 25A if the add-on control device is not an oxidizer.

(c) If two or more add-on control devices are used for the same emission stream, then you must measure emissions at the outlet to the atmosphere of each device. For example, if one add-on control device is a concentrator with an outlet to the atmosphere for the high-volume dilute stream that has been treated by the concentrator, and a second add-on control device is an oxidizer with an outlet to the atmosphere for the low-volume concentrated stream that is treated with the oxidizer, you must measure emissions at the outlet of the oxidizer and the high volume dilute stream outlet of the concentrator.

(d) For each test run, determine the total gaseous organic emissions mass flow rates for the inlet and the outlet of the add-on control device, using Equation 1 of this section. If there is more than one inlet or outlet to the add-on control device, you must calculate the total gaseous organic mass flow rate using Equation 1 of this section for each inlet and each outlet and then total all of the inlet emissions and total all of the outlet emissions:

$$M_f = Q_{sd} C_c (12)\ (0.0416)\ \left(10^{-6}\right) \qquad (Eq.\ 1)$$

Where:

$M_f$= Total gaseous organic emissions mass flow rate, kg per hour (h).

$C_c$= Concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or Method 25A, parts per million by volume (ppmv), dry basis.

$Q_{sd}$= Volumetric flow rate of gases entering or exiting the add-on control device, as determined by Method 2, 2A, 2C, 2D, 2F, or 2G, dry standard cubic meters/hour (dscm/h).

0.0416 = Conversion factor for molar volume, kg-moles per cubic meter (mol/$m^3$) (@ 293 Kelvin (K) and 760 millimeters of mercury (mmHg).

(e) For each test run, determine the add-on control device organic emissions destruction or removal efficiency, using Equation 2 of this section:

$$DRE = \frac{M_{fi} - M_{fo}}{M_{fi}} \times 100 \qquad \text{(Eq. 2)}$$

Where:

DRE = Organic emissions destruction or removal efficiency of the add-on control device, percent.

$M_{fi}$= Total gaseous organic emissions mass flow rate at the inlet(s) to the add-on control device, using Equation 1 of this section, kg/h.

$M_{fo}$= Total gaseous organic emissions mass flow rate at the outlet(s) of the add-on control device, using Equation 1 of this section, kg/h.

(f) Determine the emission destruction or removal efficiency of the add-on control device as the average of the efficiencies determined in the three test runs and calculated in Equation 2 of this section.

## § 63.3967 How do I establish the emission capture system and add-on control device operating limits during the performance test?

During the performance test required by §63.3960 and described in §§63.3964, 63.3965, and 63.3966, you must establish the operating limits required by §63.3892 according to this section, unless you have received approval for alternative monitoring and operating limits under §63.8(f) as specified in §63.3892.

(a) *Thermal oxidizers.* If your add-on control device is a thermal oxidizer, establish the operating limits according to paragraphs (a)(1) and (2) of this section.

(1) During the performance test, you must monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. You must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.

(2) Use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature is the minimum operating limit for your thermal oxidizer.

(b) *Catalytic oxidizers.* If your add-on control device is a catalytic oxidizer, establish the operating limits according to either paragraphs (b)(1) and (2) or paragraphs (b)(3) and (4) of this section. If the source is a magnet wire coating machine, you may use the procedures in section 3.0 of appendix A to this subpart as an alternative.

(1) During the performance test, you must monitor and record the temperature just before the catalyst bed and the temperature difference across the catalyst bed at least once every 15 minutes during each of the three test runs.

(2) Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test. These are the minimum operating limits for your catalytic oxidizer.

(3) You must monitor the temperature at the inlet to the catalyst bed and implement a site-specific inspection and maintenance plan for your catalytic oxidizer as specified in paragraph (b)(4) of this section. During the performance test, you must monitor and record the temperature just before the catalyst bed at least once every 15 minutes during each of the three test runs. Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed during the performance test. This is the minimum operating limit for your catalytic oxidizer.

(4) You must develop and implement an inspection and maintenance plan for your catalytic oxidizer(s) for which you elect to monitor according to paragraph (b)(3) of this section. The plan must address, at a minimum, the elements specified in paragraphs (b)(4)(i) through (iii) of this section.

(i) Annual sampling and analysis of the catalyst activity (i.e*.,* conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures. If problems are found during the catalyst activity test, you must replace the catalyst bed or take other corrective action consistent with the manufacturer's recommendations.

(ii) Monthly external inspection of the catalytic oxidizer system, including the burner assembly and fuel supply lines for problems and, as necessary, adjust the equipment to assure proper air-to-fuel mixtures.

(iii) Annual internal inspection of the catalyst bed to check for channeling, abrasion, and settling. If problems are found during the annual internal inspection of the catalyst, you must replace the catalyst bed or take other corrective action consistent with the manufacturer's recommendations. If the catalyst bed is replaced and is not of like or better kind and quality as the old catalyst then you must conduct a new performance test to determine destruction efficiency according to §63.3966. If a catalyst bed is replaced and the replacement catalyst is of like or better kind and quality as the old catalyst, then a new performance test to determine destruction efficiency is not required and you may continue to use the previously established operating limits for that catalytic oxidizer.

(c) *Regenerative carbon adsorbers.* If your add-on control device is a regenerative carbon adsorber, establish the operating limits according to paragraphs (c)(1) and (2) of this section.

(1) You must monitor and record the total regeneration desorbing gas (e.g*.,* steam or nitrogen) mass flow for each regeneration cycle, and the carbon bed temperature after each carbon bed regeneration and cooling cycle for the regeneration cycle either immediately preceding or immediately following the performance test.

(2) The operating limits for your regenerative carbon adsorber are the minimum total desorbing gas mass flow recorded during the regeneration cycle and the maximum carbon bed temperature recorded after the cooling cycle.

(d) *Condensers.* If your add-on control device is a condenser, establish the operating limits according to paragraphs (d)(1) and (2) of this section.

(1) During the performance test, you must monitor and record the condenser outlet (product side) gas temperature at least once every 15 minutes during each of the three test runs.

(2) Use the data collected during the performance test to calculate and record the average condenser outlet (product side) gas temperature maintained during the performance test. This average condenser outlet gas temperature is the maximum operating limit for your condenser.

(e) *Concentrators.* If your add-on control device includes a concentrator, you must establish operating limits for the concentrator according to paragraphs (e)(1) through (4) of this section.

(1) During the performance test, you must monitor and record the desorption concentrate stream gas temperature at least once every 15 minutes during each of the three runs of the performance test.

(2) Use the data collected during the performance test to calculate and record the average temperature. This is the minimum operating limit for the desorption concentrate gas stream temperature.

(3) During the performance test, you must monitor and record the pressure drop of the dilute stream across the concentrator at least once every 15 minutes during each of the three runs of the performance test.

(4) Use the data collected during the performance test to calculate and record the average pressure drop. This is the minimum operating limit for the dilute stream across the concentrator.

(f) *Emission capture systems.* For each capture device that is not part of a PTE that meets the criteria of §63.3965(a), establish an operating limit for either the gas volumetric flow rate or duct static pressure, as specified in paragraphs (f)(1) and (2) of this section. The operating limit for a PTE is specified in Table 1 to this subpart. If the source is a magnet wire coating machine, you may use the procedures in section 2.0 of appendix A to this subpart as an alternative.

(1) During the capture efficiency determination required by §63.3960 and described in §§63.3964 and 63.3965, you must monitor and record either the gas volumetric flow rate or the duct static pressure for each separate capture device in your emission capture system at least once every 15 minutes during each of the three test runs at a point in the duct between the capture device and the add-on control device inlet.

(2) Calculate and record the average gas volumetric flow rate or duct static pressure for the three test runs for each capture device. This average gas volumetric flow rate or duct static pressure is the minimum operating limit for that specific capture device.

## § 63.3968 What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?

(a) *General.* You must install, operate, and maintain each CPMS specified in paragraphs (c), (e), (f), and (g) of this section according to paragraphs (a)(1) through (6) of this section. You must install, operate, and maintain each CPMS specified in paragraphs (b) and (d) of this section according to paragraphs (a)(3) through (5) of this section.

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four equally spaced successive cycles of CPMS operation in 1 hour.

(2) You must determine the average of all recorded readings for each successive 3-hour period of the emission capture system and add-on control device operation.

(3) You must record the results of each inspection, calibration, and validation check of the CPMS.

(4) You must maintain the CPMS at all times and have available necessary parts for routine repairs of the monitoring equipment.

(5) You must operate the CPMS and collect emission capture system and add-on control device parameter data at all times that a controlled coating operation is operating, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments).

(6) You must not use emission capture system or add-on control device parameter data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities when calculating data averages. You must use all the data collected during all other periods in calculating the data averages for determining compliance with the emission capture system and add-on control device operating limits.

(7) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the CPMS to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations is a deviation from the monitoring requirements.

(b) *Capture system bypass line.* You must meet the requirements of paragraphs (b)(1) and (2) of this section for each emission capture system that contains bypass lines that could divert emissions away from the add-on control device to the atmosphere.

(1) You must monitor or secure the valve or closure mechanism controlling the bypass line in a nondiverting position in such a way that the valve or closure mechanism cannot be opened without creating a record that

the valve was opened. The method used to monitor or secure the valve or closure mechanism must meet one of the requirements specified in paragraphs (b)(1)(i) through (v) of this section.

(i) *Flow control position indicator.* Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. The time of occurrence and flow control position must be recorded, as well as every time the flow direction is changed. The flow control position indicator must be installed at the entrance to any bypass line that could divert the emissions away from the add-on control device to the atmosphere.

(ii) *Car-seal or lock-and-key valve closures.* Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. You must visually inspect the seal or closure mechanism at least once every month to ensure that the valve is maintained in the closed position, and the emissions are not diverted away from the add-on control device to the atmosphere.

(iii) *Valve closure monitoring.* Ensure that any bypass line valve is in the closed (nondiverting) position through monitoring of valve position at least once every 15 minutes. You must inspect the monitoring system at least once every month to verify that the monitor will indicate valve position.

(iv) *Automatic shutdown system.* Use an automatic shutdown system in which the coating operation is stopped when flow is diverted by the bypass line away from the add-on control device to the atmosphere when the coating operation is running. You must inspect the automatic shutdown system at least once every month to verify that it will detect diversions of flow and shut down the coating operation.

(v) *Flow direction indicator.* Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow direction indicator that takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. Each time the flow direction changes, the next reading of the time of occurrence and flow direction must be recorded. The flow direction indicator must be installed in each bypass line or air makeup supply line that could divert the emissions away from the add-on control device to the atmosphere.

(2) If any bypass line is opened, you must include a description of why the bypass line was opened and the length of time it remained open in the semiannual compliance reports required in §63.3920.

(c) *Thermal oxidizers and catalytic oxidizers.* If you are using a thermal oxidizer or catalytic oxidizer as an add-on control device (including those used with concentrators or with carbon adsorbers to treat desorbed concentrate streams), you must comply with the requirements in paragraphs (c)(1) through (3) of this section:

(1) For a thermal oxidizer, install a gas temperature monitor in the firebox of the thermal oxidizer or in the duct immediately downstream of the firebox before any substantial heat exchange occurs.

(2) For a catalytic oxidizer, install gas temperature monitors upstream and/or downstream of the catalyst bed as required in §63.3967(b).

(3) For all thermal oxidizers and catalytic oxidizers, you must meet the requirements in paragraphs (a) and (c)(3)(i) through (v) of this section for each gas temperature monitoring device.

(i) Locate the temperature sensor in a position that provides a representative temperature.

(ii) Use a temperature sensor with a measurement sensitivity of 5 degrees Fahrenheit or 1.0 percent of the temperature value, whichever is larger.

(iii) Before using the sensor for the first time or when relocating or replacing the sensor, perform a validation check by comparing the sensor output to a calibrated temperature measurement device or by comparing the sensor output to a simulated temperature.

(iv) Conduct an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor output to redundant temperature sensors, to calibrated temperature measurement devices, or to temperature simulation devices.

(v) Conduct a visual inspection of each sensor every quarter if redundant temperature sensors are not used.

(d) *Regenerative carbon adsorbers.* If you are using a regenerative carbon adsorber as an add-on control device, you must monitor the total regeneration desorbing gas ( *e.g.,* steam or nitrogen) mass flow for each regeneration cycle, the carbon bed temperature after each regeneration and cooling cycle, and comply with paragraphs (a)(3) through (5) and (d)(1) through (3) of this section.

(1) The regeneration desorbing gas mass flow monitor must be an integrating device having a measurement sensitivity of plus or minus 10 percent capable of recording the total regeneration desorbing gas mass flow for each regeneration cycle.

(2) The carbon bed temperature monitor must be capable of recording the temperature within 15 minutes of completing any carbon bed cooling cycle.

(3) For all regenerative carbon adsorbers, you must meet the requirements in paragraphs (c)(3)(i) through (v) of this section for each temperature monitoring device.

(e) *Condensers.* If you are using a condenser, you must monitor the condenser outlet (product side) gas temperature and comply with paragraphs (a) and (e)(1) and (2) of this section.

(1) The temperature monitor must provide a gas temperature record at least once every 15 minutes.

(2) For all condensers, you must meet the requirements in paragraphs (c)(3)(i) through (v) of this section for each temperature monitoring device.

(f) *Concentrators.* If you are using a concentrator, such as a zeolite wheel or rotary carbon bed concentrator, you must comply with the requirements in paragraphs (f)(1) and (2) of this section.

(1) You must install a temperature monitor in the desorption gas stream. The temperature monitor must meet the requirements in paragraphs (a) and (c)(3) of this section.

(2) You must install a device to monitor pressure drop across the zeolite wheel or rotary carbon bed. The pressure monitoring device must meet the requirements in paragraphs (a) and (g)(2) of this section.

(g) *Emission capture systems.* The capture system monitoring system must comply with the applicable requirements in paragraphs (g)(1) and (2) of this section. If the source is a magnet wire coating machine, you may use the procedures in section 2.0 of appendix A to this subpart as an alternative.

(1) For each flow measurement device, you must meet the requirements in paragraphs (a) and (g)(1)(i) through (vii) of this section.

(i) Locate a flow sensor in a position that provides a representative flow measurement in the duct from each capture device in the emission capture system to the add-on control device.

(ii) Use a flow sensor with an accuracy of at least 10 percent of the flow.

(iii) Perform an initial sensor calibration in accordance with the manufacturer's requirements.

(iv) Perform a validation check before initial use or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values with electronic signal simulations or via relative accuracy testing.

(v) Conduct an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor values with electronic signal simulations or via relative accuracy testing.

(vi) Perform leak checks monthly.

(vii) Perform visual inspections of the sensor system quarterly if there is no redundant sensor.

(2) For each pressure drop measurement device, you must comply with the requirements in paragraphs (a) and (g)(2)(i) through (vii) of this section.

(i) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure drop across each opening you are monitoring.

(ii) Use a pressure sensor with an accuracy of at least 0.5 inches of water column or 5 percent of the measured value, whichever is larger.

(iii) Perform an initial calibration of the sensor according to the manufacturer's requirements.

(iv) Conduct a validation check before initial operation or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.

(v) Conduct accuracy audits every quarter and after every deviation. Accuracy audits include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.

(vi) Perform monthly leak checks on pressure connections. A pressure of at least 1.0 inches of water column to the connection must yield a stable sensor result for at least 15 seconds.

(vii) Perform a visual inspection of the sensor at least monthly if there is no redundant sensor.

## Other Requirements and Information

### § 63.3980 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (EPA), or a delegated authority such as your State, local, or tribal agency. If the Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of 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 subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator and are not transferred to the State, local, or tribal agency.

(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 requirements in §63.3881 through 3883 and §63.3890 through 3893.

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

### § 63.3981 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:

*Additive* means a material that is added to a coating after purchase from a supplier ( *e.g.,* catalysts, activators, accelerators).

*Add-on control* means an air pollution control device, such as a thermal oxidizer or carbon adsorber, that reduces pollution in an air stream by destruction or removal before discharge to the atmosphere.

*Adhesive, adhesive coating* means any chemical substance that is applied for the purpose of bonding two surfaces together. Products used on humans and animals, adhesive tape, contact paper, or any other product with an adhesive incorporated onto or in an inert substrate shall not be considered adhesives under this subpart.

*Assembled on-road vehicle coating* means any coating operation in which coating is applied to the surface of some component or surface of a fully assembled motor vehicle or trailer intended for on-road use including, but not limited to, components or surfaces on automobiles and light-duty trucks that have been repaired after a collision or otherwise repainted, fleet delivery trucks, and motor homes and other recreational vehicles (including camping trailers and fifth wheels). Assembled on-road vehicle coating includes the concurrent coating of parts of the assembled on-road vehicle that are painted off-vehicle to protect systems, equipment, or to allow full coverage. Assembled on-road vehicle coating does not include surface coating operations that meet the applicability criteria of the automobiles and light-duty trucks NESHAP. Assembled on-road vehicle coating also does not include the use of adhesives, sealants, and caulks used in assembling on-road vehicles.

*Capture device* means a hood, enclosure, room, floor sweep, or other means of containing or collecting emissions and directing those emissions into an add-on air pollution control device.

*Capture efficiency or capture system efficiency* means the portion (expressed as a percentage) of the pollutants from an emission source that is delivered to an add-on control device.

*Capture system* means one or more capture devices intended to collect emissions generated by a coating operation in the use of coatings or cleaning materials, both at the point of application and at subsequent points where emissions from the coatings and cleaning materials occur, such as flashoff, drying, or curing. As used in this subpart, multiple capture devices that collect emissions generated by a coating operation are considered a single capture system.

*Cleaning material* means a solvent used to remove contaminants and other materials, such as dirt, grease, oil, and dried or wet coating ( *e.g.,* depainting or paint stripping), from a substrate before or after coating application or from equipment associated with a coating operation, such as spray booths, spray guns, racks, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment or both.

*Coating* means a material applied to a substrate for decorative, protective, or functional purposes. Such materials include, but are not limited to, paints, sealants, liquid plastic coatings, caulks, inks, adhesives, and maskants. Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances, or paper film or plastic film which may be pre-coated with an adhesive by the film manufacturer, are not considered coatings for the purposes of this subpart. A liquid plastic coating means a coating made from fine particle-size polyvinyl chloride (PVC) in solution (also referred to as a plastisol).

*Coating operation* means equipment used to apply cleaning materials to a substrate to prepare it for coating application (surface preparation) or to remove dried coating; to apply coating to a substrate (coating application) and to dry or cure the coating after application; or to clean coating operation equipment (equipment cleaning). A single coating operation may include any combination of these types of equipment, but always includes at least the point at which a given quantity of coating or cleaning material is applied to a given part and all subsequent points in the affected source where organic HAP are emitted from the specific quantity of coating or cleaning material on the specific part. There may be multiple coating operations in an affected source. Coating application with handheld, non-refillable aerosol containers, touch-up markers, or marking pens is not a coating operation for the purposes of this subpart.

*Coatings solids* means the nonvolatile portion of the coating that makes up the dry film.

*Continuous parameter monitoring system (CPMS)* means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, used to sample, condition (if applicable), analyze, and provide a record of coating operation, or capture system, or add-on control device parameters.

*Controlled coating operation* means a coating operation from which some or all of the organic HAP emissions are routed through an emission capture system and add-on control device.

*Deviation* means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart including but not limited to, any emission limit or operating limit or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

*Emission limitation* means the aggregate of all requirements associated with a compliance option including emission limit, operating limit, work practice standard, etc.

*Enclosure* means a structure that surrounds a source of emissions and captures and directs the emissions to an add-on control device.

*Exempt compound* means a specific compound that is not considered a VOC due to negligible photochemical reactivity. The exempt compounds are listed in 40 CFR 51.100(s).

*Extreme performance fluoropolymer coating* means coatings that are formulated systems based on fluoropolymer resins which often contain bonding matrix polymers dissolved in non-aqueous solvents as well as other ingredients. Extreme performance fluoropolymer coatings are typically used when one or more critical performance criteria are required including, but not limited to a nonstick low-energy surface, dry film lubrication, high resistance to chemical attack, extremely wide operating temperature, high electrical insulating properties, or that the surface comply with government (e.g*.,* USDA, FDA) or third party specifications for health, safety, reliability, or performance. Once applied to a substrate, extreme performance fluoropolymer coatings undergo a curing process that typically requires high temperatures, a chemical reaction, or other specialized technology.

*Facility maintenance* means the routine repair or renovation (including the surface coating) of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity.

*General use coating* means any material that meets the definition of coating but does not meet the definition of high performance coating, rubber-to-metal coating, magnet wire coating, or extreme performance fluoropolymer coating as defined in this section.

*High performance architectural coating* means any coating applied to architectural subsections which is required to meet the specifications of Architectural Aluminum Manufacturer's Association's publication number AAMA 605.2–2000.

*High performance coating* means any coating that meets the definition of high performance architectural coating or high temperature coating in this section.

*High temperature coating* means any coating applied to a substrate which during normal use must withstand temperatures of at least 538 degrees Celsius (1000 degrees Fahrenheit).

*Hobby shop* means any surface coating operation, located at an affected source, that is used exclusively for personal, noncommercial purposes by the affected source's employees or assigned personnel.

*Magnet wire coatings,* commonly referred to as magnet wire enamels, are applied to a continuous strand of wire which will be used to make turns (windings) in electrical devices such as coils, transformers, or motors. Magnet wire coatings provide high dielectric strength and turn-to-turn conductor insulation. This allows the turns of an electrical device to be placed in close proximity to one another which leads to increased coil effectiveness and electrical efficiency.

*Magnet wire coating machine* means equipment which applies and cures magnet wire coatings.

*Manufacturer's formulation data* means data on a material (such as a coating) that are supplied by the material manufacturer based on knowledge of the ingredients used to manufacture that material, rather than based on testing of the material with the test methods specified in §63.3941. Manufacturer's formulation data may include, but are not limited to, information on density, organic HAP content, volatile organic matter content, and coating solids content.

*Mass fraction of organic HAP* means the ratio of the mass of organic HAP to the mass of a material in which it is contained, expressed as kg of organic HAP per kg of material.

*Month* means a calendar month or a pre-specified period of 28 days to 35 days to allow for flexibility in recordkeeping when data are based on a business accounting period.

*Non-HAP coating* means, for the purposes of this subpart, a coating that contains no more than 0.1 percent by mass of any individual organic HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4) and no more than 1.0 percent by mass for any other individual HAP.

*Organic HAP content* means the mass of organic HAP emitted per volume of coating solids used for a coating calculated using Equation 2 of §63.3941. The organic HAP content is determined for the coating in the condition it is in when received from its manufacturer or supplier and does not account for any alteration after receipt. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, organic HAP content is the mass of organic HAP that is emitted, rather than the organic HAP content of the coating as it is received.

*Permanent total enclosure (PTE)* means a permanently installed enclosure that meets the criteria of Method 204 of appendix M, 40 CFR part 51, for a PTE and that directs all the exhaust gases from the enclosure to an add-on control device.

*Personal watercraft* means a vessel (boat) which uses an inboard motor powering a water jet pump as its primary source of motive power and which is designed to be operated by a person or persons sitting, standing, or kneeling on the vessel, rather than in the conventional manner of sitting or standing inside the vessel.

*Protective oil* means an organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils. Protective oils used on miscellaneous metal parts and products include magnet wire lubricants and soft temporary protective coatings that are removed prior to installation or further assembly of a part or component.

*Reactive adhesive* means adhesive systems composed, in part, of volatile monomers that react during the adhesive curing reaction, and, as a result, do not evolve from the film during use. These volatile components instead become integral parts of the adhesive through chemical reaction. At least 70 percent of the liquid components of the system, excluding water, react during the process.

*Research or laboratory facility* means a facility whose primary purpose is for research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and is not engaged in the manufacture of final or intermediate products for commercial purposes, except in a *de minimis* manner.

*Responsible official* means responsible official as defined in 40 CFR 70.2.

*Rubber-to-metal coatings* are coatings that contain heat-activated polymer systems in either solvent or water that, when applied to metal substrates, dry to a non-tacky surface and react chemically with the rubber and metal during a vulcanization process.

*Startup, initial* means the first time equipment is brought online in a facility.

*Surface preparation* means use of a cleaning material on a portion of or all of a substrate. This includes use of a cleaning material to remove dried coating, which is sometimes called depainting.

*Temporary total enclosure* means an enclosure constructed for the purpose of measuring the capture efficiency of pollutants emitted from a given source as defined in Method 204 of appendix M, 40 CFR part 51.

*Thinner* means an organic solvent that is added to a coating after the coating is received from the supplier.

*Total volatile hydrocarbon (TVH)* means the total amount of nonaqueous volatile organic matter determined according to Methods 204 and 204A through 204F of appendix M to 40 CFR part 51 and substituting the term TVH each place in the methods where the term VOC is used. The TVH includes both VOC and non-VOC.

*Uncontrolled coating operation* means a coating operation from which none of the organic HAP emissions are routed through an emission capture system and add-on control device.

*Volatile organic compound (VOC)* means any compound defined as VOC in 40 CFR 51.100(s).

*Volume fraction of coating solids* means the ratio of the volume of coating solids (also known as the volume of nonvolatiles) to the volume of a coating in which it is contained; liters (gal) of coating solids per liter (gal) of coating.

*Wastewater* means water that is generated in a coating operation and is collected, stored, or treated prior to being discarded or discharged.

## Table 1 to Subpart MMMM of Part 63—Operating Limits if Using the Emission Rate With Add-On Controls Option

If you are required to comply with operating limits by §63.3892(c), you must comply with the applicable operating limits in the following table:

| For the following device . . . | You must meet the following operating limit . . . | And you must demonstrate continuous compliance with the operating limit by . . . |
|---|---|---|
| 1. Thermal oxidizer | a. The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to §63.3967(a) | i. Collecting the combustion temperature data according to §63.3968(c);<br>ii. Reducing the data to 3-hour block averages; and<br>iii. Maintaining the 3-hour average combustion temperature at or above the temperature limit. |
| 2. Catalytic oxidizer | a. The average temperature measured just before the catalyst bed | i. Collecting the temperature data according to §63.3968(c); |

| For the following device . . . | You must meet the following operating limit . . . | And you must demonstrate continuous compliance with the operating limit by . . . |
|---|---|---|
| | in any 3-hour period must not fall below the limit established according to §63.3967(b) (for magnet wire coating machines, temperature can be monitored before or after the catalyst bed); and either | ii. Reducing the data to 3-hour block averages; and<br>iii. Maintaining the 3-hour average temperature before (or for magnet wire coating machines after) the catalyst bed at or above the temperature limit. |
| | b. Ensure that the average temperature difference across the catalyst bed in any 3-hour period does not fall below the temperature difference limit established according to §63.3967(b) (2); or | i. Collecting the temperature data according to §63.3968(c);<br>ii. Reducing the data to 3-hour block averages; and<br>iii. Maintaining the 3-hour average temperature difference at or above the temperature difference limit. |
| | c. Develop and implement an inspection and maintenance plan according to §63.3967(b)(4) or for magnet wire coating machines according to section 3.0 of appendix A to this subpart | i. Maintaining and up-to-date inspection and maintenance plan, records of annual catalyst activity checks, records of monthly inspections of the oxidizer system, and records of the annual internal inspections of the catalyst bed. If a problem is discovered during a monthly or annual inspection required by §63.3967(b)(4) or for magnet wire coating machines by section 3.0 of appendix A to this subpart, you must take corrective action as soon as practicable consistent with the manufacturer's recommendations. |
| 3. Regenerative carbon adsorber | a. The total regeneration desorbing gas ( *e.g.,* steam or nitrogen) mass flow for each carbon bed regeneration cycle must not fall below the total regeneration desorbing gas mass flow limit established according to §63.3967(c); and | i. Measuring the total regeneration desorbing gas (e.g., steam or nitrogen) mass flow for each regeneration cycle according to §63.3968(d); and<br>ii. Maintaining the total regeneration desorbing gas mass flow at or above the mass flow limit. |
| | b. The temperature of the carbon bed, after completing each regeneration and any cooling cycle, must not exceed the carbon bed temperature limit established according to §63.3967(c) | i. Measuring the temperature of the carbon bed after completing each regeneration and any cooling cycle according to §63.3968(d); and<br>ii. Operating the carbon beds such that each carbon bed is not returned to service until completing each regeneration and any cooling cycle until the recorded temperature of the carbon bed is at or below the temperature limit. |
| 4. Condenser | a. The average condenser outlet (product side) gas temperature in any 3-hour period must not exceed the temperature limit established according to §63.3967(d) | i. Collecting the condenser outlet (product side) gas temperature according to §63.3968(e);<br>ii. Reducing the data to 3-hour block averages; and<br>iii. Maintaining the 3-hour average gas temperature at the outlet at or below the temperature limit. |
| 5. Concentrators, including zeolite wheels and rotary carbon adsorbers | a. The average gas temperature of the desorption concentrate stream in any 3-hour period must not fall below the limit established according to §63.3967(e); and | i. Collecting the temperature data according to 63.3968(f);<br>ii. Reducing the data to 3-hour block averages; and<br>iii. Maintaining the 3-hour average temperature at or above the temperature limit. |

| For the following device . . . | You must meet the following operating limit . . . | And you must demonstrate continuous compliance with the operating limit by . . . |
|---|---|---|
| | b. The average pressure drop of the dilute stream across the concentrator in any 3-hour period must not fall below the limit established according to §63.3967(e) | i. Collecting the pressure drop data according to 63.3968(f);<br>ii. Reducing the pressure drop data to 3-hour block averages; and<br>iii. Maintaining the 3-hour average pressure drop at or above the pressure drop limit. |
| 6. Emission capture system that is a PTE according to §63.3965(a) | a. The direction of the air flow at all times must be into the enclosure; and either | i. Collecting the direction of air flow, and either the facial velocity of air through all natural draft openings according to §63.3968(b)(1) or the pressure drop across the enclosure according to §63.3968(g)(2); and<br>ii. Maintaining the facial velocity of air flow through all natural draft openings or the pressure drop at or above the facial velocity limit or pressure drop limit, and maintaining the direction of air flow into the enclosure at all times. |
| | b. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minutes; or | i. See items 6.a.i and 6.a.ii. |
| | c. The pressure drop across the enclosure must be at least 0.007 inch $H_2O$, as established in Method 204 of appendix M to 40 CFR part 51 | i. See items 6.a.i and 6.a.ii. |
| 7. Emission capture system that is not a PTE according to §63.3965(a) | a. The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to §63.3967(f) | i. Collecting the gas volumetric flow rate or duct static pressure for each capture device according to §63.3968(g);<br>ii. Reducing the data to 3-hour block averages; and<br>iii. Maintaining the 3-hour average gas volumetric flow rate or duct static pressure for each capture device at or above the gas volumetric flow rate or duct static pressure limited. |

**Table 2 to Subpart MMMM of Part 63—Applicability of General Provisions to Subpart MMMM of Part 63**

You must comply with the applicable General Provisions requirements according to the following table:

| Citation | Subject | Applicable to subpart MMMM | Explanation |
|---|---|---|---|
| §63.1(a)(1)–(14) | General Applicability | Yes | |
| §63.1(b)(1)–(3) | Initial Applicability Determination | Yes | Applicability to subpart MMMM is also specified in §63.3881. |
| §63.1(c)(1) | Applicability After Standard Established | Yes | |
| §63.1(c)(2)–(3) | Applicability of Permit Program for Area Sources | No | Area sources are not subject to subpart MMMM. |

| Citation | Subject | Applicable to subpart MMMM | Explanation |
|---|---|---|---|
| §63.1(c)(4)–(5) | Extensions and Notifications | Yes | |
| §63.1(e) | Applicability of Permit Program Before Relevant Standard is Set | Yes | |
| §63.2 | Definitions | Yes | Additional definitions are specified in §63.3981. |
| §63.1(a)–(c) | Units and Abbreviations | Yes | |
| §63.4(a)(1)–(5) | Prohibited Activities | Yes | |
| §63.4(b)–(c) | Circumvention/Severability | Yes | |
| §63.5(a) | Construction/Reconstruction | Yes | |
| §63.5(b)(1)–(6) | Requirements for Existing Newly Constructed, and Reconstructed Sources | Yes | |
| §63.5(d) | Application for Approval of Construction/Reconstruction | Yes | |
| §63.5(e) | Approval of Construction/Reconstruction | Yes | |
| §63.5(f) | Approval of Construction/Reconstruction Based on Prior State Review | Yes | |
| §63.6(a) | Compliance With Standards and Maintenance Requirements—Applicability | Yes | |
| §63.6(b)(1)–(7) | Compliance Dates for New and Reconstructed Sources | Yes | Section 63.3883 specifies the compliance dates. |
| §63.6(c)(1)–(5) | Compliance Dates for Existing Sources | Yes | Section 63.3883 specifies the compliance dates. |
| §63.6(e)(1)–(2) | Operation and Maintenance | Yes | |
| §63.6(e)(3) | Startup, Shutdown, and Malfunction Plan | Yes | Only sources using an add-on control device to comply with the standard must complete startup, shutdown, and malfunction plans. |
| §63.6(f)(1) | Compliance Except During Startup, Shutdown, and Malfunction | Yes | Applies only to sources using an add-on control device to comply with the standard. |
| §63.6(f)(2)–(3) | Methods for Determining Compliance. | Yes | |
| §63.6(g)(1)–(3) | Use of an Alternative Standard | Yes | |

| Citation | Subject | Applicable to subpart MMMM | Explanation |
|---|---|---|---|
| §63.6(h) | Compliance With Opacity/Visible Emission Standards | No | Subpart MMMM does not establish opacity standards and does not require continuous opacity monitoring systems (COMS). |
| §63.6(i)(1)–(16) | Extension of Compliance | Yes | |
| §63.6(j) | Presidential Compliance Exemption | Yes | |
| §63.7(a)(1) | Performance Test Requirements—Applicability | Yes | Applies to all affected sources. Additional requirements for performance testing are specified in §§63.3964, 63.3965, and 63.3966. |
| §63.7(a)(2) | Performance Test Requirements—Dates | Yes | Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standard. Section 63.3960 specifies the schedule for performance test requirements that are earlier than those specified in §63.7(a)(2). |
| §63.7(a)(3) | Performance Tests Required By the Administrator | Yes | |
| §63.7(b)–(e) | Performance Test Requirements—Notification, Quality Assurance, Facilities Necessary for Safe Testing, Conditions During Test | Yes | Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard. |
| §63.7(f) | Performance Test Requirements—Use of Alternative Test Method | Yes | Applies to all test methods except those used to determine capture system efficiency. |
| §63.7(g)–(h) | Performance Test Requirements—Data Analysis, Recordkeeping, Reporting, Waiver of Test | Yes | Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standard. |
| §63.8(a)(1)–(3) | Monitoring Requirements—Applicability | Yes | Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for monitoring are specified in §63.3968. |
| §63.8(a)(4) | Additional Monitoring Requirements | No | Subpart MMMM does not have monitoring requirements for flares. |
| §63.8(b) | Conduct of Monitoring | Yes | |
| §63.8(c)(1)–(3) | Continuous Monitoring Systems (CMS) Operation and Maintenance | Yes | Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for CMS operations and maintenance are specified in §63.3968. |

| Citation | Subject | Applicable to subpart MMMM | Explanation |
|---|---|---|---|
| §63.8(c)(4) | CMS | No | §63.3968 specifies the requirements for the operation of CMS for capture systems and add-on control devices at sources using these to comply. |
| §63.8(c)(5) | COMS | No | Subpart MMMM does not have opacity or visible emission standards. |
| §63.8(c)(6) | CMS Requirements | No | Section 63.3968 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply. |
| §63.8(c)(7) | CMS Out-of-Control Periods | Yes | |
| §63.8(c)(8) | CMS Out-of-Control Periods and Reporting | No | §63.3920 requires reporting of CMS out-of-control periods. |
| §63.8(d)–(e) | Quality Control Program and CMS Performance Evaluation | No | Subpart MMMM does not require the use of continuous emissions monitoring systems. |
| §63.8(f)(1)–(5) | Use of an Alternative Monitoring Method | Yes | |
| §63.8(f)(6) | Alternative to Relative Accuracy Test | No | Subpart MMMM does not require the use of continuous emissions monitoring systems. |
| §63.8(g)(1)–(5) | Data Reduction | No | Sections 63.3967 and 63.3968 specify monitoring data reduction. |
| §63.9(a)–(d) | Notification Requirements | Yes | |
| §63.9(e) | Notification of Performance Test | Yes | Applies only to capture system and add-on control device performance tests at sources using these to comply with the standard. |
| §63.9(f) | Notification of Visible Emissions/Opacity Test | No | Subpart MMMM does not have opacity or visible emissions standards. |
| §63.9(g)(1)–(3) | Additional Notifications When Using CMS | No | Subpart MMMM does not require the use of continuous emissions monitoring systems. |
| §63.9(h) | Notification of Compliance Status | Yes | Section 63.3910 specifies the dates for submitting the notification of compliance status. |
| §63.9(i) | Adjustment of Submittal Deadlines | Yes | |
| §63.9(j) | Change in Previous Information | Yes | |
| §63.10(a) | Recordkeeping/Reporting—Applicability and General Information | Yes | |
| §63.10(b)(1) | General Recordkeeping | Yes | Additional requirements are specified in |

| Citation | Subject | Applicable to subpart MMMM | Explanation |
|---|---|---|---|
| | Requirements | | §§63.3930 and 63.3931. |
| §63.10(b)(2)(i)–(v) | Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS | Yes | Requirements for startup, shutdown, and malfunction records only apply to add-on control devices used to comply with the standard. |
| §63.10(b)(2)(vi)–(xi) | | Yes | |
| §63.10(b)(2)(xii) | Records | Yes | |
| §63.10(b)(2)(xiii) | | No | Subpart MMMM does not require the use of continuous emissions monitoring systems. |
| §63.10(b)(2)(xiv) | | Yes | |
| §63.10(b)(3) | Recordkeeping Requirements for Applicability Determinations | Yes | |
| §63.10(c)(1)–(6) | Additional Recordkeeping Requirements for Sources with CMS | Yes | |
| §63.10(c)(7)–(8) | | No | The same records are required in §63.3920(a)(7). |
| §63.10(c)(9)–(15) | | Yes | |
| §63.10(d)(1) | General Reporting Requirements | Yes | Additional requirements are specified in §63.3920. |
| §63.10(d)(2) | Report of Performance Test Results | Yes | Additional requirements are specified in §63.3920(b). |
| §63.10(d)(3) | Reporting Opacity or Visible Emissions Observations | No | Subpart MMMM does not require opacity or visible emissions observations. |
| §63.10(d)(4) | Progress Reports for Sources With Compliance Extensions | Yes | |
| §63.10(d)(5) | Startup, Shutdown, and Malfunction Reports | Yes | Applies only to add-on control devices at sources using these to comply with the standard. |
| §63.10(e)(1)–(2) | Additional CMS Reports | No | Subpart MMMM does not require the use of continuous emissions monitoring systems. |
| §63.10(e) (3) | Excess Emissions/CMS Performance Reports | No | Section 63.3920 (b) specifies the contents of periodic compliance reports. |
| §63.10(e) (4) | COMS Data Reports | No | Subpart MMMM does not specify requirements for opacity or COMS. |
| §63.10(f) | Recordkeeping/Reporting Waiver | Yes | |

| Citation | Subject | Applicable to subpart MMMM | Explanation |
|---|---|---|---|
| §63.11 | Control Device Requirements/Flares | No | Subpart MMMM does not specify use of flares for compliance. |
| §63.12 | State Authority and Delegations | Yes | |
| §63.13 | Addresses | Yes | |
| §63.14 | Incorporation by Reference | Yes | |
| §63.15 | Availability of Information/Confidentiality | Yes | |

**Table 3 to Subpart MMMM of Part 63—Default Organic HAP Mass Fraction for Solvents and Solvent Blends**

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data and which match either the solvent blend name or the chemical abstract series (CAS) number. If a solvent blend matches both the name and CAS number for an entry, that entry's organic HAP mass fraction must be used for that solvent blend. Otherwise, use the organic HAP mass fraction for the entry matching either the solvent blend name or CAS number, or use the organic HAP mass fraction from table 4 to this subpart if neither the name or CAS number match.

| Solvent/solvent blend | CAS. No. | Average organic HAP mass fraction | Typical organic HAP, percent by mass |
|---|---|---|---|
| 1. Toluene | 108–88–3 | 1.0 | Toluene. |
| 2. Xylene(s) | 1330–20–7 | 1.0 | Xylenes, ethylbenzene. |
| 3. Hexane | 110–54–3 | 0.5 | n-hexane. |
| 4. n-Hexane | 110–54–3 | 1.0 | n-hexane. |
| 5. Ethylbenzene | 100–41–4 | 1.0 | Ethylbenzene. |
| 6. Aliphatic 140 | | 0 | None. |
| 7. Aromatic 100 | | 0.02 | 1% xylene, 1% cumene. |
| 8. Aromatic 150 | | 0.09 | Naphthalene. |
| 9. Aromatic naphtha | 64742–95–6 | 0.02 | 1% xylene, 1% cumene. |
| 10. Aromatic solvent | 64742–94–5 | 0.1 | Naphthalene. |
| 11. Exempt mineral spirits | 8032–32–4 | 0 | None. |
| 12. Ligroines (VM & P) | 8032–32–4 | 0 | None. |
| 13. Lactol spirits | 64742–89–6 | 0.15 | Toluene. |
| 14. Low aromatic white spirit | 64742–82–1 | 0 | None. |
| 15. Mineral spirits | 64742–88–7 | 0.01 | Xylenes. |
| 16. Hydrotreated naphtha | 64742–48–9 | 0 | None. |
| 17. Hydrotreated light distillate | 64742–47–8 | 0.001 | Toluene. |

| Solvent/solvent blend | CAS. No. | Average organic HAP mass fraction | Typical organic HAP, percent by mass |
|---|---|---|---|
| 18. Stoddard solvent | 8052–41–3 | 0.01 | Xylenes. |
| 19. Super high-flash naphtha | 64742–95–6 | 0.05 | Xylenes. |
| 20. Varsol®solvent | 8052–49–3 | 0.01 | 0.5% xylenes, 0.5% ethylbenzene. |
| 21. VM & P naphtha | 64742–89–8 | 0.06 | 3% toluene, 3% xylene. |
| 22. Petroleum distillate mixture | 68477–31–6 | 0.08 | 4% naphthalene, 4% biphenyl. |

### Table 4 to Subpart MMMM of Part 63—Default Organic HAP Mass Fraction for Petroleum Solvent Groups[a]

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data.

| Solvent type | Average organic HAP mass fraction | Typical organic HAP, percent by mass |
|---|---|---|
| Aliphatic[b] | 0.03 | 1% Xylene, 1% Toluene, and 1% Ethylbenzene. |
| Aromatic[c] | 0.06 | 4% Xylene, 1% Toluene, and 1% Ethylbenzene. |

[a] Use this table only if the solvent blend does not match any of the solvent blends in Table 3 to this subpart by either solvent blend name or CAS number and you only know whether the blend is aliphatic or aromatic.

[b] Mineral Spirits 135, Mineral Spirits 150 EC, Naphtha, Mixed Hydrocarbon, Aliphatic Hydrocarbon, Aliphatic Naphtha, Naphthol Spirits, Petroleum Spirits, Petroleum Oil, Petroleum Naphtha, Solvent Naphtha, Solvent Blend.

[c] Medium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent.

### Appendix A to Subpart MMMM of Part 63—Alternative Capture Efficiency and Destruction Efficiency Measurement and Monitoring Procedures for Magnet Wire Coating Operations

1.0 Introduction.

1.1 These alternative procedures for capture efficiency and destruction efficiency measurement and monitoring are intended principally for newer magnet wire coating machines where the control device is internal and integral to the oven so that it is difficult or infeasible to make gas measurements at the inlet to the control device.

1.2 In newer gas fired magnet wire ovens with thermal control (no catalyst), the burner tube serves as the control device (thermal oxidizer) for the process. The combustion of solvents in the burner tube is the principal source of heat for the oven.

1.3 In newer magnet wire ovens with a catalyst there is either a burner tube (gas fired ovens) or a tube filled with electric heating elements (electric heated oven) before the catalyst. A large portion of the solvent is often oxidized before reaching the catalyst. The combustion of solvents in the tube and across the catalyst is the principal source of heat for the oven. The internal catalyst in these ovens cannot be accessed without disassembly of the oven. This disassembly includes removal of the oven insulation. Oven reassembly often requires the installation of new oven insulation.

1.4 Some older magnet wire ovens have external afterburners. A significant portion of the solvent is oxidized within these ovens as well.

1.5 The alternative procedure for destruction efficiency determines the organic carbon content of the volatiles entering the control device based on the quantity of coating used, the carbon content of the volatile portion of the coating and the efficiency of the capture system. The organic carbon content of the control device outlet (oven exhaust for ovens without an external afterburner) is determined using Method 25 or 25A.

1.6 When it is difficult or infeasible to make gas measurements at the inlet to the control device, measuring capture efficiency with a gas-to-gas protocol (see §63.3965(d)) which relies on direct measurement of the captured gas stream will also be difficult or infeasible. In these situations, capture efficiency measurement is more appropriately done with a procedure which does not rely on direct measurement of the captured gas stream.

1.7 Magnet wire ovens are relatively small compared to many other coating ovens. The exhaust rate from an oven is low and varies as the coating use rate and solvent loading rate change from job to job. The air balance in magnet wire ovens is critical to product quality. Magnet wire ovens must be operated under negative pressure to avoid smoke and odor in the workplace, and the exhaust rate must be sufficient to prevent over heating within the oven.

1.8 The liquid and gas measurements needed to determine capture efficiency and control device efficiency using these alternative procedures may be made simultaneously.

1.9 Magnet wire facilities may have many (e.g*.,* 20 to 70 or more) individual coating lines each with its own capture and control system. With approval, representative capture efficiency and control device efficiency testing of one magnet wire coating machine out of a group of identical or very similar magnet wire coating machines may be performed rather than testing every individual magnet wire coating machine. The operating parameters must be established for each tested magnet wire coating machine during each capture efficiency test and each control device efficiency test. The operating parameters established for each tested magnet wire coating machine also serve as the operating parameters for untested or very similar magnet wire coating machines represented by a tested magnet wire coating machine.

2.0 Capture Efficiency.

2.1 If the capture system is a permanent total enclosure as described in §63.3965(a), then its capture efficiency may be assumed to be 100 percent.

2.2 If the capture system is not a permanent total enclosure, then capture efficiency must be determined using the liquid-to-uncaptured-gas protocol using a temporary total enclosure or building enclosure in §63.3965(c), or an alternative capture efficiency protocol (see §63.3965(e)) which does not rely on direct measurement of the captured gas stream.

2.3 As an alternative to establishing and monitoring the capture efficiency operating parameters in §63.3967(f), the monitoring described in either section 2.4 or 2.5, and the monitoring described in sections 2.6 and 2.7 may be used for magnet wire coating machines.

2.4 Each magnet wire oven must be equipped with an interlock mechanism which will stop or prohibit the application of coating either when any exhaust fan for that oven is not operating or when the oven experiences an over limit temperature condition.

2.5 Each magnet wire oven must be equipped with an alarm which will be activated either when any oven exhaust fan is not operating or when the oven experiences an over limit temperature condition.

2.6 If the interlock in 2.4 or the alarm in 2.5 is monitoring for over limit temperature conditions, then the temperature(s) that will trigger the interlock or the alarm must be included in the start-up, shutdown and malfunction plan and the interlock or alarm must be set to be activated when the oven reaches that temperature.

2.7 Once every 6 months, each magnet wire oven must be checked using a smoke stick or equivalent approach to confirm that the oven is operating at negative pressure compared to the surrounding atmosphere.

3.0 Control Device Efficiency.

3.1 Determine the weight fraction carbon content of the volatile portion of each coating, thinner, additive, or cleaning material used during each test run using either the procedure in section 3.2 or 3.3.

3.2 Following the procedures in Method 204F, distill a sample of each coating, thinner, additive, or cleaning material used during each test run to separate the volatile portion. Determine the weight fraction carbon content of each distillate using ASTM Method D5291–02, “Standard Test Methods for Instrumental Determination of Carbon, Hydrogen, and Nitrogen in Petroleum Products and Lubricants” (incorporated by reference, see §63.14).

3.3 Analyze each coating, thinner, additive or cleaning material used during each test run using Method 311. For each volatile compound detected in the gas chromatographic analysis of each coating, thinner, additive, or cleaning material calculate the weight fraction of that whole compound in the coating, thinner, additive, or cleaning material. For each volatile compound detected in the gas chromatographic analysis of each coating, thinner, additive, or cleaning material calculate the weight fraction of the carbon in that compound in the coating, thinner, additive, or cleaning material. Calculate the weight fraction carbon content of each coating, thinner, additive, or cleaning material as the ratio of the sum of the carbon weight fractions divided by the sum of the whole compound weight fractions.

3.4 Determine the mass fraction of total volatile hydrocarbon ($TVH_i$) in each coating, thinner, additive, or cleaning material, i, used during each test run using Method 24. The mass fraction of total volatile hydrocarbon equals the weight fraction volatile matter ($W_v$in Method 24) minus the weight fraction water ($W_w$in Method 24), if any, present in the coating. The ASTM Method D6053–00, “Standard Test Method for Determination of Volatile Organic Compound (VOC) Content of Electrical Insulating Varnishes” (incorporated by reference, see §63.14), may be used as an alternative to Method 24 for magnet wire enamels. The specimen size for testing magnet wire enamels with ASTM Method D6053–00 must be 2.0 ±0.1 grams.

3.5 Determine the volume ($VOL_i$) or mass ($MASS_i$) of each coating, thinner, additive, or cleaning material, i, used during each test run.

3.6 Calculate the total volatile hydrocarbon input ($TVHC_{inlet}$) to the control device during each test run, as carbon, using Equation 1:

$$TVHC_{inlet} = \sum_{i=1}^{n} (TVH_i \times VOL_i \times D_i \times CD_i) \qquad (Eq.\ 1)$$

where:

$TVH_i$= Mass fraction of TVH in coating, thinner, additive, or cleaning material, i, used in the coating operation during the test run.

$VOL_i$= Volume of coating, thinner, additive, or cleaning material, i, used in the coating operation during the test run, liters.

$D_i$= Density of coating, thinner, additive, or cleaning material, i, used in the coating operation during the test run, kg per liter.

$CD_i$= Weight fraction carbon content of the distillate from coating, thinner, additive, or cleaning material, i, used in the coating operation during the test run, percent.

n = Number of coating, thinner, additive, and cleaning materials used in the coating operation during the test run.

3.7 If the mass, $MASS_i$, of each coating, solvent, additive, or cleaning material, i, used during the test run is measured directly then $MASS_i$ can be substituted for $VOL_i \times D_i$ in Equation 1 in section 3.6.

3.8 Determine the TVHC output ($TVHC_{outlet}$) from the control device, as carbon, during each test run using the methods in §63.3966(a) and the procedure for determining $M_{fo}$ in §63.3966(d). $TVHC_{outlet}$ equals $M_{fo}$ times the length of the test run in hours.

3.9 Determine the control device efficiency (DRE) for each test run using Equation 2:

$$DRE = \frac{\left(TVHC_{inlet} - TVHC_{outlet}\right)}{TVHC_{inlet}} \times 100 \qquad \text{(Eq. 2)}$$

3.10 The efficiency of the control device is the average of the three individual test run values determined in section 3.9.

3.11 As an alternative to establishing and monitoring the destruction efficiency operating parameters for catalytic oxidizers in §63.3967(b), the monitoring described in sections 3.12 and 3.13 may be used for magnet wire coating machines equipped with catalytic oxidizers.

3.12 During the performance test, you must monitor and record the temperature either just before or just after the catalyst bed at least once every 15 minutes during each of the three test runs. Use the data collected during the performance test to calculate and record the average temperature either just before or just after the catalyst bed during the performance test. This is the minimum operating limit for your catalytic oxidizer and for the catalytic oxidizers in identical or very similar magnet wire coating machines represented by the tested magnet wire coating machine.

3.13 You must develop and implement an inspection and maintenance plan for your catalytic oxidizer(s). The plan must address, at a minimum, the elements specified in sections 3.14 and 3.15, and the elements specified in either (a) section 3.16 or (b) sections 3.17 and 3.18.

3.14 You must conduct a monthly external inspection of each catalytic oxidizer system, including the burner assembly and fuel supply lines for problems and, as necessary, adjust the equipment to assure proper air-to-fuel mixtures.

3.15 You must conduct an annual internal inspection of each accessible catalyst bed to check for channeling, abrasion, and settling. If problems are found, you must replace the catalyst bed or take corrective action consistent with the manufacturer's recommendations. This provision does not apply to internal catalysts which cannot be accessed without disassembling the magnet wire oven.

3.16 You must take a sample of each catalyst bed and perform an analysis of the catalyst activity (i.e., conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures. This sampling and analysis must be done within the time period shown in Table 1 below of the most recent of the last catalyst activity test or the last catalyst replacement. For example, if the warranty for the catalyst is 3 years and the catalyst was more recently replaced then the sampling and analysis must be done within the earlier of 26,280 operating hours or 5 calendar years of the last catalyst replacement. If the warranty for the catalyst is 3 years and the catalyst was more recently tested then the sampling and analysis must be done within the earlier of 13,140 operating hours or 3 calendar years of the last catalyst activity test. If problems are found during the catalyst activity test, you must replace the catalyst bed or take corrective action consistent with the manufacturer's recommendations.

**Table 1—Catalyst Monitoring Requirements**

| If the catalyst was last (more recently) replaced and the warranty period is . . . | Then the time between catalyst replacement and the next catalyst activity test cannot exceed the earlier of . . . | And the catalyst was more recently tested, then the time between catalyst activity tests cannot exceed the earlier of . . . |
|---|---|---|
| 1 year | 8,760 operating hours or 5 calendar years | 8,760 operating hours or 3 calendar years. |
| 2 years | 15,520 operating hours or 5 calendar years | 8,760 operating hours or 3 calendar years. |
| 3 years | 26,280 operating hours or 5 calendar years | 13,100 operating hours or 3 calendar years. |
| 4 years | 35,040 operating hours or 5 calendar years | 17,520 operating hours or 3 calendar years. |
| 5 or more years | 43,800 operating hours or 5 calendar years | 21,900 operating hours or 3 calendar years. |

3.17 During the performance test, you must determine the average concentration of organic compounds as carbon in the magnet wire oven exhaust stack gases ($C_c$ in Equation 1 in §63.3966(d)) and the destruction efficiency of the catalytic oxidizer, and calculate the operating limit for oven exhaust stack gas concentration as follows. You must identify the highest organic HAP content coating used on this magnet wire coating machine or any identical or very similar magnet wire coating machines to which the same destruction efficiency test results will be applied. Calculate the percent emission reduction necessary to meet the magnet wire coating emission limit when using this coating. Calculate the average concentration of organic compounds as carbon in the magnet wire oven exhaust stack gases that would be equivalent to exactly meeting the magnet wire coating emissions limit when using the highest organic HAP content coating. The maximum operating limit for oven exhaust stack gas concentration equals 90 percent of this calculated concentration.

3.18 For each magnet wire coating machine equipped with a catalytic oxidizer you must perform an annual 10 minute test of the oven exhaust stack gases using EPA Method 25A. This test must be performed under steady state operating conditions similar to those at which the last destruction efficiency test for equipment of that type (either the specific magnet wire coating machine or an identical or very similar magnet wire coating machine) was conducted. If the average exhaust stack gas concentration during the annual test of a magnet wire coating machine equipped with a catalytic oxidizer is greater than the operating limit established in section 3.17 then that is a deviation from the operating limit for that catalytic oxidizer. If problems are found during the annual 10-minute test of the oven exhaust stack gases, you must replace the catalyst bed or take other corrective action consistent with the manufacturer's recommendations.

3.19 If a catalyst bed is replaced and the replacement catalyst is not of like or better kind and quality as the old catalyst, then you must conduct a new performance test to determine destruction efficiency according to §63.3966 and establish new operating limits for that catalytic oxidizer unless destruction efficiency test results and operating limits for an identical or very similar unit (including consideration of the replacement catalyst) are available and approved for use for the catalytic oxidizer with the replacement catalyst.

3.20 If a catalyst bed is replaced and the replacement catalyst is of like or better kind and quality as the old catalyst, then a new performance test to determine destruction efficiency is not required and you may continue to use the previously established operating limits for that catalytic oxidizer.

## Attachment B

## Goldshield Fiberglass, Inc.

## Part 70 Operating Permit Renewal

# 40 CFR 63 Subpart PPPP—National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products

**Source:** 69 FR 20990, Apr. 19, 2004, unless otherwise noted.

### What This Subpart Covers

### § 63.4480 What is the purpose of this subpart?

This subpart establishes national emission standards for hazardous air pollutants (NESHAP) for plastic parts and products surface coating facilities. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission limitations.

### § 63.4481 Am I subject to this subpart?

(a) Plastic parts and products include, but are not limited to, plastic components of the following types of products as well as the products themselves: Motor vehicle parts and accessories for automobiles, trucks, recreational vehicles; sporting and recreational goods; toys; business machines; laboratory and medical equipment; and household and other consumer products. Except as provided in paragraph (c) of this section, the source category to which this subpart applies is the surface coating of any plastic parts or products, as described in paragraph (a)(1) of this section, and it includes the subcategories listed in paragraphs (a)(2) through (5) of this section.

(1) Surface coating is the application of coating to a substrate using, for example, spray guns or dip tanks. When application of coating to a substrate occurs, then surface coating also includes associated activities, such as surface preparation, cleaning, mixing, and storage. However, these activities do not comprise surface coating if they are not directly related to the application of the coating. Coating application with handheld, non-refillable aerosol containers, touch-up markers, marking pens, or the application of paper film or plastic film which may be pre-coated with an adhesive by the manufacturer are not coating operations for the purposes of this subpart.

(2) The general use coating subcategory includes all surface coating operations that are not automotive lamp coating operations, thermoplastic olefin (TPO) coating operations, or assembled on-road vehicle coating operations.

(3) The automotive lamp coating subcategory includes the surface coating of plastic components of the body of an exterior automotive lamp including, but not limited to, headlamps, tail lamps, turn signals, and marker (clearance) lamps; typical coatings used are reflective argent coatings and clear topcoats. This subcategory does not include the coating of interior automotive lamps, such as dome lamps and instrument panel lamps.

(4) The TPO coating subcategory includes the surface coating of TPO substrates; typical coatings used are adhesion promoters, color coatings, clear coatings and topcoats. The coating of TPO substrates on fully assembled on-road vehicles is not included in the TPO coating subcategory.

(5) The assembled on-road vehicle coating subcategory includes surface coating of fully assembled motor vehicles and trailers intended for on-road use, including, but not limited to: automobiles, light-duty trucks, heavy duty trucks, and busses that have been repaired after a collision or otherwise repainted; fleet delivery trucks; and motor homes and other recreational vehicles (including camping trailers and fifth wheels). This subcategory also includes the incidental coating of parts, such as radiator grilles, that are removed from the fully assembled on-road vehicle to facilitate concurrent coating of all parts associated with the vehicle. The assembled on-road vehicle coating

subcategory does not include the surface coating of plastic parts prior to their attachment to an on-road vehicle on an original equipment manufacturer's (OEM) assembly line. The assembled on-road vehicle coating subcategory also does not include the use of adhesives, sealants, and caulks used in assembling on-road vehicles. Body fillers used to correct small surface defects and rubbing compounds used to remove surface scratches are not considered coatings subject to this subpart.

(b) You are subject to this subpart if you own or operate a new, reconstructed, or existing affected source, as defined in §63.4482, that uses 378 liters (100 gallons (gal)) per year, or more, of coatings that contain hazardous air pollutants (HAP) in the surface coating of plastic parts and products defined in paragraph (a) of this section; and that is a major source, is located at a major source, or is part of a major source of emissions of HAP. A major source of HAP emissions is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit any single HAP at a rate of 9.07 megagrams (Mg) (10 tons) or more per year or any combination of HAP at a rate of 22.68 Mg (25 tons) or more per year. You do not need to include coatings that meet the definition of non-HAP coating contained in §63.4581 in determining whether you use 378 liters (100 gallons) per year, or more, of coatings in the surface coating of plastic parts and products.

(c) This subpart does not apply to surface coating or a coating operation that meets any of the criteria of paragraphs (c)(1) through (17) of this section.

(1) A coating operation conducted at a facility where the facility uses only coatings, thinners and other additives, and cleaning materials that contain no organic HAP, as determined according to §63.3941(a).

(2) Surface coating operations that occur at research or laboratory facilities, or is part of janitorial, building, and facility maintenance operations, or that occur at hobby shops that are operated for noncommercial purposes.

(3) The surface coating of plastic parts and products performed on-site at installations owned or operated by the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State) or the National Aeronautics and Space Administration, or the surface coating of military munitions manufactured by or for the Armed Forces of the United States (including the Coast Guard and the National Guard of any such State).

(4) Surface coating where plastic is extruded onto plastic parts or products to form a coating.

(5) Surface coating of magnet wire.

(6) In-mold coating operations or gel coating operations in the manufacture of reinforced plastic composite parts that meet the applicability criteria for reinforced plastics composites production (subpart WWWW of this part).

(7) Surface coating of plastic components of wood furniture that meet the applicability criteria for wood furniture manufacturing (subpart JJ of this part).

(8) Surface coating of plastic components of large appliances that meet the applicability criteria for large appliance surface coating (subpart NNNN of this part).

(9) Surface coating of plastic components of metal furniture that meet the applicability criteria for metal furniture surface coating (subpart RRRR of this part).

(10) Surface coating of plastic components of wood building products that meet the applicability criteria for wood building products surface coating (subpart QQQQ of this part).

(11) Surface coating of plastic components of aerospace vehicles that meet the applicability criteria for aerospace manufacturing and rework (40 CFR part 63, subpart GG).

(12) Surface coating of plastic parts intended for use in an aerospace vehicle or component using specialty coatings as defined in appendix A to subpart GG of this part.

(13) Surface coating of plastic components of ships that meet the applicability criteria for shipbuilding and ship repair (subpart II of this part).

(14) Surface coating of plastic using a web coating process that meets the applicability criteria for paper and other web coating (subpart JJJJ of this part).

(15) Surface coating of fiberglass boats or parts of fiberglass boats (including, but not limited to, the use of assembly adhesives) where the facility meets the applicability criteria for boat manufacturing (subpart VVVV of this part), except where the surface coating of the boat is a post-mold coating operation performed on personal watercraft or parts of personal watercraft. This subpart does apply to post-mold coating operations performed on personal watercraft and parts of personal watercraft.

(16) Surface coating of plastic components of automobiles and light-duty trucks that meet the applicability criteria in §63.3082(b) of the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) at a facility that meets the applicability criteria in §63.3081(b).

(17) Screen printing.

(d) If your facility meets the applicability criteria in §63.3081(b) of the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) and you perform surface coating of plastic parts or products that meets both the applicability criteria in §63.3082(c) and the applicability criteria of this subpart, then for the surface coating of any or all of your plastic parts or products that meets the applicability criteria in §63.3082(c), you may choose to comply with the requirements of subpart IIII of this part in lieu of complying with this subpart. Surface coating operations on plastic parts or products (e.g., parts for motorcycles or lawnmowers) not intended for use in automobiles, light-duty trucks, or other motor vehicles as defined in §63.3176 cannot be made part of your affected source under subpart IIII of this part.

(e) If you own or operate an affected source that meets the applicability criteria of this subpart and at the same facility you also perform surface coating that meets the applicability criteria of any other final surface coating NESHAP in this part, you may choose to comply as specified in paragraph (e)(1), (2), or (3) of this section.

(1) You may have each surface coating operation that meets the applicability criteria of a separate NESHAP comply with that NESHAP separately.

(2) You may comply with the emission limitation representing the predominant surface coating activity at your facility, as determined according to paragraphs (e)(2)(i) and (ii) of this section. However, you may not establish assembled on-road vehicle or automotive lamp coating operations as the predominant activity. You must not consider any surface coating activity that is subject to the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) in determining the predominant surface coating activity at your facility.

(i) If a surface coating operation accounts for 90 percent or more of the surface coating activity at your facility (that is, the predominant activity), then compliance with the emission limitations of the predominant activity for all surface coating operations constitutes compliance with these and other applicable surface coating NESHAP. In determining predominant activity, you must include coating activities that meet the applicability criteria of other surface coating NESHAP and constitute more than 1 percent of total coating activities at your facility. Coating activities that meet the applicability criteria of other surface coating NESHAP but comprise less than 1 percent of coating activities need not be included in the determination of predominant activity but must be included in the compliance calculation.

(ii) You must use kilogram (kg) (pound (lb)) of solids used as a measure of relative surface coating activity over a representative period of operation. You may estimate the relative mass of coating solids used from parameters other than coating consumption and mass solids content ( *e.g.,* design specifications for the parts or products coated and the number of items produced). The determination of predominant activity must accurately reflect current and projected coating operations and must be verifiable through appropriate documentation. The use of parameters other than coating consumption and mass solids content must be approved by the Administrator. You may use data for any reasonable time period of at least 1 year in determining the relative amount of coating activity, as long as they represent the way the source will continue to operate in the future and are approved by the Administrator. You must determine the predominant activity at your facility and submit the results of that determination with the initial notification required by §63.4510(b). You must also determine predominant activity annually and include the determination in the next semi-annual compliance report required by §63.4520(a).

(3) You may comply with a facility-specific emission limit calculated from the relative amount of coating activity that is subject to each emission limit. If you elect to comply using the facility-specific emission limit alternative, then compliance with the facility-specific emission limit and the emission limitations in this subpart for all surface coating operations constitutes compliance with this subpart and other applicable surface coating NESHAP. The procedures for calculating the facility-specific emission limit are specified in §63.4490. In calculating a facility-specific emission limit, you must include coating activities that meet the applicability criteria of other surface coating NESHAP and constitute more than 1 percent of total coating activities at your facility. You must not consider any surface coating activity that is subject to the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (40 CFR part 63, subpart IIII) in determining a facility-specific emission limit for your facility. Coating activities that meet the applicability criteria of other surface coating NESHAP but comprise less than 1 percent of total coating activities need not be included in the calculation of the facility-specific emission limit but must be included in the compliance calculations.

[69 FR 20990, Apr. 19, 2004, as amended at 69 FR 22660, April 26, 2004; 71 FR 76927, Dec. 22, 2006; 72 FR 20237, Apr. 24, 2007]

## § 63.4482 What parts of my plant does this subpart cover?

(a) This subpart applies to each new, reconstructed, and existing affected source within each of the four subcategories listed in §63.4481(a).

(b) The affected source is the collection of all of the items listed in paragraphs (b)(1) through (4) of this section that are used for surface coating of plastic parts and products within each subcategory.

(1) All coating operations as defined in §63.4581;

(2) All storage containers and mixing vessels in which coatings, thinners and/or other additives, and cleaning materials are stored or mixed;

(3) All manual and automated equipment and containers used for conveying coatings, thinners and/or other additives, and cleaning materials; and

(4) All storage containers and all manual and automated equipment and containers used for conveying waste materials generated by a coating operation.

(c) An affected source is a new source if it meets the criteria in paragraph (c)(1) of this section and the criteria in either paragraph (c)(2) or (3) of this section.

(1) You commenced the construction of the source after December 4, 2002 by installing new coating equipment.

(2) The new coating equipment is used to coat plastic parts and products at a source where no plastic parts surface coating was previously performed.

(3) The new coating equipment is used to perform plastic parts and products coating in a subcategory that was not previously performed.

(d) An affected source is reconstructed if you meet the criteria as defined in §63.2.

(e) An affected source is existing if it is not new or reconstructed.

## § 63.4483 When do I have to comply with this subpart?

The date by which you must comply with this subpart is called the compliance date. The compliance date for each type of affected source is specified in paragraphs (a) through (c) of this section. The compliance date begins the initial compliance period during which you conduct the initial compliance demonstration described in §§63.4540, 63.4550, and 63.4560.

(a) For a new or reconstructed affected source, the compliance date is the applicable date in paragraph (a)(1) or (2) of this section:

(1) If the initial startup of your new or reconstructed affected source is before April 19, 2004, the compliance date is April 19, 2004.

(2) If the initial startup of your new or reconstructed affected source occurs after April 19, 2004, the compliance date is the date of initial startup of your affected source.

(b) For an existing affected source, the compliance date is the date 3 years after April 19, 2004.

(c) For an area source that increases its emissions or its potential to emit such that it becomes a major source of HAP emissions, the compliance date is specified in paragraphs (c)(1) and (2) of this section.

(1) For any portion of the source that becomes a new or reconstructed affected source subject to this subpart, the compliance date is the date of initial startup of the affected source or April 19, 2004, whichever is later.

(2) For any portion of the source that becomes an existing affected source subject to this subpart, the compliance date is the date 1 year after the area source becomes a major source or 3 years after April 19, 2004, whichever is later.

(d) You must meet the notification requirements in §63.4510 according to the dates specified in that section and in subpart A of this part. Some of the notifications must be submitted before the compliance dates described in paragraphs (a) through (c) of this section.

## Emission Limitations

### § 63.4490 What emission limits must I meet?

(a) For a new or reconstructed affected source, you must limit organic HAP emissions to the atmosphere from the affected source to the applicable limit specified in paragraphs (a)(1) through (4) of this section, except as specified in paragraph (c) of this section, determined according to the requirements in §63.4541, §63.4551, or §63.4561.

(1) For each new general use coating affected source, limit organic HAP emissions to no more than 0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(2) For each new automotive lamp coating affected source, limit organic HAP emissions to no more than 0.26 kg (0.26 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(3) For each new TPO coating affected source, limit organic HAP emissions to no more than 0.22 kg (0.22 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(4) For each new assembled on-road vehicle coating affected source, limit organic HAP emissions to no more than 1.34 kg (1.34 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(b) For an existing affected source, you must limit organic HAP emissions to the atmosphere from the affected source to the applicable limit specified in paragraphs (b)(1) through (4) of this section, except as specified in paragraph (c) of this section, determined according to the requirements in §63.4541, §63.4551, or §63.4561.

(1) For each existing general use coating affected source, limit organic HAP emissions to no more than 0.16 kg (0.16 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(2) For each existing automotive lamp coating affected source, limit organic HAP emissions to no more than 0.45 kg (0.45 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(3) For each existing TPO coating affected source, limit organic HAP emissions to no more than 0.26 kg (0.26 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(4) For each existing assembled on-road vehicle coating affected source, limit organic HAP emissions to no more than 1.34 kg (1.34 lb) organic HAP emitted per kg (lb) coating solids used during each 12-month compliance period.

(c) If your facility's surface coating operations meet the applicability criteria of more than one of the subcategory emission limits specified in paragraphs (a) or (b) of this section, you may comply separately with each subcategory emission limit or comply using one of the alternatives in paragraph (c)(1) or (2) of this section.

(1) If the general use or TPO surface coating operations subject to only one of the emission limits specified in paragraphs (a)(1), (a)(3), (b)(1), or (b)(3) of this section account for 90 percent or more of the surface coating activity at your facility ( *i.e.,* it is the predominant activity at your facility), then compliance with that emission limitation for all surface coating operations constitutes compliance with the other applicable emission limitations. You must use kg (lb) of solids used as a measure of relative surface coating activity over a representative period of operation. You may estimate the relative mass of coating solids used from parameters other than coating consumption and mass solids content ( *e.g.,* design specifications for the parts or products coated and the number of items produced). The determination of predominant activity must accurately reflect current and projected coating operations and must be verifiable through appropriate documentation. The use of parameters other than coating consumption and mass solids content must be approved by the Administrator. You may use data for any reasonable time period of at least 1 year in determining the relative amount of coating activity, as long as they represent the way the source will continue to operate in the future and are approved by the Administrator. You must determine the predominant activity at your facility and submit the results of that determination with the initial notification required by §63.4510(b). Additionally, you must determine the facility's predominant activity annually and include the determination in the next semi-annual compliance report required by §63.4520(a).

(2) You may calculate and comply with a facility-specific emission limit as described in paragraphs (c)(2)(i) through (iii) of this section. If you elect to comply using the facility-specific emission limit alternative, then compliance with the facility-specific emission limit and the emission limitations in this subpart for all surface coating operations constitutes compliance with this and other applicable surface coating NESHAP. In calculating a facility-specific emission limit, you must include coating activities that meet the applicability criteria of the other subcategories and constitute more than 1 percent of total coating activities. Coating activities that meet the applicability criteria of other surface coating NESHAP but comprise less than 1 percent of coating activities need not be included in the determination of predominant activity but must be included in the compliance calculation.

(i) You are required to calculate the facility-specific emission limit for your facility when you submit the notification of compliance status required in §63.4510(c), and on a monthly basis afterward using the coating data for the relevant 12-month compliance period.

(ii) Use Equation 1 of this section to calculate the facility-specific emission limit for your surface coating operations for each 12-month compliance period.

$$Facility-Specific\ \text{Emission Limit}=\frac{\sum_{i=1}^{n}(\text{Limit}_i)(Solids_i)}{\sum_{i=1}^{n}(Solids_i)} \qquad (Eq.\ 1)$$

Where:

Facility-specific emission limit = Facility-specific emission limit for each 12-month compliance period, kg (lb) organic HAP per kg (lb) coating solids used.

$\text{Limit}_i$= The new source or existing source emission limit applicable to coating operation, i, included in the facility-specific emission limit, converted to kg (lb) organic HAP per kg (lb) coating solids used, if the emission limit is not already in those units. All emission limits included in the facility-specific emission limit must be in the same units.

$\text{Solids}_i$= The kg (lb) of solids used in coating operation, i, in the 12-month compliance period that is subject to emission limit, i. You may estimate the mass of coating solids used from parameters other than coating consumption and mass solids content ( *e.g.,* design specifications for the parts or products coated and the number of items produced). The use of parameters other than coating consumption and mass solids content must be approved by the Administrator.

n = The number of different coating operations included in the facility-specific emission limit.

(iii) If you need to convert an emission limit in another surface coating NESHAP from kg (lb) organic HAP per liter (gallon) coating solids used to kg (lb) organic HAP per kg (lb) coating solids used, you must use the default solids density of 1.50 kg solids per liter coating solids (12.5 lb solids per gal solids).

### § 63.4491 What are my options for meeting the emission limits?

You must include all coatings (as defined in §63.4581), thinners and/or other additives, and cleaning materials used in the affected source when determining whether the organic HAP emission rate is equal to or less than the applicable emission limit in §63.4490. To make this determination, you must use at least one of the three compliance options listed in paragraphs (a) through (c) of this section. You may apply any of the compliance options to an individual coating operation, or to multiple coating operations as a group, or to the entire affected source. You may use different compliance options for different coating operations, or at different times on the same coating operation. You may employ different compliance options when different coatings are applied to the same part, or when the same coating is applied to different parts. However, you may not use different compliance options at the same time on the same coating operation. If you switch between compliance options for any coating operation or group of coating operations, you must document this switch as required by §63.4530(c), and you must report it in the next semiannual compliance report required in §63.4520.

(a) *Compliant material option.* Demonstrate that the organic HAP content of each coating used in the coating operation(s) is less than or equal to the applicable emission limit in §63.4490, and that each thinner and/or other additive, and cleaning material used contains no organic HAP. You must meet all the requirements of §§63.4540, 63.4541, and 63.4542 to demonstrate compliance with the applicable emission limit using this option.

(b) *Emission rate without add-on controls option.* Demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in §63.4490, calculated as a rolling 12-month emission rate and determined on a monthly basis. You must meet all the requirements of §§63.4550, 63.4551, and 63.4552 to demonstrate compliance with the emission limit using this option.

(c) *Emission rate with add-on controls option.* Demonstrate that, based on the coatings, thinners and/or other additives, and cleaning materials used in the coating operation(s), and the emissions reductions achieved by emission capture systems and add-on controls, the organic HAP emission rate for the coating operation(s) is less than or equal to the applicable emission limit in §63.4490, calculated as a rolling 12-month emission rate and determined on a monthly basis. If you use this compliance option, you must also demonstrate that all emission capture systems and add-on control devices for the coating operation(s) meet the operating limits required in §63.4492, except for solvent recovery systems for which you conduct liquid-liquid material balances according to §63.4561(j), and that you meet the work practice standards required in §63.4493. You must meet all the requirements of §§63.4560 through 63.4568 to demonstrate compliance with the emission limits, operating limits, and work practice standards using this option.

## § 63.4492 What operating limits must I meet?

(a) For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any operating limits.

(b) For any controlled coating operation(s) on which you use the emission rate with add-on controls option, except those for which you use a solvent recovery system and conduct a liquid-liquid material balance according to §63.4561(j), you must meet the operating limits specified in Table 1 to this subpart. These operating limits apply to the emission capture and control systems on the coating operation(s) for which you use this option, and you must establish the operating limits during the performance test according to the requirements in §63.4567. You must meet the operating limits at all times after you establish them.

(c) If you use an add-on control device other than those listed in Table 1 to this subpart, or wish to monitor an alternative parameter and comply with a different operating limit, you must apply to the Administrator for approval of alternative monitoring under §63.8(f).

## § 63.4493 What work practice standards must I meet?

(a) For any coating operation(s) on which you use the compliant material option or the emission rate without add-on controls option, you are not required to meet any work practice standards.

(b) If you use the emission rate with add-on controls option, you must develop and implement a work practice plan to minimize organic HAP emissions from the storage, mixing, and conveying of coatings, thinners and/or other additives, and cleaning materials used in, and waste materials generated by the controlled coating operation(s) for which you use this option; or you must meet an alternative standard as provided in paragraph (c) of this section. The plan must specify practices and procedures to ensure that, at a minimum, the elements specified in paragraphs (b)(1) through (5) of this section are implemented.

(1) All organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be stored in closed containers.

(2) Spills of organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be minimized.

(3) Organic-HAP-containing coatings, thinners and/or other additives, cleaning materials, and waste materials must be conveyed from one location to another in closed containers or pipes.

(4) Mixing vessels which contain organic-HAP-containing coatings and other materials must be closed except when adding to, removing, or mixing the contents.

(5) Emissions of organic HAP must be minimized during cleaning of storage, mixing, and conveying equipment.

(c) As provided in §63.6(g), we, the U.S. Environmental Protection Agency, may choose to grant you permission to use an alternative to the work practice standards in this section.

## General Compliance Requirements

## § 63.4500 What are my general requirements for complying with this subpart?

(a) You must be in compliance with the emission limitations in this subpart as specified in paragraphs (a)(1) and (2) of this section.

(1) Any coating operation(s) for which you use the compliant material option or the emission rate without add-on controls option, as specified in §63.4491(a) and (b), must be in compliance with the applicable emission limit in §63.4490 at all times.

(2) Any coating operation(s) for which you use the emission rate with add-on controls option, as specified in §63.4491(c), must be in compliance with the emission limitations as specified in paragraphs (a)(2)(i) through (iii) of this section.

(i) The coating operation(s) must be in compliance with the applicable emission limit in §63.4490 at all times except during periods of startup, shutdown, and malfunction.

(ii) The coating operation(s) must be in compliance with the operating limits for emission capture systems and add-on control devices required by §63.4492 at all times except during periods of startup, shutdown, and malfunction, and except for solvent recovery systems for which you conduct liquid-liquid material balances according to §63.4561(j).

(iii) The coating operation(s) must be in compliance with the work practice standards in §63.4493 at all times.

(b) You must always operate and maintain your affected source, including all air pollution control and monitoring equipment you use for purposes of complying with this subpart, according to the provisions in §63.6(e)(1)(i).

(c) If your affected source uses an emission capture system and add-on control device, you must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3). The plan must address the startup, shutdown, and corrective actions in the event of a malfunction of the emission capture system or the add-on control device. The plan must also address any coating operation equipment that may cause increased emissions or that would affect capture efficiency if the process equipment malfunctions, such as conveyors that move parts among enclosures.

[69 FR 20990, Apr. 19, 2004, as amended at 71 FR 20465, Apr. 20, 2006]

## § 63.4501 What parts of the General Provisions apply to me?

Table 2 to this subpart shows which parts of the General Provisions in §§63.1 through 63.15 apply to you.

## Notifications, Reports, and Records

## § 63.4510 What notifications must I submit?

(a) *General.* You must submit the notifications in §§63.7(b) and (c), 63.8(f)(4), and 63.9(b) through (e) and (h) that apply to you by the dates specified in those sections, except as provided in paragraphs (b) and (c) of this section.

(b) *Initial notification.* You must submit the initial notification required by §63.9(b) for a new or reconstructed affected source no later than 120 days after initial startup or 120 days after April 19, 2004, whichever is later. For an existing affected source, you must submit the initial notification no later than 1 year after April 19, 2004. If you are using compliance with the Surface Coating of Automobiles and Light-Duty Trucks NESHAP (subpart IIII of this part) as provided for under §63.4481(d) to constitute compliance with this subpart for any or all of your plastic parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those plastic parts coating operations. If you are complying with another NESHAP that constitutes the predominant activity at your facility under §63.4481(e)(2) to constitute compliance with this subpart for your plastic parts coating operations, then you must include a statement to this effect in your initial notification, and no other notifications are required under this subpart in regard to those plastic parts coating operations.

(c) *Notification of compliance status.* You must submit the notification of compliance status required by §63.9(h) no later than 30 calendar days following the end of the initial compliance period described in §63.4540, §63.4550, or §63.4560 that applies to your affected source. The notification of compliance status must contain the information specified in paragraphs (c)(1) through (11) of this section and in §63.9(h).

(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. The reporting period is the initial compliance period described in §63.4540, §63.4550, or §63.4560 that applies to your affected source.

(4) Identification of the compliance option or options specified in §63.4491 that you used on each coating operation in the affected source during the initial compliance period.

(5) Statement of whether or not the affected source achieved the emission limitations for the initial compliance period.

(6) If you had a deviation, include the information in paragraphs (c)(6)(i) and (ii) of this section.

(i) A description and statement of the cause of the deviation.

(ii) If you failed to meet the applicable emission limit in §63.4490, include all the calculations you used to determine the kg (lb) organic HAP emitted per kg (lb) coating solids used. You do not need to submit information provided by the materials' suppliers or manufacturers, or test reports.

(7) For each of the data items listed in paragraphs (c)(7)(i) through (iv) of this section that is required by the compliance option(s) you used to demonstrate compliance with the emission limit, include an example of how you determined the value, including calculations and supporting data. Supporting data may include a copy of the information provided by the supplier or manufacturer of the example coating or material, or a summary of the results of testing conducted according to §63.4541(a), (b), or (c). You do not need to submit copies of any test reports.

(i) Mass fraction of organic HAP for one coating, for one thinner and/or other additive, and for one cleaning material.

(ii) Mass fraction of coating solids for one coating.

(iii) Density for one coating, one thinner and/or other additive, and one cleaning material, except that if you use the compliant material option, only the example coating density is required.

(iv) The amount of waste materials and the mass of organic HAP contained in the waste materials for which you are claiming an allowance in Equation 1 of §63.4551.

(8) The calculation of kg (lb) organic HAP emitted per kg (lb) coating solids used for the compliance option(s) you used, as specified in paragraphs (c)(8)(i) through (iii) of this section.

(i) For the compliant material option, provide an example calculation of the organic HAP content for one coating, using Equation 1 of §63.4541.

(ii) For the emission rate without add-on controls option, provide the calculation of the total mass of organic HAP emissions for each month; the calculation of the total mass of coating solids used each month; and the calculation of the 12-month organic HAP emission rate using Equations 1 and 1A through 1C, 2, and 3, respectively, of §63.4551.

(iii) For the emission rate with add-on controls option, provide the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month, using Equations 1 and 1A through 1C of §63.4551; the calculation of the total mass of coating solids used each month using Equation 2 of §63.4551; the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of §63.4561 and Equations 2, 3, and 3A through 3C of §63.4561, as applicable; the calculation of the total mass of organic HAP emissions each month using Equation 4 of §63.4561; and the calculation of the 12-month organic HAP emission rate using Equation 5 of §63.4561.

(9) For the emission rate with add-on controls option, you must include the information specified in paragraphs (c)(9)(i) through (iv) of this section, except that the requirements in paragraphs (c)(9)(i) through (iii) of this section do not apply to solvent recovery systems for which you conduct liquid-liquid material balances according to §63.4561(j).

(i) For each emission capture system, a summary of the data and copies of the calculations supporting the determination that the emission capture system is a permanent total enclosure (PTE) or a measurement of the emission capture system efficiency. Include a description of the protocol followed for measuring capture efficiency, summaries of any capture efficiency tests conducted, and any calculations supporting the capture efficiency determination. If you use the data quality objective (DQO) or lower confidence limit (LCL) approach, you must also include the statistical calculations to show you meet the DQO or LCL criteria in appendix A to subpart KK of this part. You do not need to submit complete test reports.

(ii) A summary of the results of each add-on control device performance test. You do not need to submit complete test reports.

(iii) A list of each emission capture system's and add-on control device's operating limits and a summary of the data used to calculate those limits.

(iv) A statement of whether or not you developed and implemented the work practice plan required by §63.4493.

(10) If you are complying with a single emission limit representing the predominant activity under §63.4490(c)(1), include the calculations and supporting information used to demonstrate that this emission limit represents the predominant activity as specified in §63.4490(c)(1).

(11) If you are complying with a facility-specific emission limit under §63.4490(c)(2), include the calculation of the facility-specific emission limit and any supporting information as specified in §63.4490(c)(2).

[69 FR 20990, Apr. 19, 2004, as amended at 69 FR 22661, Apr. 26, 2004]

## § 63.4520 What reports must I submit?

(a) *Semiannual compliance reports.* You must submit semiannual compliance reports for each affected source according to the requirements of paragraphs (a)(1) through (7) of this section. The semiannual compliance reporting requirements may be satisfied by reports required under other parts of the Clean Air Act (CAA), as specified in paragraph (a)(2) of this section.

(1) *Dates.* Unless the Administrator has approved or agreed to a different schedule for submission of reports under §63.10(a), you must prepare and submit each semiannual compliance report according to the dates specified in paragraphs (a)(1)(i) through (iv) of this section. Note that the information reported for each of the months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

(i) The first semiannual compliance report must cover the first semiannual reporting period which begins the day after the end of the initial compliance period described in §63.4540, §63.4550, or §63.4560 that applies to your affected source and ends on June 30 or December 31, whichever date is the first date following the end of the initial compliance period.

(ii) Each subsequent semiannual compliance report must cover the subsequent semiannual reporting period from January 1 through June 30 or the semiannual reporting period from July 1 through December 31.

(iii) Each semiannual 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.

(iv) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 40 CFR part 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 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 date specified in paragraph (a)(1)(iii) of this section.

(2) *Inclusion with title V report.* Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 40 CFR part 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A). If an affected source submits a semiannual compliance report pursuant to this section along with, or as part of, the semiannual monitoring report required by 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 71.6(a)(3)(iii)(A), and the semiannual compliance report includes all required information concerning deviations from any emission limitation in this subpart, its submission will be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a semiannual compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority.

(3) *General requirements.* The semiannual compliance report must contain the information specified in paragraphs (a)(3)(i) through (vii) of this section, and the information specified in paragraphs (a)(4) through (7) and (c)(1) of this section that is applicable to your affected source.

(i) Company name and address.

(ii) 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.

(iii) Date of report and beginning and ending dates of the reporting period. The reporting period is the 6-month period ending on June 30 or December 31. Note that the information reported for each of the 6 months in the reporting period will be based on the last 12 months of data prior to the date of each monthly calculation.

(iv) Identification of the compliance option or options specified in §63.4491 that you used on each coating operation during the reporting period. If you switched between compliance options during the reporting period, you must report the beginning and ending dates for each option you used.

(v) If you used the emission rate without add-on controls or the emission rate with add-on controls compliance option (§63.4491(b) or (c)), the calculation results for each rolling 12-month organic HAP emission rate during the 6-month reporting period.

(vi) If you used the predominant activity alternative (§63.4490(c)(1)), include the annual determination of predominant activity if it was not included in the previous semi-annual compliance report.

(vii) If you used the facility-specific emission limit alternative (§63.4490(c)(2)), include the calculation of the facility-specific emission limit for each 12-month compliance period during the 6-month reporting period.

(4) *No deviations.* If there were no deviations from the emission limitations in §§63.4490, 63.4492, and 63.4493 that apply to you, the semiannual compliance report must include a statement that there were no deviations from the emission limitations during the reporting period. If you used the emission rate with add-on controls option and there were no periods during which the continuous parameter monitoring systems (CPMS) were out-of-control as specified in §63.8(c)(7), the semiannual compliance report must include a statement that there were no periods during which the CPMS were out-of-control during the reporting period.

(5) *Deviations: Compliant material option.* If you used the compliant material option and there was a deviation from the applicable organic HAP content requirements in §63.4490, the semiannual compliance report must contain the information in paragraphs (a)(5)(i) through (iv) of this section.

(i) Identification of each coating used that deviated from the applicable emission limit, and each thinner and/or other additive, and cleaning material used that contained organic HAP, and the dates and time periods each was used.

(ii) The calculation of the organic HAP content (using Equation 1 of §63.4541) for each coating identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation ( *e.g.,* information provided by coating suppliers or manufacturers, or test reports).

(iii) The determination of mass fraction of organic HAP for each thinner and/or other additive, and cleaning material identified in paragraph (a)(5)(i) of this section. You do not need to submit background data supporting this calculation ( *e.g.,* information provided by material suppliers or manufacturers, or test reports).

(iv) A statement of the cause of each deviation.

(6) *Deviations: Emission rate without add-on controls option.* If you used the emission rate without add-on controls option and there was a deviation from the applicable emission limit in §63.4490, the semiannual compliance report must contain the information in paragraphs (a)(6)(i) through (iii) of this section.

(i) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in §63.4490.

(ii) The calculations used to determine the 12-month organic HAP emission rate for the compliance period in which the deviation occurred. You must submit the calculations for Equations 1, 1A through 1C, 2, and 3 of §63.4551; and if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.4551(e)(4). You do not need to submit background data supporting these calculations ( *e.g.,* information provided by materials suppliers or manufacturers, or test reports).

(iii) A statement of the cause of each deviation.

(7) *Deviations: Emission rate with add-on controls option.* If you used the emission rate with add-on controls option and there was a deviation from an emission limitation (including any periods when emissions bypassed the add-on control device and were diverted to the atmosphere), the semiannual compliance report must contain the information in paragraphs (a)(7)(i) through (xiv) of this section. This includes periods of startup, shutdown, and malfunction during which deviations occurred.

(i) The beginning and ending dates of each compliance period during which the 12-month organic HAP emission rate exceeded the applicable emission limit in §63.4490.

(ii) The calculations used to determine the 12-month organic HAP emission rate for each compliance period in which a deviation occurred. You must provide the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1 and 1A through 1C of §63.4551; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.4551(e)(4); the calculation of the total mass of coating solids used each month using Equation 2 of §63.4551; the calculation of the mass of organic HAP emission reduction each month by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of §63.4561, and Equations 2, 3, and 3A through 3C of §63.4561, as applicable; the calculation of the total mass of organic HAP emissions each month using Equation 4 of §63.4561; and the calculation of the 12-month organic HAP emission rate using Equation 5 of §63.4561. You do not need to submit the background data supporting these calculations ( *e.g.,* information provided by materials suppliers or manufacturers, or test reports).

(iii) The date and time that each malfunction started and stopped.

(iv) A brief description of the CPMS.

(v) The date of the latest CPMS certification or audit.

(vi) The date and time that each CPMS was inoperative, except for zero (low-level) and high-level checks.

(vii) The date, time, and duration that each CPMS was out-of-control, including the information in §63.8(c)(8).

(viii) The date and time period of each deviation from an operating limit in Table 1 to this subpart; date and time period of any bypass of the add-on control device; and whether each deviation occurred during a period of startup, shutdown, or malfunction or during another period.

(ix) A summary of the total duration of each deviation from an operating limit in Table 1 to this subpart and each bypass of the add-on control device during the semiannual reporting period, and the total duration as a percent of the total source operating time during that semiannual reporting period.

(x) A breakdown of the total duration of the deviations from the operating limits in Table 1 of this subpart and bypasses of the add-on control device during the semiannual reporting period into those that were due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(xi) A summary of the total duration of CPMS downtime during the semiannual reporting period and the total duration of CPMS downtime as a percent of the total source operating time during that semiannual reporting period.

(xii) A description of any changes in the CPMS, coating operation, emission capture system, or add-on control device since the last semiannual reporting period.

(xiii) For each deviation from the work practice standards, a description of the deviation, the date and time period of the deviation, and the actions you took to correct the deviation.

(xiv) A statement of the cause of each deviation.

(b) *Performance test reports.* If you use the emission rate with add-on controls option, you must submit reports of performance test results for emission capture systems and add-on control devices no later than 60 days after completing the tests as specified in §63.10(d)(2).

(c) *Startup, shutdown, malfunction reports.* If you used the emission rate with add-on controls option and you had a startup, shutdown, or malfunction during the semiannual reporting period, you must submit the reports specified in paragraphs (c)(1) and (2) of this section.

(1) If your actions were consistent with your startup, shutdown, and malfunction plan, you must include the information specified in §63.10(d) in the semiannual compliance report required by paragraph (a) of this section.

(2) If your actions were not consistent with your startup, shutdown, and malfunction plan, you must submit an immediate startup, shutdown, and malfunction report as described in paragraphs (c)(2)(i) and (ii) of this section.

(i) You must describe the actions taken during the event in a report delivered by facsimile, telephone, or other means to the Administrator within 2 working days after starting actions that are inconsistent with the plan.

(ii) You must submit a letter to the Administrator within 7 working days after the end of the event, unless you have made alternative arrangements with the Administrator as specified in §63.10(d)(5)(ii). The letter must contain the information specified in §63.10(d)(5)(ii).

## § 63.4530 What records must I keep?

You must collect and keep records of the data and information specified in this section. Failure to collect and keep these records is a deviation from the applicable standard.

(a) A copy of each notification and report that you submitted to comply with this subpart, and the documentation supporting each notification and report. If you are using the predominant activity alternative under §63.4490(c), you must keep records of the data and calculations used to determine the predominant activity. If you are using the facility-specific emission limit alternative under §63.4490(c), you must keep records of the data used to calculate the facility-specific emission limit for the initial compliance demonstration. You must also keep records of any data used in each annual predominant activity determination and in the calculation of the facility-specific emission limit for each 12-month compliance period included in the semi-annual compliance reports.

(b) A current copy of information provided by materials suppliers or manufacturers, such as manufacturer's formulation data, or test data used to determine the mass fraction of organic HAP and density for each coating, thinner and/or other additive, and cleaning material, and the mass fraction of coating solids for each coating. If you conducted testing to determine mass fraction of organic HAP, density, or mass fraction of coating solids, you must keep a copy of the complete test report. If you use information provided to you by the manufacturer or supplier of the material that was based on testing, you must keep the summary sheet of results provided to you by the manufacturer or supplier. You are not required to obtain the test report or other supporting documentation from the manufacturer or supplier.

(c) For each compliance period, the records specified in paragraphs (c)(1) through (4) of this section.

(1) A record of the coating operations on which you used each compliance option and the time periods (beginning and ending dates and times) for each option you used.

(2) For the compliant material option, a record of the calculation of the organic HAP content for each coating, using Equation 1 of §63.4541.

(3) For the emission rate without add-on controls option, a record of the calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1, 1A through 1C, and 2 of §63.4551 and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.4551(e)(4); the calculation of the total mass of coating solids used each month using Equation 2 of §63.4551; and the calculation of each 12-month organic HAP emission rate using Equation 3 of §63.4551.

(4) For the emission rate with add-on controls option, records of the calculations specified in paragraphs (c)(4)(i) through (v) of this section.

(i) The calculation of the total mass of organic HAP emissions for the coatings, thinners and/or other additives, and cleaning materials used each month using Equations 1 and 1A through 1C of §63.4551; and, if applicable, the calculation used to determine mass of organic HAP in waste materials according to §63.4551(e)(4);

(ii) The calculation of the total mass of coating solids used each month using Equation 2 of §63.4551;

(iii) The calculation of the mass of organic HAP emission reduction by emission capture systems and add-on control devices using Equations 1 and 1A through 1D of §63.4561 and Equations 2, 3, and 3A through 3C of §63.4561, as applicable;

(iv) The calculation of each month's organic HAP emission rate using Equation 4 of §63.4561; and

(v) The calculation of each 12-month organic HAP emission rate using Equation 5 of §63.4561.

(d) A record of the name and mass of each coating, thinner and/or other additive, and cleaning material used during each compliance period. If you are using the compliant material option for all coatings at the source, you may maintain purchase records for each material used rather than a record of the mass used.

(e) A record of the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each compliance period.

(f) A record of the mass fraction of coating solids for each coating used during each compliance period.

(g) If you use an allowance in Equation 1 of §63.4551 for organic HAP contained in waste materials sent to or designated for shipment to a treatment, storage, and disposal facility (TSDF) according to §63.4551(e)(4), you must keep records of the information specified in paragraphs (g)(1) through (3) of this section.

(1) The name and address of each TSDF to which you sent waste materials for which you use an allowance in Equation 1 of §63.4551, a statement of which subparts under 40 CFR parts 262, 264, 265, and 266 apply to the facility; and the date of each shipment.

(2) Identification of the coating operations producing waste materials included in each shipment and the month or months in which you used the allowance for these materials in Equation 1 of §63.4551.

(3) The methodology used in accordance with §63.4551(e)(4) to determine the total amount of waste materials sent to or the amount collected, stored, and designated for transport to a TSDF each month; and the methodology to determine the mass of organic HAP contained in these waste materials. This must include the sources for all data used in the determination, methods used to generate the data, frequency of testing or monitoring, and supporting calculations and documentation, including the waste manifest for each shipment.

(h) You must keep records of the date, time, and duration of each deviation.

(i) If you use the emission rate with add-on controls option, you must keep the records specified in paragraphs (i)(1) through (8) of this section.

(1) For each deviation, a record of whether the deviation occurred during a period of startup, shutdown, or malfunction.

(2) The records in §63.6(e)(3)(iii) through (v) related to startup, shutdown, and malfunction.

(3) The records required to show continuous compliance with each operating limit specified in Table 1 to this subpart that applies to you.

(4) For each capture system that is a PTE, the data and documentation you used to support a determination that the capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and has a capture efficiency of 100 percent, as specified in §63.4565(a).

(5) For each capture system that is not a PTE, the data and documentation you used to determine capture efficiency according to the requirements specified in §§63.4564 and 63.4565(b) through (e), including the records specified in paragraphs (i)(5)(i) through (iii) of this section that apply to you.

(i) *Records for a liquid-to-uncaptured gas protocol using a temporary total enclosure or building enclosure.* Records of the mass of total volatile hydrocarbon (TVH) as measured by Method 204A or 204F of appendix M to 40 CFR part 51 for each material used in the coating operation, and the total TVH for all materials used during each capture efficiency test run, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run, as measured by Method 204D or 204E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.

(ii) *Records for a gas-to-gas protocol using a temporary total enclosure or a building enclosure.* Records of the mass of TVH emissions captured by the emission capture system as measured by Method 204B or 204C of appendix M to 40 CFR part 51 at the inlet to the add-on control device, including a copy of the test report. Records of the mass of TVH emissions not captured by the capture system that exited the temporary total enclosure or building enclosure during each capture efficiency test run as measured by Method 204D or 204E of appendix M to 40 CFR part 51, including a copy of the test report. Records documenting that the enclosure used for the capture efficiency test met the criteria in Method 204 of appendix M to 40 CFR part 51 for either a temporary total enclosure or a building enclosure.

(iii) *Records for an alternative protocol.* Records needed to document a capture efficiency determination using an alternative method or protocol as specified in §63.4565(e), if applicable.

(6) The records specified in paragraphs (i)(6)(i) and (ii) of this section for each add-on control device organic HAP destruction or removal efficiency determination as specified in §63.4566.

(i) Records of each add-on control device performance test conducted according to §§63.4564 and 63.4566.

(ii) Records of the coating operation conditions during the add-on control device performance test showing that the performance test was conducted under representative operating conditions.

(7) Records of the data and calculations you used to establish the emission capture and add-on control device operating limits as specified in §63.4567 and to document compliance with the operating limits as specified in Table 1 to this subpart.

(8) A record of the work practice plan required by §63.4493 and documentation that you are implementing the plan on a continuous basis.

### § 63.4531 In what form and for how long must I keep my records?

(a) Your records must be in a form suitable and readily available for expeditious review, according to §63.10(b)(1). Where appropriate, the records may be maintained as electronic spreadsheets or as a database.

(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 on-site 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 may keep the records off-site for the remaining 3 years.

## Compliance Requirements for the Compliant Material Option

### § 63.4540 By what date must I conduct the initial compliance demonstration?

You must complete the initial compliance demonstration for the initial compliance period according to the requirements in §63.4541. The initial compliance period begins on the applicable compliance date specified in §63.4483 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through that month plus the next 12 months. The initial compliance demonstration includes the calculations according to §63.4541 and supporting documentation showing that during the initial compliance period, you used no coating with an organic HAP content that exceeded the applicable emission limit in §63.4490, and that you used no thinners and/or other additives, or cleaning materials that contained organic HAP as determined according to §63.4541(a).

### § 63.4541 How do I demonstrate initial compliance with the emission limitations?

You may use the compliant material option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. You must use either the emission rate without add-on controls option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the compliant material option, the coating operation or group of coating operations must use no coating with an organic HAP content that exceeds the applicable emission limits in §63.4490 and must use no thinner and/or other additive, or cleaning material that contains organic HAP as determined according to this section. Any coating operation for which you use the compliant material option is not required to meet the operating limits or work practice standards required in §§63.4492 and 63.4493, respectively. You must conduct a separate initial compliance demonstration for each general use coating, TPO coating, automotive lamp coating, and assembled on-road vehicle coating affected source unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of this section. Use the procedures in this section on each coating, thinner and/or other additive, and cleaning material in the condition it is in when it is received from its manufacturer or supplier and prior to any alteration. You do not need to redetermine the organic HAP content of coatings, thinners and/or other additives, and cleaning materials that are reclaimed on-site (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coating operation for which you use the compliant material option, provided these materials in their condition as received were demonstrated to comply with the compliant material option.

(a) *Determine the mass fraction of organic HAP for each material used.* You must determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during the compliance period by using one of the options in paragraphs (a)(1) through (5) of this section.

(1) *Method 311 (appendix A to 40 CFR part 63).* You may use Method 311 for determining the mass fraction of organic HAP. Use the procedures specified in paragraphs (a)(1)(i) and (ii) of this section when performing a Method 311 test.

(i) Count each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, you do not have to count it. Express the mass fraction of each organic HAP you count as a value truncated to four places after the decimal point ( *e.g.,* 0.3791).

(ii) Calculate the total mass fraction of organic HAP in the test material by adding up the individual organic HAP mass fractions and truncating the result to three places after the decimal point ( *e.g.,* 0.763).

(2) *Method 24 (appendix A to 40 CFR part 60).* For coatings, you may use Method 24 to determine the mass fraction of nonaqueous volatile matter and use that value as a substitute for mass fraction of organic HAP. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may use the alternative method contained in appendix A to this subpart, rather than Method 24. You may use the volatile fraction that is emitted, as measured by the alternative method in appendix A to this subpart, as a substitute for the mass fraction of organic HAP.

(3) *Alternative method.* You may use an alternative test method for determining the mass fraction of organic HAP once the Administrator has approved it. You must follow the procedure in §63.7(f) to submit an alternative test method for approval.

(4) *Information from the supplier or manufacturer of the material.* You may rely on information other than that generated by the test methods specified in paragraphs (a)(1) through (3) of this section, such as manufacturer's formulation data, if it represents each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, you do not have to count it. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, you may rely on manufacturer's data that expressly states the organic HAP or volatile matter mass fraction emitted. If there is a disagreement between such information and results of a test conducted according to paragraphs (a)(1) through (3) of this section, then the test method results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(5) *Solvent blends.* Solvent blends may be listed as single components for some materials in data provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP mass fraction of the materials. When test data and manufacturer's data for solvent blends are not available, you may use the default values for the mass fraction of organic HAP in these solvent blends listed in Table 3 or 4 to this subpart. If you use the tables, you must use the values in Table 3 for all solvent blends that match Table 3 entries according to the instructions for Table 3, and you may use Table 4 only if the solvent blends in the materials you use do not match any of the solvent blends in Table 3 and you know only whether the blend is aliphatic or aromatic. However, if the results of a Method 311 (appendix A to 40 CFR part 63) test indicate higher values than those listed on Table 3 or 4 to this subpart, the Method 311 results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(b) *Determine the mass fraction of coating solids for each coating.* You must determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during the compliance period by a test, by information provided by the supplier or the manufacturer of the material, or by calculation, as specified in paragraphs (b)(1) through (3) of this section.

(1) *Method 24 (appendix A to 40 CFR part 60).* Use Method 24 for determining the mass fraction of coating solids. For reactive adhesives in which some of the liquid fraction reacts to form solids, you may use the alternative method contained in appendix A to this subpart, rather than Method 24, to determine the mass fraction of coating solids.

(2) *Alternative method.* You may use an alternative test method for determining the solids content of each coating once the Administrator has approved it. You must follow the procedure in §63.7(f) to submit an alternative test method for approval.

(3) *Information from the supplier or manufacturer of the material.* You may obtain the mass fraction of coating solids for each coating from the supplier or manufacturer. If there is disagreement between such information and the test method results, then the test method results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(c) *Calculate the organic HAP content of each coating.* Calculate the organic HAP content, kg (lb) organic HAP emitted per kg (lb) coating solids used, of each coating used during the compliance period using Equation 1 of this section:

$$H_c = \frac{W_c}{S_c} \qquad (Eq.\ 1)$$

Where:

$H_c$= Organic HAP content of the coating, kg (lb) of organic HAP emitted per kg (lb) coating solids used.

$W_c$= Mass fraction of organic HAP in the coating, kg organic HAP per kg coating, determined according to paragraph (a) of this section.

$S_c$= Mass fraction of coating solids, kg coating solids per kg coating, determined according to paragraph (b) of this section.

(d) *Compliance demonstration.* The calculated organic HAP content for each coating used during the initial compliance period must be less than or equal to the applicable emission limit in §63.4490; and each thinner and/or other additive, and cleaning material used during the initial compliance period must contain no organic HAP, determined according to paragraph (a) of this section. You must keep all records required by §§63.4530 and 63.4531. As part of the notification of compliance status required in §63.4510, you must identify the coating operation(s) for which you used the compliant material option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because you used no coatings for which the organic HAP content exceeded the applicable emission limit in §63.4490, and you used no thinners and/or other additives, or cleaning materials that contained organic HAP, determined according to the procedures in paragraph (a) of this section.

## § 63.4542 How do I demonstrate continuous compliance with the emission limitations?

(a) For each compliance period to demonstrate continuous compliance, you must use no coating for which the organic HAP content (determined using Equation 1 of §63.4541) exceeds the applicable emission limit in §63.4490, and use no thinner and/or other additive, or cleaning material that contains organic HAP, determined according to §63.4541(a). A compliance period consists of 12 months. Each month, after the end of the initial compliance period described in §63.4540, is the end of a compliance period consisting of that month and the preceding 11 months. If you are complying with a facility-specific emission limit under §63.4490(c), you must also perform the calculation using Equation 1 in §63.4490(c)(2) on a monthly basis using the data from the previous 12 months of operation.

(b) If you choose to comply with the emission limitations by using the compliant material option, the use of any coating, thinner and/or other additive, or cleaning material that does not meet the criteria specified in paragraph (a) of this section is a deviation from the emission limitations that must be reported as specified in §§63.4510(c)(6) and 63.4520(a)(5).

(c) As part of each semiannual compliance report required by §63.4520, you must identify the coating operation(s) for which you used the compliant material option. If there were no deviations from the applicable emission limit in §63.4490, submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because you used no coatings for which the organic HAP content exceeded the applicable emission limit in §63.4490, and you used no thinner and/or other additive, or cleaning material that contained organic HAP, determined according to §63.4541(a).

(d) You must maintain records as specified in §§63.4530 and 63.4531.

## Compliance Requirements for the Emission Rate Without Add-On Controls Option

### § 63.4550 By what date must I conduct the initial compliance demonstration?

You must complete the initial compliance demonstration for the initial compliance period according to the requirements of §63.4551. The initial compliance period begins on the applicable compliance date specified in §63.4483 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. You must determine the mass of organic HAP emissions and mass of coating solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the calculations according to §63.4551 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in §63.4490.

### § 63.4551 How do I demonstrate initial compliance with the emission limitations?

You may use the emission rate without add-on controls option for any individual coating operation, for any group of coating operations in the affected source, or for all the coating operations in the affected source. You must use either the compliant material option or the emission rate with add-on controls option for any coating operation in the affected source for which you do not use this option. To demonstrate initial compliance using the emission rate without add-on controls option, the coating operation or group of coating operations must meet the applicable emission limit in §63.4490, but is not required to meet the operating limits or work practice standards in §§63.4492 and 63.4493, respectively. You must conduct a separate initial compliance demonstration for each general use, TPO, automotive lamp, and assembled on-road vehicle coating operation unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of this section. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which you use the compliant material option or the emission rate with add-on controls option. You do not need to redetermine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coating operation for which you use the emission rate without add-on controls option. If you use coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.

(a) *Determine the mass fraction of organic HAP for each material.* Determine the mass fraction of organic HAP for each coating, thinner and/or other additive, and cleaning material used during each month according to the requirements in §63.4541(a).

(b) *Determine the mass fraction of coating solids.* Determine the mass fraction of coating solids (kg (lb) of coating solids per kg (lb) of coating) for each coating used during each month according to the requirements in §63.4541(b).

(c) *Determine the density of each material.* Determine the density of each liquid coating, thinner and/or other additive, and cleaning material used during each month from test results using ASTM Method D1475–98, "Standard Test Method for Density of Liquid Coatings, Inks, and Related Products" (incorporated by reference, see §63.14), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475–98 and other such information sources, the test results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine material density. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of this section.

(d) *Determine the volume of each material used.* Determine the volume (liters) of each coating, thinner and/or other additive, and cleaning material used during each month by measurement or usage records. If you purchase materials or monitor consumption by weight instead of volume, you do not need to determine the volume of each material used. Instead, you may use the material weight in place of the combined terms for density and volume in Equations 1A, 1B, 1C, and 2 of this section.

(e) *Calculate the mass of organic HAP emissions.* The mass of organic HAP emissions is the combined mass of organic HAP contained in all coatings, thinners and/or other additives, and cleaning materials used during each month minus the organic HAP in certain waste materials. Calculate the mass of organic HAP emissions using Equation 1 of this section.

$$H_e = A + B + C - R_w \qquad (Eq.\ 1)$$

Where:

$H_e$= Total mass of organic HAP emissions during the month, kg.

A = Total mass of organic HAP in the coatings used during the month, kg, as calculated in Equation 1A of this section.

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg, as calculated in Equation 1B of this section.

C = Total mass of organic HAP in the cleaning materials used during the month, kg, as calculated in Equation 1C of this section.

$R_w$= Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the month, kg, determined according to paragraph (e)(4) of this section. (You may assign a value of zero to $R_W$if you do not wish to use this allowance.)

(1) Calculate the kg organic HAP in the coatings used during the month using Equation 1A of this section:

$$A = \sum_{i=1}^{m} \left(Vol_{c,i}\right)\left(D_{c,i}\right)\left(W_{c,i}\right) \qquad (Eq.\ 1A)$$

Where:

A = Total mass of organic HAP in the coatings used during the month, kg.

$Vol_{c,i}$= Total volume of coating, i, used during the month, liters.

$D_{c,i}$= Density of coating, i, kg coating per liter coating.

$W_{c,i}$= Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

m = Number of different coatings used during the month.

(2) Calculate the kg of organic HAP in the thinners and/or other additives used during the month using Equation 1B of this section:

$$B = \sum_{j=1}^{n} \left(Vol_{t,j}\right)\left(\mathrm{D}_{t,j}\right)\left(\mathrm{W}_{t,j}\right) \qquad (Eq.\ 1\mathrm{B})$$

Where:

B = Total mass of organic HAP in the thinners and/or other additives used during the month, kg.

$Vol_{t,j}$= Total volume of thinner and/or other additive, j, used during the month, liters.

$D_{t,j}$= Density of thinner and/or other additive, j, kg per liter.

$W_{t,j}$= Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

n = Number of different thinners and/or other additives used during the month.

(3) Calculate the kg organic HAP in the cleaning materials used during the month using Equation 1C of this section:

$$C = \sum_{k=1}^{p} \left(Vol_{s,k}\right)\left(\mathrm{D}_{s,k}\right)\left(W_{s,k}\right) \qquad (Eq.\ 1\mathrm{C})$$

Where:

C = Total mass of organic HAP in the cleaning materials used during the month, kg.

$Vol_{s,k}$= Total volume of cleaning material, k, used during the month, liters.

$D_{s,k}$= Density of cleaning material, k, kg per liter.

$W_{s,k}$= Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg material.

p = Number of different cleaning materials used during the month.

(4) If you choose to account for the mass of organic HAP contained in waste materials sent or designated for shipment to a hazardous waste TSDF in Equation 1 of this section, then you must determine the mass according to paragraphs (e)(4)(i) through (iv) of this section.

(i) You may only include waste materials in the determination that are generated by coating operations in the affected source for which you use Equation 1 of this section and that will be treated or disposed of by a facility that is regulated as a TSDF under 40 CFR part 262, 264, 265, or 266. The TSDF may be either off-site or on-site. You may not include organic HAP contained in wastewater.

(ii) You must determine either the amount of the waste materials sent to a TSDF during the month or the amount collected and stored during the month and designated for future transport to a TSDF. Do not include in your determination any waste materials sent to a TSDF during a month if you have already included them in the amount collected and stored during that month or a previous month.

(iii) Determine the total mass of organic HAP contained in the waste materials specified in paragraph (e)(4)(ii) of this section.

(iv) You must document the methodology you use to determine the amount of waste materials and the total mass of organic HAP they contain, as required in §63.4530(g). If waste manifests include this information, they may be used as part of the documentation of the amount of waste materials and mass of organic HAP contained in them.

(f) *Calculate the total mass of coating solids used.* Determine the total mass of coating solids used, kg, which is the combined mass of coating solids for all the coatings used during each month, using Equation 2 of this section:

$$M_{st} = \sum_{i=1}^{m} \left(\mathrm{Vol}_{c,i}\right)\left(\mathrm{D}_{c,i}\right)\left(\mathrm{M}_{s,i}\right) \qquad (Eq.\ 2)$$

Where:

$M_{st}$= Total mass of coating solids used during the month, kg.

$Vol_{c,i}$= Total volume of coating, i, used during the month, liters.

$D_{c,i}$= Density of coating, i, kgs per liter coating, determined according to §63.4551(c).

$M_{s,i}$= Mass fraction of coating solids for coating, i, kgs solids per kg coating, determined according to §63.4541(b).

m = Number of coatings used during the month.

(g) *Calculate the organic HAP emission rate.* Calculate the organic HAP emission rate for the compliance period, kg (lb) organic HAP emitted per kg (lb) coating solids used, using Equation 3 of this section:

$$H_{yr} = \frac{\sum_{y=1}^{n} H_e}{\sum_{y=1}^{n} M_{st}} \qquad (Eq.\ 3)$$

Where:

$H_{yr}$= Average organic HAP emission rate for the compliance period, kg organic HAP emitted per kg coating solids used.

$H_e$= Total mass of organic HAP emissions from all materials used during month, y, kg, as calculated by Equation 1 of this section.

$M_{st}$= Total mass of coating solids used during month, y, kg, as calculated by Equation 2 of this section.

y = Identifier for months.

n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

(h) *Compliance demonstration.* The organic HAP emission rate for the initial compliance period calculated using Equation 3 of this section must be less than or equal to the applicable emission limit for each subcategory in §63.4490 or the predominant activity or facility-specific emission limit allowed in §63.4490(c). You must keep all records as required by §§63.4530 and 63.4531. As part of the notification of compliance status required by §63.4510, you must identify the coating operation(s) for which you used the emission rate without add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in §63.4490, determined according to the procedures in this section.

### § 63.4552 How do I demonstrate continuous compliance with the emission limitations?

(a) To demonstrate continuous compliance, the organic HAP emission rate for each compliance period, determined according to §63.4551(a) through (g), must be less than or equal to the applicable emission limit in §63.4490. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in §63.4550 is the end of a compliance period consisting of that month and the preceding 11 months. You must perform the calculations in §63.4551(a) through (g) on a monthly basis using data from the previous 12 months of operation. If you are complying with a facility-specific emission limit under §63.4490(c), you must also perform the calculation using Equation 1 in §63.4490(c)(2) on a monthly basis using the data from the previous 12 months of operation.

(b) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in §63.4490, this is a deviation from the emission limitation for that compliance period and must be reported as specified in §§63.4510(c)(6) and 63.4520(a)(6).

(c) As part of each semiannual compliance report required by §63.4520, you must identify the coating operation(s) for which you used the emission rate without add-on controls option. If there were no deviations from the emission limitations, you must submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in §63.4490, determined according to §63.4551(a) through (g).

(d) You must maintain records as specified in §§63.4530 and 63.4531.

## Compliance Requirements for the Emission Rate With Add-On Controls Option

### § 63.4560 By what date must I conduct performance tests and other initial compliance demonstrations?

(a) *New and reconstructed affected sources.* For a new or reconstructed affected source, you must meet the requirements of paragraphs (a)(1) through (4) of this section.

(1) All emission capture systems, add-on control devices, and CPMS must be installed and operating no later than the applicable compliance date specified in §63.4483. Except for solvent recovery systems for which you conduct liquid-liquid material balances according to §63.4561(j), you must conduct a performance test of each capture system and add-on control device according to §§63.4564, 63.4565, and 63.4566 and establish the operating limits required by §63.4492 no later than 180 days after the applicable compliance date specified in §63.4483. For a solvent recovery system for which you conduct liquid-liquid material balances according to §63.4561(j), you must initiate the first material balance no later than the applicable compliance date specified in §63.4483.

(2) You must develop and begin implementing the work practice plan required by §63.4493 no later than the compliance date specified in §63.4483.

(3) You must complete the initial compliance demonstration for the initial compliance period according to the requirements of §63.4561. The initial compliance period begins on the applicable compliance date specified in §63.4483 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. You must determine the mass of organic HAP emissions and mass of coatings solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §§63.4564, 63.4565, and 63.4566; results of liquid-liquid material balances conducted according to §63.4561(j); calculations according to §63.4561 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in §63.4490; the operating limits established during the performance tests and the results of the continuous parameter monitoring required by §63.4568; and documentation of whether you developed and implemented the work practice plan required by §63.4493.

(4) You do not need to comply with the operating limits for the emission capture system and add-on control device required by §63.4492 until after you have completed the performance tests specified in paragraph (a)(1) of this section. Instead, you must maintain a log detailing the operation and maintenance of the emission capture system, add-on control device, and continuous parameter monitors during the period between the compliance date and the performance test. You must begin complying with the operating limits for your affected source on the date you complete the performance tests specified in paragraph (a)(1) of this section. The requirements in this paragraph (a)(4) do not apply to solvent recovery systems for which you conduct liquid-liquid material balances according to the requirements in §63.4561(j).

(b) *Existing affected sources.* For an existing affected source, you must meet the requirements of paragraphs (b)(1) through (3) of this section.

(1) All emission capture systems, add-on control devices, and CPMS must be installed and operating no later than the applicable compliance date specified in §63.4483. Except for solvent recovery systems for which you conduct liquid-liquid material balances according to §63.4561(j), you must conduct a performance test of each capture system and add-on control device according to the procedures in §§63.4564, 63.4565, and 63.4566 and establish the operating limits required by §63.4492 no later than the compliance date specified in §63.4483. For a solvent recovery system for which you conduct liquid-liquid material balances according to §63.4561(j), you must initiate the first material balance no later than the compliance date specified in §63.4483.

(2) You must develop and begin implementing the work practice plan required by §63.4493 no later than the compliance date specified in §63.4483.

(3) You must complete the initial compliance demonstration for the initial compliance period according to the requirements of §63.4561. The initial compliance period begins on the applicable compliance date specified in §63.4483 and ends on the last day of the 12th month following the compliance date. If the compliance date occurs on any day other than the first day of a month, then the initial compliance period extends through the end of that month plus the next 12 months. You must determine the mass of organic HAP emissions and mass of coatings solids used each month and then calculate an organic HAP emission rate at the end of the initial compliance period. The initial compliance demonstration includes the results of emission capture system and add-on control device performance tests conducted according to §§63.4564, 63.4565, and 63.4566; results of liquid-liquid material balances conducted according to §63.4561(j); calculations according to §63.4561 and supporting documentation showing that during the initial compliance period the organic HAP emission rate was equal to or less than the applicable emission limit in

§63.4490; the operating limits established during the performance tests and the results of the continuous parameter monitoring required by §63.4568; and documentation of whether you developed and implemented the work practice plan required by §63.4493.

(c) You are not required to conduct an initial performance test to determine capture efficiency or destruction efficiency of a capture system or control device if you receive approval to use the results of a performance test that has been previously conducted on that capture system or control device. Any such previous tests must meet the conditions described in paragraphs (c)(1) through (3) of this section.

(1) The previous test must have been conducted using the methods and conditions specified in this subpart.

(2) Either no process or equipment changes must have been made since the previous test was performed, or the owner or operator must be able to demonstrate that the results of the performance test, with or without adjustments, reliably demonstrate compliance despite process or equipment changes.

(3) Either the required operating parameters were established in the previous test or sufficient data were collected in the previous test to establish the required operating parameters.

## § 63.4561 How do I demonstrate initial compliance?

(a) You may use the emission rate with add-on controls option for any coating operation, for any group of coating operations in the affected source, or for all of the coating operations in the affected source. You may include both controlled and uncontrolled coating operations in a group for which you use this option. You must use either the compliant material option or the emission rate without add-on controls option for any coating operation in the affected source for which you do not use the emission rate with add-on controls option. To demonstrate initial compliance, the coating operation(s) for which you use the emission rate with add-on controls option must meet the applicable emission limitations in §§63.4490, 63.4492, and 63.4493. You must conduct a separate initial compliance demonstration for each general use, TPO, automotive lamp, and assembled on-road vehicle coating operation, unless you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c). If you are demonstrating compliance with a predominant activity or facility-specific emission limit as provided in §63.4490(c), you must demonstrate that all coating operations included in the predominant activity determination or calculation of the facility-specific emission limit comply with that limit. You must meet all the requirements of this section. When calculating the organic HAP emission rate according to this section, do not include any coatings, thinners and/or other additives, or cleaning materials used on coating operations for which you use the compliant material option or the emission rate without add-on controls option. You do not need to redetermine the mass of organic HAP in coatings, thinners and/or other additives, or cleaning materials that have been reclaimed onsite (or reclaimed off-site if you have documentation showing that you received back the exact same materials that were sent off-site) and reused in the coatings operation(s) for which you use the emission rate with add-on controls option. If you use coatings, thinners and/or other additives, or cleaning materials that have been reclaimed on-site, the amount of each used in a month may be reduced by the amount of each that is reclaimed. That is, the amount used may be calculated as the amount consumed to account for materials that are reclaimed.

(b) *Compliance with operating limits.* Except as provided in §63.4560(a)(4), and except for solvent recovery systems for which you conduct liquid-liquid material balances according to the requirements of paragraph (j) of this section, you must establish and demonstrate continuous compliance during the initial compliance period with the operating limits required by §63.4492, using the procedures specified in §§63.4567 and 63.4568.

(c) *Compliance with work practice requirements.* You must develop, implement, and document your implementation of the work practice plan required by §63.4493 during the initial compliance period, as specified in §63.4530.

(d) *Compliance with emission limits.* You must follow the procedures in paragraphs (e) through (n) of this section to demonstrate compliance with the applicable emission limit in §63.4490 for each affected source in each subcategory.

(e) *Determine the mass fraction of organic HAP, density, volume used, and mass fraction of coating solids.* Follow the procedures specified in §63.4551(a) through (d) to determine the mass fraction of organic HAP, density, and volume of each coating, thinner and/or other additive, and cleaning material used during each month; and the mass fraction of coating solids for each coating used during each month.

(f) *Calculate the total mass of organic HAP emissions before add-on controls.* Using Equation 1 of §63.4551, calculate the total mass of organic HAP emissions before add-on controls from all coatings, thinners and/or other additives, and cleaning materials used during each month in the coating operation or group of coating operations for which you use the emission rate with add-on controls option.

(g) *Calculate the organic HAP emission reduction for each controlled coating operation.* Determine the mass of organic HAP emissions reduced for each controlled coating operation during each month. The emission reduction determination quantifies the total organic HAP emissions that pass through the emission capture system and are destroyed or removed by the add-on control device. Use the procedures in paragraph (h) of this section to calculate the mass of organic HAP emission reduction for each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances. For each controlled coating operation using a solvent recovery system for which you conduct a liquid-liquid material balance, use the procedures in paragraph (j) of this section to calculate the organic HAP emission reduction.

(h) *Calculate the organic HAP emission reduction for each controlled coating operation not using liquid-liquid material balance.* Use Equation 1 of this section to calculate the organic HAP emission reduction for each controlled coating operation using an emission capture system and add-on control device other than a solvent recovery system for which you conduct liquid-liquid material balances. The calculation applies the emission capture system efficiency and add-on control device efficiency to the mass of organic HAP contained in the coatings, thinners and/or other additives, and cleaning materials that are used in the coating operation served by the emission capture system and add-on control device during each month. You must assume zero efficiency for the emission capture system and add-on control device for any period of time a deviation specified in §63.4563(c) or (d) occurs in the controlled coating operation, including a deviation during a period of startup, shutdown, or malfunction, unless you have other data indicating the actual efficiency of the emission capture system and add-on control device and the use of these data is approved by the Administrator. Equation 1 of this section treats the materials used during such a deviation as if they were used on an uncontrolled coating operation for the time period of the deviation.

$$H_C = \left(A_C + B_C + C_C - R_W - H_{UNC}\right)\left(\frac{CE}{100} \times \frac{DRE}{100}\right) \qquad (Eq.\ 1)$$

Where:

$H_C$= Mass of organic HAP emission reduction for the controlled coating operation during the month, kg.

$A_C$= Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg, as calculated in Equation 1A of this section.

$B_C$= Total mass of organic HAP in the thinners and/or other additives used in the controlled coating operation during the month, kg, as calculated in Equation 1B of this section.

$C_C$= Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg, as calculated in Equation 1C of this section.

$R_w$= Total mass of organic HAP in waste materials sent or designated for shipment to a hazardous waste TSDF for treatment or disposal during the compliance period, kg, determined according to §63.4951(e)(4). (You may assign a value of zero to $R_w$if you do not wish to use this allowance.)

$H_{UNC}$= Total mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used during all deviations specified in §63.4563(c) and (d) that occurred during the month in the controlled coating operation, kg, as calculated in Equation 1D of this section.

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent. Use the test methods and procedures specified in §§63.4564 and 63.4565 to measure and record capture efficiency.

DRE = Organic HAP destruction or removal efficiency of the add-on control device, percent. Use the test methods and procedures in §§63.4564 and 63.4566 to measure and record the organic HAP destruction or removal efficiency.

(1) Calculate the mass of organic HAP in the coatings used in the controlled coating operation, kg (lb), using Equation 1A of this section:

$$A_C = \sum_{i=1}^{m} (Vol_{c,i})(D_{c,i})(W_{c,i}) \quad (Eq.\ 1A)$$

Where:

$A_C$= Total mass of organic HAP in the coatings used in the controlled coating operation during the month, kg.

$Vol_{c,i}$= Total volume of coating, i, used during the month, liters.

$D_{c,i}$= Density of coating, i, kg per liter.

$W_{c,i}$= Mass fraction of organic HAP in coating, i, kg per kg. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

m = Number of different coatings used.

(2) Calculate the mass of organic HAP in the thinners and/or other additives used in the controlled coating operation, kg (lb), using Equation 1B of this section:

$$B_C = \sum_{j=1}^{n} (Vol_{t,j})(D_{t,j})(W_{t,j}) \quad (Eq.\ 1B)$$

Where:

$B_C$= Total mass of organic HAP in the thinners and/or other additives used in the controlled coating operation during the month, kg.

$Vol_{t,j}$= Total volume of thinner and/or other additive, j, used during the month, liters.

$D_{t,j}$= Density of thinner and/or other additive, j, kg per liter.

$W_{t,j}$= Mass fraction of organic HAP in thinner and/or other additive, j, kg per kg. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

n = Number of different thinners and/or other additives used.

(3) Calculate the mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg (lb), using Equation 1C of this section:

$$C_C = \sum_{k=1}^{p} \left(Vol_{s,k}\right)\left(D_{s,k}\right)\left(W_{s,k}\right) \quad (Eq.\ 1C)$$

Where:

$C_C$= Total mass of organic HAP in the cleaning materials used in the controlled coating operation during the month, kg.

$Vol_{s,k}$= Total volume of cleaning material, k, used during the month, liters.

$D_{s,k}$= Density of cleaning material, k, kg per liter.

$W_{s,k}$= Mass fraction of organic HAP in cleaning material, k, kg per kg.

p = Number of different cleaning materials used.

(4) Calculate the mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used in the controlled coating operation during deviations specified in §63.4563(c) and (d), using Equation 1D of this section:

$$H_{UNC} = \sum_{k=1}^{q} \left(\mathrm{Vol}_h\right)\left(D_h\right)\left(W_h\right) \quad (Eq.\ 1D)$$

Where:

$H_{UNC}$= Total mass of organic HAP in the coatings, thinners and/or other additives, and cleaning materials used during all deviations specified in §63.4563(c) and (d) that occurred during the month in the controlled coating operation, kg.

$Vol_h$= Total volume of coating, thinner and/or other additive, or cleaning material, h, used in the controlled coating operation during deviations, liters.

$D_h$= Density of coating, thinner and/or other additives, or cleaning material, h, kg per liter.

$W_h$= Mass fraction of organic HAP in coating, thinner and/or other additives, or cleaning material, h, kg organic HAP per kg coating. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

q = Number of different coatings, thinners and/or other additives, and cleaning materials used.

(i) [Reserved]

(j) *Calculate the organic HAP emission reduction for each controlled coating operation using liquid-liquid material balances.* For each controlled coating operation using a solvent recovery system for which you conduct liquid-liquid material balances, calculate the organic HAP emission reduction by applying the volatile organic matter collection and recovery efficiency to the mass of organic HAP contained in the coatings, thinners and/or other additives, and cleaning materials that are used in the coating operation controlled by the solvent recovery system during each month. Perform a liquid-liquid material balance for each month as specified in paragraphs (j)(1) through (6) of this section. Calculate the mass of organic HAP emission reduction by the solvent recovery system as specified in paragraph (j)(7) of this section.

(1) For each solvent recovery system, install, calibrate, maintain, and operate according to the manufacturer's specifications, a device that indicates the cumulative amount of volatile organic matter recovered by the solvent recovery system each month. The device must be initially certified by the manufacturer to be accurate to within ±2.0 percent of the mass of volatile organic matter recovered.

(2) For each solvent recovery system, determine the mass of volatile organic matter recovered for the month, based on measurement with the device required in paragraph (j)(1) of this section.

(3) Determine the mass fraction of volatile organic matter for each coating, thinner and/or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, kg volatile organic matter per kg coating. You may determine the volatile organic matter mass fraction using Method 24 of 40 CFR part 60, appendix A, or an EPA approved alternative method, or you may use information provided by the manufacturer or supplier of the coating. In the event of any inconsistency between information provided by the manufacturer or supplier and the results of Method 24 of 40 CFR part 60, appendix A, or an approved alternative method, the test method results will take precedence unless, after consultation you demonstrate to the satisfaction of the enforcement agency that the formulation data are correct.

(4) Determine the density of each coating, thinner and/or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, kg per liter, according to §63.4551(c).

(5) Measure the volume of each coating, thinner and/or other additive, and cleaning material used in the coating operation controlled by the solvent recovery system during the month, liters.

(6) Each month, calculate the solvent recovery system's volatile organic matter collection and recovery efficiency, using Equation 2 of this section:

$$R_V = 100 \frac{M_{VR}}{\sum_{i=1}^{m} Vol_i D_i WV_{c,i} + \sum_{j=1}^{n} Vol_j D_j WV_{t,j} + \sum_{k=1}^{p} Vol_k D_k WV_{s,k}} \qquad (Eq.\ 2)$$

Where:

$R_V$= Volatile organic matter collection and recovery efficiency of the solvent recovery system during the month, percent.

$M_{VR}$= Mass of volatile organic matter recovered by the solvent recovery system during the month, kg.

$Vol_i$= Volume of coating, i, used in the coating operation controlled by the solvent recovery system during the month, liters.

$D_i$= Density of coating, i, kg per liter.

$WV_{c,i}$= Mass fraction of volatile organic matter for coating, i, kg volatile organic matter per kg coating. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

$Vol_j$= Volume of thinner and/or other additive, j, used in the coating operation controlled by the solvent recovery system during the month, liters.

$D_j$= Density of thinner and/or other additive, j, kg per liter.

$WV_{t,j}$= Mass fraction of volatile organic matter for thinner and/or other additive, j, kg volatile organic matter per kg thinner and/or other additive. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

$Vol_k$= Volume of cleaning material, k, used in the coating operation controlled by the solvent recovery system during the month, liters.

$D_k$= Density of cleaning material, k, kg per liter.

$WV_{s,k}$= Mass fraction of volatile organic matter for cleaning material, k, kg volatile organic matter per kg cleaning material.

m = Number of different coatings used in the coating operation controlled by the solvent recovery system during the month.

n = Number of different thinners and/or other additives used in the coating operation controlled by the solvent recovery system during the month.

p = Number of different cleaning materials used in the coating operation controlled by the solvent recovery system during the month.

(7) Calculate the mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system during the month, using Equation 3 of this section and according to paragraphs (j)(7)(i) through (iii) of this section:

$$H_{CSR} = \left(A_{CSR} + B_{CSR} + C_{CSR}\right)\left(\frac{R_V}{100}\right) \qquad (Eq.\ 3)$$

Where:

$H_{CSR}$= Mass of organic HAP emission reduction for the coating operation controlled by the solvent recovery system using a liquid-liquid material balance during the month, kg.

$A_{CSR}$= Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3A of this section.

$B_{CSR}$= Total mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3B of this section.

$C_{CSR}$= Total mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system, kg, calculated using Equation 3C of this section.

$R_V$= Volatile organic matter collection and recovery efficiency of the solvent recovery system, percent, from Equation 2 of this section.

(i) Calculate the mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system, kg, using Equation 3A of this section.

$$A_{CSR} = \sum_{i=1}^{m}\left(Vol_{c,i}\right)\left(D_{c,i}\right)\left(W_{c,i}\right) \qquad (Eq.\ 3A)$$

Where:

$A_{CSR}$= Total mass of organic HAP in the coatings used in the coating operation controlled by the solvent recovery system during the month, kg.

$Vol_{c,i}$= Total volume of coating, i, used during the month in the coating operation controlled by the solvent recovery system, liters.

$D_{c,i}$= Density of coating, i, kg per liter.

$W_{c,i}$= Mass fraction of organic HAP in coating, i, kg organic HAP per kg coating. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

m = Number of different coatings used.

(ii) Calculate the mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system, kg, using Equation 3B of this section:

$$B_{CSR} = \sum_{j=1}^{n} \left(\mathrm{Vol}_{t,j}\right)\left(\mathrm{D}_{t,j}\right)\left(\mathrm{W}_{t,j}\right) \quad (Eq.\ 3B)$$

Where:

$B_{CSR}$= Total mass of organic HAP in the thinners and/or other additives used in the coating operation controlled by the solvent recovery system during the month, kg.

$Vol_{t,j}$= Total volume of thinner and/or other additive, j, used during the month in the coating operation controlled by the solvent recovery system, liters.

$D_{t,j}$= Density of thinner and/or other additive, j, kg per liter.

$W_{t,j}$= Mass fraction of organic HAP in thinner and/or other additive, j, kg organic HAP per kg thinner and/or other additive. For reactive adhesives as defined in §63.4581, use the mass fraction of organic HAP that is emitted as determined using the method in appendix A to this subpart.

n = Number of different thinners and/or other additives used.

(iii) Calculate the mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system during the month, kg, using Equation 3C of this section:

$$C_{CSR} = \sum_{k=1}^{p} \left(Vol_{s,k}\right)\left(\mathrm{D}_{s,k}\right)\left(\mathrm{W}_{s,k}\right) \quad (Eq.\ 3C)$$

Where:

$C_{CSR}$= Total mass of organic HAP in the cleaning materials used in the coating operation controlled by the solvent recovery system during the month, kg.

$Vol_{s,k}$= Total volume of cleaning material, k, used during the month in the coating operation controlled by the solvent recovery system, liters.

$D_{s,k}$= Density of cleaning material, k, kg per liter.

$W_{s,k}$= Mass fraction of organic HAP in cleaning material, k, kg organic HAP per kg cleaning material.

p = Number of different cleaning materials used.

(k) *Calculate the total mass of coating solids used.* Determine the total mass of coating solids used, kg, which is the combined mass of coating solids for all the coatings used during each month in the coating operation or group of coating operations for which you use the emission rate with add-on controls option, using Equation 2 of §63.4551.

(l) *Calculate the mass of organic HAP emissions for each month.* Determine the mass of organic HAP emissions, kg, during each month, using Equation 4 of this section:

$$H_{HAP} = H_e - \sum_{i=1}^{q}\left(H_{C,i}\right) - \sum_{j=1}^{r}\left(H_{CSR,j}\right) \qquad (Eq.\ 4)$$

Where:

$H_{HAP}$= Total mass of organic HAP emissions for the month, kg.

$H_e$= Total mass of organic HAP emissions before add-on controls from all the coatings, thinners and/or other additives, and cleaning materials used during the month, kg, determined according to paragraph (f) of this section.

$H_{C,i}$= Total mass of organic HAP emission reduction for controlled coating operation, i, not using a liquid-liquid material balance, during the month, kg, from Equation 1 of this section.

$H_{CSR,j}$= Total mass of organic HAP emission reduction for coating operation, j, controlled by a solvent recovery system using a liquid-liquid material balance, during the month, kg, from Equation 3 of this section.

q = Number of controlled coating operations not controlled by a solvent recovery system using a liquid-liquid material balance.

r = Number of coating operations controlled by a solvent recovery system using a liquid-liquid material balance.

(m) *Calculate the organic HAP emission rate for the compliance period.* Determine the organic HAP emission rate for the compliance period, kg (lb) of organic HAP emitted per kg (lb) coating solids used, using Equation 5 of this section:

$$H_{annual} = \frac{\sum_{y=1}^{n} H_{HAP,y}}{\sum_{y=1}^{n} M_{st,y}} \qquad (Eq.\ 5)$$

Where:

$H_{annual}$= Organic HAP emission rate for the compliance period, kg organic HAP emitted per kg coating solids used.

$H_{HAP,y}$= Organic HAP emissions for month, y, kg, determined according to Equation 4 of this section.

$M_{st,y}$= Total mass of coating solids used during month, y, kg, from Equation 2 of §63.4551.

y = Identifier for months.

n = Number of full or partial months in the compliance period (for the initial compliance period, n equals 12 if the compliance date falls on the first day of a month; otherwise n equals 13; for all following compliance periods, n equals 12).

(n) *Compliance demonstration.* The organic HAP emission rate for the initial compliance period, calculated using Equation 5 of this section, must be less than or equal to the applicable emission limit for each subcategory in §63.4490 or the predominant activity or facility-specific emission limit allowed in §63.4490(c). You must keep all records as required by §§63.4530 and 63.4531. As part of the notification of compliance status required by §63.4510, you must identify the coating operation(s) for which you used the emission rate with add-on controls option and submit a statement that the coating operation(s) was (were) in compliance with the emission limitations during the initial compliance period because the organic HAP emission rate was less than or equal to the applicable emission limit in §63.4490, and you achieved the operating limits required by §63.4492 and the work practice standards required by §63.4493.

## § 63.4562 [Reserved]

## § 63.4563 How do I demonstrate continuous compliance with the emission limitations?

(a) To demonstrate continuous compliance with the applicable emission limit in §63.4490, the organic HAP emission rate for each compliance period, determined according to the procedures in §63.4561, must be equal to or less than the applicable emission limit in §63.4490. A compliance period consists of 12 months. Each month after the end of the initial compliance period described in §63.4560 is the end of a compliance period consisting of that month and the preceding 11 months. You must perform the calculations in §63.4561 on a monthly basis using data from the previous 12 months of operation. If you are complying with a facility-specific emission limit under §63.4490(c), you must also perform the calculation using Equation 1 in §63.4490(c)(2) on a monthly basis using the data from the previous 12 months of operation.

(b) If the organic HAP emission rate for any 12-month compliance period exceeded the applicable emission limit in §63.4490, this is a deviation from the emission limitation for that compliance period that must be reported as specified in §§63.4510(c)(6) and 63.4520(a)(7).

(c) You must demonstrate continuous compliance with each operating limit required by §63.4492 that applies to you, as specified in Table 1 to this subpart, when the coating line is in operation.

(1) If an operating parameter is out of the allowed range specified in Table 1 to this subpart, this is a deviation from the operating limit that must be reported as specified in §§63.4510(c)(6) and 63.4520(a)(7).

(2) If an operating parameter deviates from the operating limit specified in Table 1 to this subpart, then you must assume that the emission capture system and add-on control device were achieving zero efficiency during the time period of the deviation, unless you have other data indicating the actual efficiency of the emission capture system and add-on control device and the use of these data is approved by the Administrator.

(d) You must meet the requirements for bypass lines in §63.4568(b) for controlled coating operations for which you do not conduct liquid-liquid material balances. If any bypass line is opened and emissions are diverted to the atmosphere when the coating operation is running, this is a deviation that must be reported as specified in §§63.4510(c)(6) and 63.4520(a)(7). For the purposes of completing the compliance calculations specified in

§§63.4561(h), you must treat the materials used during a deviation on a controlled coating operation as if they were used on an uncontrolled coating operation for the time period of the deviation as indicated in Equation 1 of §63.4561.

(e) You must demonstrate continuous compliance with the work practice standards in §63.4493. If you did not develop a work practice plan, or you did not implement the plan, or you did not keep the records required by §63.4530(i)(8), this is a deviation from the work practice standards that must be reported as specified in §§63.4510(c)(6) and 63.4520(a)(7).

(f) As part of each semiannual compliance report required in §63.4520, you must identify the coating operation(s) for which you used the emission rate with add-on controls option. If there were no deviations from the emission limitations, submit a statement that you were in compliance with the emission limitations during the reporting period because the organic HAP emission rate for each compliance period was less than or equal to the applicable emission limit in §63.4490, and you achieved the operating limits required by §63.4492 and the work practice standards required by §63.4493 during each compliance period.

(g)–(i) [Reserved]

(j) You must maintain records as specified in §§63.4530 and 63.4531.

[69 FR 20990, Apr. 19, 2004, as amended at 71 FR 20465, Apr. 20, 2006]

## § 63.4564 What are the general requirements for performance tests?

(a) You must conduct each performance test required by §63.4560 according to the requirements in §63.7(e)(1) and under the conditions in this section, unless you obtain a waiver of the performance test according to the provisions in §63.7(h).

(1) *Representative coating operation operating conditions.* You must conduct the performance test under representative operating conditions for the coating operation. Operations during periods of startup, shutdown, or malfunction and during periods of nonoperation do not constitute representative conditions. You must record the process information that is necessary to document operating conditions during the test and explain why the conditions represent normal operation.

(2) *Representative emission capture system and add-on control device operating conditions.* You must conduct the performance test when the emission capture system and add-on control device are operating at a representative flow rate, and the add-on control device is operating at a representative inlet concentration. You must record information that is necessary to document emission capture system and add-on control device operating conditions during the test and explain why the conditions represent normal operation.

(b) You must conduct each performance test of an emission capture system according to the requirements in §63.4565. You must conduct each performance test of an add-on control device according to the requirements in §63.4566.

## § 63.4565 How do I determine the emission capture system efficiency?

You must use the procedures and test methods in this section to determine capture efficiency as part of the performance test required by §63.4560.

(a) *Assuming 100 percent capture efficiency.* You may assume the capture system efficiency is 100 percent if both of the conditions in paragraphs (a)(1) and (2) of this section are met:

(1) The capture system meets the criteria in Method 204 of appendix M to 40 CFR part 51 for a PTE and directs all the exhaust gases from the enclosure to an add-on control device.

(2) All coatings, thinners and/or other additives, and cleaning materials used in the coating operation are applied within the capture system; coating solvent flash-off, curing, and drying occurs within the capture system; and the removal or evaporation of cleaning materials from the surfaces they are applied to occurs within the capture system. For example, this criterion is not met if parts enter the open shop environment when being moved between a spray booth and a curing oven.

(b) *Measuring capture efficiency.* If the capture system does not meet both of the criteria in paragraphs (a)(1) and (2) of this section, then you must use one of the three protocols described in paragraphs (c), (d), and (e) of this section to measure capture efficiency. The capture efficiency measurements use TVH capture efficiency as a surrogate for organic HAP capture efficiency. For the protocols in paragraphs (c) and (d) of this section, the capture efficiency measurement must consist of three test runs. Each test run must be at least 3 hours duration or the length of a production run, whichever is longer, up to 8 hours. For the purposes of this test, a production run means the time required for a single part to go from the beginning to the end of the production, which includes surface preparation activities and drying and curing time.

(c) *Liquid-to-uncaptured-gas protocol using a temporary total enclosure or building enclosure.* The liquid-to-uncaptured-gas protocol compares the mass of liquid TVH in materials used in the coating operation to the mass of TVH emissions not captured by the emission capture system. Use a temporary total enclosure or a building enclosure and the procedures in paragraphs (c)(1) through (6) of this section to measure emission capture system efficiency using the liquid-to-uncaptured-gas protocol.

(1) Either use a building enclosure or construct an enclosure around the coating operation where coatings, thinners and/or other additives, and cleaning materials are applied, and all areas where emissions from these applied coatings and materials subsequently occur, such as flash-off, curing, and drying areas. The areas of the coating operation where capture devices collect emissions for routing to an add-on control device, such as the entrance and exit areas of an oven or spray booth, must also be inside the enclosure. The enclosure must meet the applicable definition of a temporary total enclosure or building enclosure in Method 204 of appendix M to 40 CFR part 51.

(2) Use Method 204A or 204F of appendix M to 40 CFR part 51 to determine the mass fraction of TVH liquid input from each coating, thinner and/or other additive, and cleaning material used in the coating operation during each capture efficiency test run. To make the determination, substitute TVH for each occurrence of the term volatile organic compounds (VOC) in the methods.

(3) Use Equation 1 of this section to calculate the total mass of TVH liquid input from all the coatings, thinners and/or other additives, and cleaning materials used in the coating operation during each capture efficiency test run:

$$TVH_{used} = \sum_{i=1}^{n} (TVH_i)(Vol_i)(D_i) \quad (Eq.\ 1)$$

Where:

$TVH_{used}$= Mass of liquid TVH in materials used in the coating operation during the capture efficiency test run, kg.

$TVH_i$= Mass fraction of TVH in coating, thinner and/or other additive, or cleaning material, i, that is used in the coating operation during the capture efficiency test run, kg TVH per kg material.

$Vol_i$= Total volume of coating, thinner and/or other additive, or cleaning material, i, used in the coating operation during the capture efficiency test run, liters.

$D_i$= Density of coating, thinner and/or other additive, or cleaning material, i, kg material per liter material.

n = Number of different coatings, thinners and/or other additives, and cleaning materials used in the coating operation during the capture efficiency test run.

(4) Use Method 204D or 204E of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions that are not captured by the emission capture system. They are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) Use Method 204D of appendix M to 40 CFR part 51 if the enclosure is a temporary total enclosure.

(ii) Use Method 204E of appendix M to 40 CFR 51 if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the coating operation for which capture efficiency is being determined, must be shut down, but all fans and blowers must be operating normally.

(5) For each capture efficiency test run, determine the percent capture efficiency of the emission capture system using Equation 2 of this section:

$$CE = \frac{\left(TVH_{used} - TVH_{uncaptured}\right)}{TVH_{used}} \times 100 \qquad (Eq.\ 2)$$

Where:

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent.

$TVH_{used}$= Total mass of TVH liquid input used in the coating operation during the capture efficiency test run, kg.

$TVH_{uncaptured}$= Total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, kg.

(6) Determine the capture efficiency of the emission capture system as the average of the capture efficiencies measured in the three test runs.

(d) *Gas-to-gas protocol using a temporary total enclosure or a building enclosure.* The gas-to-gas protocol compares the mass of TVH emissions captured by the emission capture system to the mass of TVH emissions not captured. Use a temporary total enclosure or a building enclosure and the procedures in paragraphs (d)(1) through (5) of this section to measure emission capture system efficiency using the gas-to-gas protocol.

(1) Either use a building enclosure or construct an enclosure around the coating operation where coatings, thinners and/or other additives, and cleaning materials are applied, and all areas where emissions from these applied coatings and materials subsequently occur, such as flash-off, curing, and drying areas. The areas of the coating operation where capture devices collect emissions generated by the coating operation for routing to an add-on control device, such as the entrance and exit areas of an oven or a spray booth, must also be inside the enclosure. The enclosure must meet the applicable definition of a temporary total enclosure or building enclosure in Method 204 of appendix M to 40 CFR part 51.

(2) Use Method 204B or 204C of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions captured by the emission capture system during each capture efficiency test run as measured at the inlet to the add-on control device. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) The sampling points for the Method 204B or 204C measurement must be upstream from the add-on control device and must represent total emissions routed from the capture system and entering the add-on control device.

(ii) If multiple emission streams from the capture system enter the add-on control device without a single common duct, then the emissions entering the add-on control device must be simultaneously measured in each duct and the total emissions entering the add-on control device must be determined.

(3) Use Method 204D or 204E of appendix M to 40 CFR part 51 to measure the total mass, kg, of TVH emissions that are not captured by the emission capture system; they are measured as they exit the temporary total enclosure or building enclosure during each capture efficiency test run. To make the measurement, substitute TVH for each occurrence of the term VOC in the methods.

(i) Use Method 204D of appendix M to 40 CFR part 51 if the enclosure is a temporary total enclosure.

(ii) Use Method 204E of appendix M to 40 CFR part 51 if the enclosure is a building enclosure. During the capture efficiency measurement, all organic compound emitting operations inside the building enclosure, other than the coating operation for which capture efficiency is being determined, must be shut down, but all fans and blowers must be operating normally.

(4) For each capture efficiency test run, determine the percent capture efficiency of the emission capture system using Equation 3 of this section:

$$CE = \frac{TVH_{captured}}{\left(TVH_{captured} + TVH_{uncaptured}\right)} \times 100 \qquad (Eq.\ 3)$$

Where:

CE = Capture efficiency of the emission capture system vented to the add-on control device, percent.

$TVH_{captured}$= Total mass of TVH captured by the emission capture system as measured at the inlet to the add-on control device during the emission capture efficiency test run, kg.

$TVH_{uncaptured}$= Total mass of TVH that is not captured by the emission capture system and that exits from the temporary total enclosure or building enclosure during the capture efficiency test run, kg.

(5) Determine the capture efficiency of the emission capture system as the average of the capture efficiencies measured in the three test runs.

(e) *Alternative capture efficiency protocol.* As an alternative to the procedures specified in paragraphs (c) and (d) of this section and subject to the approval of the Administrator, you may determine capture efficiency using any other capture efficiency protocol and test methods that satisfy the criteria of either the DQO or LCL approach as described in appendix A to subpart KK of this part.

### § 63.4566 How do I determine the add-on control device emission destruction or removal efficiency?

You must use the procedures and test methods in this section to determine the add-on control device emission destruction or removal efficiency as part of the performance test required by §63.4560. You must conduct three test runs as specified in §63.7(e)(3) and each test run must last at least 1 hour.

(a) For all types of add-on control devices, use the test methods specified in paragraphs (a)(1) through (5) of this section.

(1) Use Method 1 or 1A of appendix A to 40 CFR part 60, as appropriate, to select sampling sites and velocity traverse points.

(2) Use Method 2, 2A, 2C, 2D, 2F, or 2G of appendix A to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate.

(3) Use Method 3, 3A, or 3B of appendix A to 40 CFR part 60, as appropriate, for gas analysis to determine dry molecular weight.

(4) Use Method 4 of appendix A to 40 CFR part 60, to determine stack gas moisture.

(5) Methods for determining gas volumetric flow rate, dry molecular weight, and stack gas moisture must be performed, as applicable, during each test run.

(b) Measure total gaseous organic mass emissions as carbon at the inlet and outlet of the add-on control device simultaneously, using either Method 25 or 25A of appendix A to 40 CFR part 60.

(1) Use Method 25 if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be more than 50 parts per million (ppm) at the control device outlet.

(2) Use Method 25A if the add-on control device is an oxidizer and you expect the total gaseous organic concentration as carbon to be 50 ppm or less at the control device outlet.

(3) Use Method 25A if the add-on control device is not an oxidizer.

(c) If two or more add-on control devices are used for the same emission stream, then you must measure emissions at the outlet to the atmosphere of each device. For example, if one add-on control device is a concentrator with an outlet to the atmosphere for the high-volume dilute stream that has been treated by the concentrator, and a second add-on control device is an oxidizer with an outlet to the atmosphere for the low-volume concentrated stream that is treated with the oxidizer, you must measure emissions at the outlet of the oxidizer and the high volume dilute stream outlet of the concentrator.

(d) For each test run, determine the total gaseous organic emissions mass flow rates for the inlet and the outlet of the add-on control device, using Equation 1 of this section. If there is more than one inlet or outlet to the add-on control device, you must calculate the total gaseous organic mass flow rate using Equation 1 of this section for each inlet and each outlet and then total all of the inlet emissions and total all of the outlet emissions:

$$M_f = Q_{sd} C_c (12)(0.0416)(10^{-6}) \quad (Eq.\ 1)$$

Where:

$M_f$= Total gaseous organic emissions mass flow rate, kg/per hour (h).

$C_c$= Concentration of organic compounds as carbon in the vent gas, as determined by Method 25 or Method 25A, parts per million by volume (ppmv), dry basis.

$Q_{sd}$= Volumetric flow rate of gases entering or exiting the add-on control device, as determined by Method 2, 2A, 2C, 2D, 2F, or 2G, dry standard cubic meters/hour (dscm/h).

0.0416 = Conversion factor for molar volume, kg-moles per cubic meter (mol/$m^3$ ) (@ 293 Kelvin (K) and 760 millimeters of mercury (mmHg)).

(e) For each test run, determine the add-on control device organic emissions destruction or removal efficiency, using Equation 2 of this section:

$$DRE = \frac{M_{fi} - M_{fo}}{M_{fi}} \times 100 \qquad (Eq.\ 2)$$

Where:

DRE = Organic emissions destruction or removal efficiency of the add-on control device, percent.

$M_{fi}$= Total gaseous organic emissions mass flow rate at the inlet(s) to the add-on control device, using Equation 1 of this section, kg/h.

$M_{fo}$= Total gaseous organic emissions mass flow rate at the outlet(s) of the add-on control device, using Equation 1 of this section, kg/h.

(f) Determine the emission destruction or removal efficiency of the add-on control device as the average of the efficiencies determined in the three test runs and calculated in Equation 2 of this section.

## § 63.4567 How do I establish the emission capture system and add-on control device operating limits during the performance test?

During the performance test required by §63.4560 and described in §§63.4564, 63.4565, and 63.4566, you must establish the operating limits required by §63.4492 according to this section, unless you have received approval for alternative monitoring and operating limits under §63.8(f) as specified in §63.4492.

(a) *Thermal oxidizers.* If your add-on control device is a thermal oxidizer, establish the operating limits according to paragraphs (a)(1) and (2) of this section.

(1) During the performance test, you must monitor and record the combustion temperature at least once every 15 minutes during each of the three test runs. You must monitor the temperature in the firebox of the thermal oxidizer or immediately downstream of the firebox before any substantial heat exchange occurs.

(2) Use the data collected during the performance test to calculate and record the average combustion temperature maintained during the performance test. This average combustion temperature is the minimum operating limit for your thermal oxidizer.

(b) *Catalytic oxidizers.* If your add-on control device is a catalytic oxidizer, establish the operating limits according to either paragraphs (b)(1) and (2) or paragraphs (b)(3) and (4) of this section.

(1) During the performance test, you must monitor and record the temperature just before the catalyst bed and the temperature difference across the catalyst bed at least once every 15 minutes during each of the three test runs.

(2) Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed and the average temperature difference across the catalyst bed maintained during the performance test. These are the minimum operating limits for your catalytic oxidizer.

(3) You must monitor the temperature at the inlet to the catalyst bed and implement a site-specific inspection and maintenance plan for your catalytic oxidizer as specified in paragraph (b)(4) of this section. During the performance test, you must monitor and record the temperature just before the catalyst bed at least once every 15 minutes during each of the three test runs. Use the data collected during the performance test to calculate and record the average temperature just before the catalyst bed during the performance test. This is the minimum operating limit for your catalytic oxidizer.

(4) You must develop and implement an inspection and maintenance plan for your catalytic oxidizer(s) for which you elect to monitor according to paragraph (b)(3) of this section. The plan must address, at a minimum, the elements specified in paragraphs (b)(4)(i) through (iii) of this section.

(i) Annual sampling and analysis of the catalyst activity ( *i.e.,* conversion efficiency) following the manufacturer's or catalyst supplier's recommended procedures. If problems are found during the catalyst activity test, you must replace the catalyst bed or take other corrective action consistent with the manufacturer's recommendations.

(ii) Monthly external inspection of the catalytic oxidizer system, including the burner assembly and fuel supply lines for problems and, as necessary, adjust the equipment to assure proper air-to-fuel mixtures.

(iii) Annual internal inspection of the catalyst bed to check for channeling, abrasion, and settling. If problems are found during the annual internal inspection of the catalyst, you must replace the catalyst bed or take other corrective action consistent with the manufacturer's recommendations. If the catalyst bed is replaced and is not of like or better kind and quality as the old catalyst then you must conduct a new performance test to determine destruction efficiency according to §63.4566. If a catalyst bed is replaced and the replacement catalyst is of like or better kind and quality as the old catalyst, then a new performance test to determine destruction efficiency is not required and you may continue to use the previously established operating limits for that catalytic oxidizer.

(c) *Regenerative carbon adsorbers.* If your add-on control device is a regenerative carbon adsorber, establish the operating limits according to paragraphs (c)(1) and (2) of this section.

(1) You must monitor and record the total regeneration desorbing gas ( *e.g.,* steam or nitrogen) mass flow for each regeneration cycle, and the carbon bed temperature after each carbon bed regeneration and cooling cycle for the regeneration cycle either immediately preceding or immediately following the performance test.

(2) The operating limits for your regenerative carbon adsorber are the minimum total desorbing gas mass flow recorded during the regeneration cycle and the maximum carbon bed temperature recorded after the cooling cycle.

(d) *Condensers.* If your add-on control device is a condenser, establish the operating limits according to paragraphs (d)(1) and (2) of this section.

(1) During the performance test, you must monitor and record the condenser outlet (product side) gas temperature at least once every 15 minutes during each of the three test runs.

(2) Use the data collected during the performance test to calculate and record the average condenser outlet (product side) gas temperature maintained during the performance test. This average condenser outlet gas temperature is the maximum operating limit for your condenser.

(e) *Concentrators.* If your add-on control device includes a concentrator, you must establish operating limits for the concentrator according to paragraphs (e)(1) through (4) of this section.

(1) During the performance test, you must monitor and record the desorption concentrate stream gas temperature at least once every 15 minutes during each of the three runs of the performance test.

(2) Use the data collected during the performance test to calculate and record the average temperature. This is the minimum operating limit for the desorption concentrate gas stream temperature.

(3) During the performance test, you must monitor and record the pressure drop of the dilute stream across the concentrator at least once every 15 minutes during each of the three runs of the performance test.

(4) Use the data collected during the performance test to calculate and record the average pressure drop. This is the minimum operating limit for the dilute stream across the concentrator.

(f) *Emission capture systems.* For each capture device that is not part of a PTE that meets the criteria of §63.4565(a), establish an operating limit for either the gas volumetric flow rate or duct static pressure, as specified in paragraphs (f)(1) and (2) of this section. The operating limit for a PTE is specified in Table 1 to this subpart.

(1) During the capture efficiency determination required by §63.4560 and described in §§63.4564 and 63.4565, you must monitor and record either the gas volumetric flow rate or the duct static pressure for each separate capture device in your emission capture system at least once every 15 minutes during each of the three test runs at a point in the duct between the capture device and the add-on control device inlet.

(2) Calculate and record the average gas volumetric flow rate or duct static pressure for the three test runs for each capture device. This average gas volumetric flow rate or duct static pressure is the minimum operating limit for that specific capture device.

## § 63.4568 What are the requirements for continuous parameter monitoring system installation, operation, and maintenance?

(a) *General.* You must install, operate, and maintain each CPMS specified in paragraphs (c), (e), (f), and (g) of this section according to paragraphs (a)(1) through (6) of this section. You must install, operate, and maintain each CPMS specified in paragraphs (b) and (d) of this section according to paragraphs (a)(3) through (5) of this section.

(1) The CPMS must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four equally spaced successive cycles of CPMS operation in 1 hour.

(2) You must determine the average of all recorded readings for each successive 3-hour period of the emission capture system and add-on control device operation.

(3) You must record the results of each inspection, calibration, and validation check of the CPMS.

(4) You must maintain the CPMS at all times and have available necessary parts for routine repairs of the monitoring equipment.

(5) You must operate the CPMS and collect emission capture system and add-on control device parameter data at all times that a controlled coating operation is operating, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments).

(6) You must not use emission capture system or add-on control device parameter data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities when calculating data averages. You must use all the data collected during all other periods in calculating the data averages for determining compliance with the emission capture system and add-on control device operating limits.

(7) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the CPMS to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions. Any period for which the monitoring system is out-of-control and data are not available for required calculations is a deviation from the monitoring requirements.

(b) *Capture system bypass line.* You must meet the requirements of paragraphs (b)(1) and (2) of this section for each emission capture system that contains bypass lines that could divert emissions away from the add-on control device to the atmosphere.

(1) You must monitor or secure the valve or closure mechanism controlling the bypass line in a nondiverting position in such a way that the valve or closure mechanism cannot be opened without creating a record that the valve was opened. The method used to monitor or secure the valve or closure mechanism must meet one of the requirements specified in paragraphs (b)(1)(i) through (v) of this section.

(i) *Flow control position indicator.* Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. The time of occurrence and flow control position must be recorded, as well as every time the flow direction is changed. The flow control position indicator must be installed at the entrance to any bypass line that could divert the emissions away from the add-on control device to the atmosphere.

(ii) *Car-seal or lock-and-key valve closures.* Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. You must visually inspect the seal or closure mechanism at least once every month to ensure that the valve is maintained in the closed position, and the emissions are not diverted away from the add-on control device to the atmosphere.

(iii) *Valve closure monitoring.* Ensure that any bypass line valve is in the closed (nondiverting) position through monitoring of valve position at least once every 15 minutes. You must inspect the monitoring system at least once every month to verify that the monitor will indicate valve position.

(iv) *Automatic shutdown system.* Use an automatic shutdown system in which the coating operation is stopped when flow is diverted by the bypass line away from the add-on control device to the atmosphere when the coating operation is running. You must inspect the automatic shutdown system at least once every month to verify that it will detect diversions of flow and shut down the coating operation.

(v) *Flow direction indicator.* Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow direction indicator that takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. Each time the flow direction changes, the next reading of the time of occurrence and flow direction must be recorded. The flow direction indicator must be installed in each bypass line or air makeup supply line that could divert the emissions away from the add-on control device to the atmosphere.

(2) If any bypass line is opened, you must include a description of why the bypass line was opened and the length of time it remained open in the semiannual compliance reports required in §63.4520.

(c) *Thermal oxidizers and catalytic oxidizers.* If you are using a thermal oxidizer or catalytic oxidizer as an add-on control device (including those used with concentrators or with carbon adsorbers to treat desorbed concentrate streams), you must comply with the requirements in paragraphs (c)(1) through (3) of this section:

(1) For a thermal oxidizer, install a gas temperature monitor in the firebox of the thermal oxidizer or in the duct immediately downstream of the firebox before any substantial heat exchange occurs.

(2) For a catalytic oxidizer, install gas temperature monitors upstream and/or downstream of the catalyst bed as required in §63.3967(b).

(3) For all thermal oxidizers and catalytic oxidizers, you must meet the requirements in paragraphs (a) and (c)(3)(i) through (v) of this section for each gas temperature monitoring device.

(i) Locate the temperature sensor in a position that provides a representative temperature.

(ii) Use a temperature sensor with a measurement sensitivity of 5 degrees Fahrenheit or 1.0 percent of the temperature value, whichever is larger.

(iii) Before using the sensor for the first time or when relocating or replacing the sensor, perform a validation check by comparing the sensor output to a calibrated temperature measurement device or by comparing the sensor output to a simulated temperature.

(iv) Conduct an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor output to redundant temperature sensors, to calibrated temperature measurement devices, or to temperature simulation devices.

(v) Conduct a visual inspection of each sensor every quarter if redundant temperature sensors are not used.

(d) *Regenerative carbon adsorbers.* If you are using a regenerative carbon adsorber as an add-on control device, you must monitor the total regeneration desorbing gas ( *e.g.,* steam or nitrogen) mass flow for each regeneration cycle, the carbon bed temperature after each regeneration and cooling cycle, and comply with paragraphs (a)(3) through (5) and (d)(1) through (3) of this section.

(1) The regeneration desorbing gas mass flow monitor must be an integrating device having a measurement sensitivity of plus or minus 10 percent capable of recording the total regeneration desorbing gas mass flow for each regeneration cycle.

(2) The carbon bed temperature monitor must be capable of recording the temperature within 15 minutes of completing any carbon bed cooling cycle.

(3) For all regenerative carbon adsorbers, you must meet the requirements in paragraphs (c)(3)(i) through (v) of this section for each temperature monitoring device.

(e) *Condensers.* If you are using a condenser, you must monitor the condenser outlet (product side) gas temperature and comply with paragraphs (a) and (e)(1) and (2) of this section.

(1) The temperature monitor must provide a gas temperature record at least once every 15 minutes.

(2) For all condensers, you must meet the requirements in paragraphs (c)(3)(i) through (v) of this section for each temperature monitoring device.

(f) *Concentrators.* If you are using a concentrator, such as a zeolite wheel or rotary carbon bed concentrator, you must comply with the requirements in paragraphs (f)(1) and (2) of this section.

(1) You must install a temperature monitor in the desorption gas stream. The temperature monitor must meet the requirements in paragraphs (a) and (c)(3) of this section.

(2) You must install a device to monitor pressure drop across the zeolite wheel or rotary carbon bed. The pressure monitoring device must meet the requirements in paragraphs (a) and (g)(2) of this section.

(g) *Emission capture systems.* The capture system monitoring system must comply with the applicable requirements in paragraphs (g)(1) and (2) of this section.

(1) For each flow measurement device, you must meet the requirements in paragraphs (a) and (g)(1)(i) through (vii) of this section.

(i) Locate a flow sensor in a position that provides a representative flow measurement in the duct from each capture device in the emission capture system to the add-on control device.

(ii) Use a flow sensor with an accuracy of at least 10 percent of the flow.

(iii) Perform an initial sensor calibration in accordance with the manufacturer's requirements.

(iv) Perform a validation check before initial use or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values with electronic signal simulations or via relative accuracy testing.

(v) Conduct an accuracy audit every quarter and after every deviation. Accuracy audit methods include comparisons of sensor values with electronic signal simulations or via relative accuracy testing.

(vi) Perform leak checks monthly.

(vii) Perform visual inspections of the sensor system quarterly if there is no redundant sensor.

(2) For each pressure drop measurement device, you must comply with the requirements in paragraphs (a) and (g)(2)(i) through (vii) of this section.

(i) Locate the pressure sensor(s) in or as close to a position that provides a representative measurement of the pressure drop across each opening you are monitoring.

(ii) Use a pressure sensor with an accuracy of at least 0.5 inches of water column or 5 percent of the measured value, whichever is larger.

(iii) Perform an initial calibration of the sensor according to the manufacturer's requirements.

(iv) Conduct a validation check before initial operation or upon relocation or replacement of a sensor. Validation checks include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.

(v) Conduct accuracy audits every quarter and after every deviation. Accuracy audits include comparison of sensor values to calibrated pressure measurement devices or to pressure simulation using calibrated pressure sources.

(vi) Perform monthly leak checks on pressure connections. A pressure of at least 1.0 inches of water column to the connection must yield a stable sensor result for at least 15 seconds.

(vii) Perform a visual inspection of the sensor at least monthly if there is no redundant sensor.

## Other Requirements and Information

## § 63.4580 Who implements and enforces this subpart?

(a) This subpart can be implemented and enforced by us, the U.S. Environmental Protection Agency (EPA), or a delegated authority such as your State, local, or tribal agency. If the Administrator has delegated authority to your State, local, or tribal agency, then that agency (as well as the EPA) has the authority to implement and enforce this subpart. You should contact your EPA Regional Office to find out if implementation and enforcement of 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 subpart E of this part, the authorities contained in paragraph (c) of this section are retained by the Administrator and are not transferred to the State, local, or tribal agency.

(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 requirements in §§63.4481 through 4483 and §§63.4490 through 4493.

(2) Approval of major alternatives to test methods under §63.7(e)(2)(ii) and (f) and as defined in §63.90.

(3) Approval of major alternatives to monitoring under §63.8(f) and as defined in §63.90.

(4) Approval of major alternatives to recordkeeping and reporting under §63.10(f) and as defined in §63.90.

## § 63.4581 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:

*Additive* means a material that is added to a coating after purchase from a supplier (e.g., catalysts, activators, accelerators).

*Add-on control* means an air pollution control device, such as a thermal oxidizer or carbon adsorber, that reduces pollution in an air stream by destruction or removal before discharge to the atmosphere.

*Adhesive, adhesive coating* means any chemical substance that is applied for the purpose of bonding two surfaces together. Products used on humans and animals, adhesive tape, contact paper, or any other product with an adhesive incorporated onto or in an inert substrate shall not be considered adhesives under this subpart.

*Assembled on-road vehicle coating* means any coating operation in which coating is applied to the surface of some component or surface of a fully assembled motor vehicle or trailer intended for on-road use including, but not limited to, components or surfaces on automobiles and light-duty trucks that have been repaired after a collision or otherwise repainted, fleet delivery trucks, and motor homes and other recreational vehicles (including camping trailers and fifth wheels). Assembled on-road vehicle coating includes the concurrent coating of parts of the assembled on-road vehicle that are painted off-vehicle to protect systems, equipment, or to allow full coverage. Assembled on-road vehicle coating does not include surface coating operations that meet the applicability criteria of the Automobiles and Light-Duty Trucks NESHAP. Assembled on-road vehicle coating also does not include the use of adhesives, sealants, and caulks used in assembling on-road vehicles.

*Automotive lamp coating* means any coating operation in which coating is applied to the surface of some component of the body of an exterior automotive lamp, including the application of reflective argent coatings and clear topcoats. Exterior automotive lamps include head lamps, tail lamps, turn signals, brake lights, and side marker lights. Automotive lamp coating does not include any coating operation performed on an assembled on-road vehicle.

*Capture device* means a hood, enclosure, room, floor sweep, or other means of containing or collecting emissions and directing those emissions into an add-on air pollution control device.

*Capture efficiency or capture system efficiency* means the portion (expressed as a percentage) of the pollutants from an emission source that is delivered to an add-on control device.

*Capture system* means one or more capture devices intended to collect emissions generated by a coating operation in the use of coatings or cleaning materials, both at the point of application and at subsequent points where emissions from the coatings and cleaning materials occur, such as flashoff, drying, or curing. As used in this subpart, multiple capture devices that collect emissions generated by a coating operation are considered a single capture system.

*Cleaning material* means a solvent used to remove contaminants and other materials, such as dirt, grease, oil, and dried or wet coating ( *e.g.,* depainting), from a substrate before or after coating application or from equipment associated with a coating operation, such as spray booths, spray guns, racks, tanks, and hangers. Thus, it includes any cleaning material used on substrates or equipment or both.

*Coating* means a material applied to a substrate for decorative, protective, or functional purposes. Such materials include, but are not limited to, paints, sealants, liquid plastic coatings, caulks, inks, adhesives, and maskants. Decorative, protective, or functional materials that consist only of protective oils for metal, acids, bases, or any combination of these substances, or paper film or plastic film which may be pre-coated with an adhesive by the film manufacturer, are not considered coatings for the purposes of this subpart. A liquid plastic coating means a coating made from fine particle-size polyvinyl chloride (PVC) in solution (also referred to as a plastisol).

*Coating operation* means equipment used to apply cleaning materials to a substrate to prepare it for coating application (surface preparation) or to remove dried coating; to apply coating to a substrate (coating application) and to dry or cure the coating after application; or to clean coating operation equipment (equipment cleaning). A single coating operation may include any combination of these types of equipment, but always includes at least the point at which a given quantity of coating or cleaning material is applied to a given part and all subsequent points in the affected source where organic HAP are emitted from the specific quantity of coating or cleaning material on the specific part. There may be multiple coating operations in an affected source. Coating application with handheld, non-refillable aerosol containers, touch-up markers, or marking pens is not a coating operation for the purposes of this subpart.

*Coatings solids* means the nonvolatile portion of the coating that makes up the dry film.

*Continuous parameter monitoring system (CPMS)* means the total equipment that may be required to meet the data acquisition and availability requirements of this subpart, used to sample, condition (if applicable), analyze, and provide a record of coating operation, or capture system, or add-on control device parameters.

*Controlled coating operation* means a coating operation from which some or all of the organic HAP emissions are routed through an emission capture system and add-on control device.

*Deviation* means any instance in which an affected source subject to this subpart, or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart including but not limited to, any emission limit or operating limit or work practice standard;

(2) Fails to meet any term or condition that is adopted to implement an applicable requirement in this subpart and that is included in the operating permit for any affected source required to obtain such a permit; or

(3) Fails to meet any emission limit, or operating limit, or work practice standard in this subpart during startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

*Emission limitation* means the aggregate of all requirements associated with a compliance option including emission limit, operating limit, work practice standard, etc.

*Enclosure* means a structure that surrounds a source of emissions and captures and directs the emissions to an add-on control device.

*Exempt compound* means a specific compound that is not considered a VOC due to negligible photochemical reactivity. The exempt compounds are listed in 40 CFR 51.100(s).

*Facility maintenance* means the routine repair or renovation (including the surface coating) of the tools, equipment, machinery, and structures that comprise the infrastructure of the affected facility and that are necessary for the facility to function in its intended capacity.

*General use coating* means any coating operation that is not an automotive lamp, TPO, or assembled on-road vehicle coating operation.

*Hobby shop* means any surface coating operation, located at an affected source, that is used exclusively for personal, noncommercial purposes by the affected source's employees or assigned personnel.

*Manufacturer's formulation data* means data on a material (such as a coating) that are supplied by the material manufacturer based on knowledge of the ingredients used to manufacture that material, rather than based on testing of the material with the test methods specified in §63.4541. Manufacturer's formulation data may include, but are not limited to, information on density, organic HAP content, volatile organic matter content, and coating solids content.

*Mass fraction of coating solids* means the ratio of the mass of solids (also known as the mass of nonvolatiles) to the mass of a coating in which it is contained; kg of coating solids per kg of coating.

*Mass fraction of organic HAP* means the ratio of the mass of organic HAP to the mass of a material in which it is contained, expressed as kg of organic HAP per kg of material.

*Month* means a calendar month or a pre-specified period of 28 days to 35 days to allow for flexibility in recordkeeping when data are based on a business accounting period.

*Non-HAP coating* means, for the purposes of this subpart, a coating that contains no more than 0.1 percent by mass of any individual organic HAP that is an OSHA-defined carcinogen as specified in 29 CFR 1910.1200(d)(4) and no more than 1.0 percent by mass for any other individual HAP.

*Organic HAP content* means the mass of organic HAP emitted per mass of coating solids used for a coating calculated using Equation 1 of §63.4541. The organic HAP content is determined for the coating in the condition it is in when received from its manufacturer or supplier and does not account for any alteration after receipt. For reactive adhesives in which some of the HAP react to form solids and are not emitted to the atmosphere, organic HAP content is the mass of organic HAP that is emitted, rather than the organic HAP content of the coating as it is received.

*Permanent total enclosure (PTE)* means a permanently installed enclosure that meets the criteria of Method 204 of appendix M, 40 CFR part 51, for a PTE and that directs all the exhaust gases from the enclosure to an add-on control device.

*Personal watercraft* means a vessel (boat) which uses an inboard motor powering a water jet pump as its primary source of motive power and which is designed to be operated by a person or persons sitting, standing, or kneeling on the vessel, rather than in the conventional manner of sitting or standing inside the vessel.

*Plastic part and product* means any piece or combination of pieces of which at least one has been formed from one or more resins. Such pieces may be solid, porous, flexible or rigid.

*Protective oil* means an organic material that is applied to metal for the purpose of providing lubrication or protection from corrosion without forming a solid film. This definition of protective oil includes, but is not limited to, lubricating oils, evaporative oils (including those that evaporate completely), and extrusion oils.

*Reactive adhesive* means adhesive systems composed, in part, of volatile monomers that react during the adhesive curing reaction, and, as a result, do not evolve from the film during use. These volatile components instead become integral parts of the adhesive through chemical reaction. At least 70 percent of the liquid components of the system, excluding water, react during the process.

*Research or laboratory facility* means a facility whose primary purpose is for research and development of new processes and products, that is conducted under the close supervision of technically trained personnel, and is not engaged in the manufacture of final or intermediate products for commercial purposes, except in a *de minimis* manner.

*Responsible official* means responsible official as defined in 40 CFR 70.2.

*Startup, initial* means the first time equipment is brought online in a facility.

*Surface preparation* means use of a cleaning material on a portion of or all of a substrate. This includes use of a cleaning material to remove dried coating, which is sometimes called depainting.

*Temporary total enclosure* means an enclosure constructed for the purpose of measuring the capture efficiency of pollutants emitted from a given source as defined in Method 204 of appendix M, 40 CFR part 51.

*Thermoplastic olefin (TPO)* means polyolefins (blends of polypropylene, polyethylene and its copolymers). This also includes blends of TPO with polypropylene and polypropylene alloys including, but not limited to, thermoplastic elastomer (TPE), TPE polyurethane (TPU), TPE polyester (TPEE), TPE polyamide (TPAE), and thermoplastic elastomer polyvinyl chloride (TPVC).

*Thermoplastic olefin (TPO) coating* means any coating operation in which the coatings are components of a system of coatings applied to a TPO substrate, including adhesion promoters, primers, color coatings, clear coatings and topcoats. Thermoplastic olefin coating does not include the coating of TPO substrates on assembled on-road vehicles.

*Thinner* means an organic solvent that is added to a coating after the coating is received from the supplier.

*Total volatile hydrocarbon (TVH)* means the total amount of nonaqueous volatile organic matter determined according to Methods 204 and 204A through 204F of appendix M to 40 CFR part 51 and substituting the term TVH each place in the methods where the term VOC is used. The TVH includes both VOC and non-VOC.

*Uncontrolled coating operation* means a coating operation from which none of the organic HAP emissions are routed through an emission capture system and add-on control device.

*Volatile organic compound (VOC)* means any compound defined as VOC in 40 CFR 51.100(s).

*Wastewater* means water that is generated in a coating operation and is collected, stored, or treated prior to being discarded or discharged.

### Table 1 to Subpart PPPP of Part 63—Operating Limits if Using the Emission Rate With Add-On Controls Option

If you are required to comply with operating limits by §63.4491(c), you must comply with the applicable operating limits in the following table:

| For the following device . . . | You must meet the following operating limit . . . | And you must demonstrate continuous compliance with the operating limit by . . . |
|---|---|---|
| 1. Thermal oxidizer | a. The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to §63.4567(a). | i. Collecting the combustion temperature data according to §63.4568(c);<br>ii. Reducing the data to 3-hour block averages; and<br>iii. Maintaining the 3-hour average combustion temperature at or above the temperature limit. |
| 2. Catalytic oxidizer | a. The average temperature measured just before the catalyst bed in any 3-hour period must not fall below the limit established according to §63.4567(b); and either | i. Collecting the temperature data according to §63.4568(c);<br>ii. Reducing the data to 3-hour block averages; and<br>iii. Maintaining the 3-hour average temperature before the catalyst bed at or above the temperature limit. |
| | b. Ensure that the average temperature difference across the catalyst bed in any 3-hour period does not fall below the temperature difference limit established according to §63.4567(b)(2); or | i. Collecting the temperature data according to §63.4568(c);<br>ii. Reducing the data to 3-hour block averages; and<br>iii. Maintaining the 3-hour average temperature difference at or above the temperature difference limit. |

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| | c. Develop and implement an inspection and maintenance plan according to §63.4567(b)(4). | i. Maintaining an up-to-date inspection and maintenance plan, records of annual catalyst activity checks, records of monthly inspections of the oxidizer system, and records of the annual internal inspections of the catalyst bed. If a problem is discovered during a monthly or annual inspection required by §63.4567(b)(4), you must take corrective action as soon as practicable consistent with the manufacturer's recommendations. |
| 3. Regenerative carbon adsorber | a. The total regeneration desorbing gas ( *e.g.*, steam or nitrogen) mass flow for each carbon bed regeneration cycle must not fall below the total regeneration desorbing gas mass flow limit established according to §63.4567(c); and | i. Measuring the total regeneration desorbing gas ( *e.g.*, steam or nitrogen) mass flow for each regeneration cycle according to §63.4568(d); and<br>ii. Maintaining the total regeneration desorbing gas mass flow at or above the mass flow limit. |
| | b. The temperature of the carbon bed, after completing each regeneration and any cooling cycle, must not exceed the carbon bed temperature limit established according to §63.4567(c). | i. Measuring the temperature of the carbon bed after completing each regeneration and any cooling cycle according to §63.4568(d); and<br>ii. Operating the carbon beds such that each carbon bed is not returned to service until completing each regeneration and any cooling cycle until the recorded temperature of the carbon bed is at or below the temperature limit. |
| 4. Condenser | a. The average condenser outlet (product side) gas temperature in any 3-hour period must not exceed the temperature limit established according to §63.4567(d). | i. Collecting the condenser outlet (product side) gas temperature according to §63.4568(e);<br>ii. Reducing the data to 3-hour block averages; and<br>iii. Maintaining the 3-hour average gas temperature at the outlet at or below the temperature limit. |
| 5. Concentrators, including zeolite wheels and rotary carbon adsorbers | a. The average gas temperature of the desorption concentrate stream in any 3-hour period must not fall below the limit established according to §63.4567(e); and | i. Collecting the temperature data according to §63.4568(f);<br>ii. Reducing the data to 3-hour block averages; and<br>iii. Maintaining the 3-hour average |

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| | | temperature at or above the temperature limit. |
| | b. The average pressure drop of the dilute stream across the concentrator in any 3-hour period must not fall below the limit established according to §63.4567(e). | i. Collecting the pressure drop data according to §63.4568(f);<br>ii. Reducing the pressure drop data to 3-hour block averages; and<br>iii. Maintaining the 3-hour average pressure drop at or above the pressure drop limit. |
| 6. Emission capture system that is a PTE according to §63.4565(a) | a. The direction of the air flow at all times must be into the enclosure; and either | i. Collecting the direction of air flow, and either the facial velocity of air through all natural draft openings according to §63.4568(g)(1) or the pressure drop across the enclosure according to §63.4568(g)(2); and<br>ii. Maintaining the facial velocity of air flow through all natural draft openings or the pressure drop at or above the facial velocity limit or pressure drop limit, and maintaining the direction of air flow into the enclosure at all times. |
| | b. The average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or | i. *See* items 6.a.i and 6.a.ii. |
| | c. The pressure drop across the enclosure must be at least 0.007 inch $H_2O$, as established in Method 204 of appendix M to 40 CFR part 51. | i. *See* items 6.a.i and 6.a.ii. |
| 7. Emission capture system that is not a PTE according to §63.4565(a) | a. The average gas volumetric flow rate or duct static pressure in each duct between a capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to §63.4567(f). | i. Collecting the gas volumetric flow rate or duct static pressure for each capture device according to §63.4568(g);<br>ii. Reducing the data to 3-hour block averages; and<br>iii. Maintaining the 3-hour average gas volumetric flow rate or duct static pressure for each capture device at or above the gas volumetric flow rate or duct static pressure limit. |

### Table 2 to Subpart PPPP of Part 63—Applicability of General Provisions to Subpart PPPP of Part 63

You must comply with the applicable General Provisions requirements according to the following table

| Citation | Subject | Applicable to subpart PPPP | Explanation |
|---|---|---|---|
| §63.1(a)(1)–(14) | General Applicability | Yes. | |
| §63.1(b)(1)–(3) | Initial Applicability Determination | Yes | Applicability to subpart PPPP is also specified in §63.4481. |
| §63.1(c)(1) | Applicability After Standard Established | Yes. | |
| §63.1(c)(2)–(3) | Applicability of Permit Program for Area Sources | No | Area sources are not subject to subpart PPPP. |
| §63.1(c)(4)–(5) | Extensions and Notifications | Yes. | |
| §63.1(e) | Applicability of Permit Program Before Relevant Standard is Set | Yes. | |
| §63.2 | Definitions | Yes | Additional definitions are specified in §63.4581. |
| §63.3(a)–(c) | Units and Abbreviations | Yes. | |
| §63.4(a)(1)–(5) | Prohibited Activities | Yes. | |
| §63.4(b)–(c) | Circumvention/Severability | Yes. | |
| §63.5(a) | Construction/Reconstruction | Yes. | |
| §63.5(b)(1)–(6) | Requirements for Existing, Newly Constructed, and Reconstructed Sources | Yes. | |
| §63.5(d) | Application for Approval of Construction/Reconstruction | Yes. | |
| §63.5(e) | Approval of Construction/Reconstruction | Yes. | |
| §63.5(f) | Approval of Construction/Reconstruction Based | Yes. | |

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| | on Prior State Review | | |
| §63.6(a) | Compliance With Standards and Maintenance Requirements—Applicability | Yes. | |
| §63.6(b)(1)–(7) | Compliance Dates for New and Reconstructed Sources | Yes | Section 63.4483 specifies the compliance dates. |
| §63.6(c)(1)–(5) | Compliance Dates for Existing Sources | Yes | Section 63.4483 specifies the compliance dates. |
| §63.6(e)(1)–(2) | Operation and Maintenance | Yes. | |
| §63.6(e)(3) | Startup, Shutdown, and Malfunction Plan | Yes | Only sources using an add-on control device to comply with the standard must complete startup, shutdown, and malfunction plans. |
| §63.6(f)(1) | Compliance Except During Startup, Shutdown, and Malfunction | Yes | Applies only to sources using an add-on control device to comply with the standard. |
| §63.6(f)(2)–(3) | Methods for Determining Compliance | Yes. | |
| §63.6(g)(1)–(3) | Use of an Alternative Standard | Yes. | |
| §63.6(h) | Compliance With Opacity/Visible Emission Standards | No | Subpart PPPP does not establish opacity standards and does not require continuous opacity monitoring systems (COMS). |
| §63.6(i)(1)–(16) | Extension of Compliance | Yes. | |
| §63.6(j) | Presidential Compliance Exemption | Yes. | |
| §63.7(a)(1) | Performance Test Requirements—Applicability | Yes | Applies to all affected sources. Additional requirements for performance testing are specified in §§63.4564, 63.4565, and 63.4566. |
| §63.7(a)(2) | Performance Test Requirements—Dates | Yes | Applies only to performance tests for capture system and control device efficiency at sources using these to comply with the standards. Section 63.4560 |

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| | | | specifies the schedule for performance test requirements that are earlier than those specified in §63.7(a)(2). |
| §63.7(a)(3) | Performance Tests Required By the Administrator | Yes. | |
| §63.7(b)–(e) | Performance Test Requirements—Notification, Quality Assurance, Facilities Necessary for Safe Testing, Conditions During Test | Yes | Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standards. |
| §63.7(f) | Performance Test Requirements—Use Alternative Test Method | Yes | Applies to all test methods except those of used to determine capture system efficiency. |
| §63.7(g)–(h) | Performance Test Requirements—Data Analysis, Recordkeeping, Reporting, Waiver of Test | Yes | Applies only to performance tests for capture system and add-on control device efficiency at sources using these to comply with the standards. |
| §63.8(a)(1)–(3) | Monitoring Requirements—Applicability | Yes | Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standards. Additional requirements for monitoring are specified in §63.4568. |
| §63.8(a)(4) | Additional Monitoring Requirements | No | Subpart PPPP does not have monitoring requirements for flares. |
| §63.8(b) | Conduct of Monitoring | Yes. | |
| §63.8(c)(1)–(3) | Continuous Monitoring Systems (CMS) Operation and Maintenance | Yes | Applies only to monitoring of capture system and add-on control device efficiency at sources using these to comply with the standard. Additional requirements for CMS operations and maintenance are specified in §63.4568. |
| §63.8(c)(4) | CMS | No | Section 63.4568 specifies the requirements for the operation of |

| | | | |
|---|---|---|---|
| | | | CMS for capture systems and add-on control devices at sources using these to comply. |
| §63.8(c)(5) | COMS | No | Subpart PPPP does not have opacity or visible emission standards. |
| §63.8(c)(6) | CMS Requirements | No | Section 63.4568 specifies the requirements for monitoring systems for capture systems and add-on control devices at sources using these to comply. |
| §63.8(c)(7) | CMS Out-of-Control Periods | Yes. | |
| §63.8(c)(8) | CMS Out-of-Control Periods and Reporting | No | Section 63.4520 requires reporting of CMS out-of-control periods. |
| §63.8(d)–(e) | Quality Control Program and CMS Performance Evaluation | No | Subpart PPPP does not require the use of continuous emissions monitoring systems. |
| §63.8(f)(1)–(5) | Use of an Alternative Monitoring Method | Yes. | |
| §63.8(f)(6) | Alternative to Relative Accuracy Test | No | Subpart PPPP does not require the use of continuous emissions monitoring systems. |
| §63.8(g)(1)–(5) | Data Reduction | No | Sections 63.4567 and 63.4568 specify monitoring data reduction. |
| §63.9(a)–(d) | Notification Requirements | Yes. | |
| §63.9(e) | Notification of Performance Test | Yes | Applies only to capture system and add-on control device performance tests at sources using these to comply with the standards. |
| §63.9(f) | Notification of Visible Emissions/Opacity Test | No | Subpart PPPP does not have opacity or visible emission standards. |
| §63.9(g)(1)–(3) | Additional Notifications When Using CMS | No | Subpart PPPP does not require the use of continuous emissions monitoring systems. |

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|---|---|---|---|
| §63.9(h) | Notification of Compliance Status | Yes | Section 63.4510 specifies the dates for submitting the notification of compliance status. |
| §63.9(i) | Adjustment of Submittal Deadlines | Yes. | |
| §63.9(j) | Change in Previous Information | Yes. | |
| §63.10(a) | Recordkeeping/Reporting—Applicability and General Information | Yes. | |
| §63.10(b)(1) | General Recordkeeping Requirements | Yes | Additional requirements are specified in §§63.4530 and 63.4531. |
| §63.10(b)(2)(i)–(v) | Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS | Yes | Requirements for startup, shutdown, and malfunction records only apply to add-on control devices used to comply with the standards. |
| §63.10(b)(2)(vi)–(xi) | | Yes. | |
| §63.10(b)(2)(xii) | Records | Yes. | |
| §63.10(b)(2)(xiii) | | No | Subpart PPPP does not require the use of continuous emissions monitoring systems. |
| §63.10(b)(2)(xiv) | | Yes. | |
| §63.10(b)(3) | Recordkeeping Requirements for Applicability Determinations | Yes. | |
| §63.10(c)(1)–(6) | Additional Recordkeeping Requirements for Sources with CMS | Yes | |
| §63.10(c)(7)–(8) | | No | The same records are required in §63.4520(a)(7). |
| §63.10(c)(9)–(15) | | Yes. | |
| §63.10(d)(1) | General Reporting Requirements | Yes | Additional requirements are specified in §63.4520. |
| §63.10(d)(2) | Report of Performance Test Results | Yes | Additional requirements are |

| | | | |
|---|---|---|---|
| | | | specified in §63.4520(b). |
| §63.10(d)(3) | Reporting Opacity or Visible Emissions Observations | No | Subpart PPPP does not require opacity or visible emissions observations. |
| §63.10(d)(4) | Progress Reports for Sources With Compliance Extensions | Yes. | |
| §63.10(d)(5) | Startup, Shutdown, and Malfunction Reports | Yes | Applies only to add-on control devices at sources using these to comply with the standards. |
| §63.10(e)(1)–(2) | Additional CMS Reports | No | Subpart PPPP does not require the use of continuous emissions monitoring systems. |
| §63.10(e)(3) | Excess Emissions/CMS Performance Reports | No | Section 63.4520(b) specifies the contents of periodic compliance reports. |
| §63.10(e)(4) | COMS Data Reports | No | Subpart PPPP does not specify requirements for opacity or COMS. |
| §63.10(f) | Recordkeeping/Reporting Waiver | Yes. | |
| §63.11 | Control Device Requirements/Flares | No | Subpart PPPP does not specify use of flares for compliance. |
| §63.12 | State Authority and Delegations | Yes. | |
| §63.13 | Addresses | Yes. | |
| §63.14 | Incorporation by Reference | Yes. | |
| §63.15 | Availability of Information/Confidentiality | Yes. | |

### Table 3 to Subpart PPPP of Part 63—Default Organic HAP Mass Fraction for Solvents and Solvent Blends

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data and which match either the solvent blend name or the chemical abstract series (CAS) number. If a solvent blend matches both the name and CAS number for an entry, that entry's organic HAP mass fraction must be used for that solvent blend. Otherwise, use the organic HAP mass fraction for the entry matching either the solvent blend name or CAS number, or use the organic HAP mass fraction from table 4 to this subpart if neither the name or CAS number match.

| **Solvent/solvent blend** | **CAS. No.** | **Average organic HAP mass fraction** | **Typical organic HAP, percent by mass** |
|---|---|---|---|

| | | | |
|---|---:|---:|---|
| 1. Toluene | 108–88–3 | 1.0 | Toluene. |
| 2. Xylene(s) | 1330–20–7 | 1.0 | Xylenes, ethylbenzene. |
| 3. Hexane | 110–54–3 | 0.5 | n-hexane. |
| 4. n-Hexane | 110–54–3 | 1.0 | n-hexane. |
| 5. Ethylbenzene | 100–41–4 | 1.0 | Ethylbenzene. |
| 6. Aliphatic 140 | | 0 | None. |
| 7. Aromatic 100 | | 0.02 | 1% xylene, 1% cumene. |
| 8. Aromatic 150 | | 0.09 | Naphthalene. |
| 9. Aromatic naphtha | 64742–95–6 | 0.02 | 1% xylene, 1% cumene. |
| 10. Aromatic solvent | 64742–94–5 | 0.1 | Naphthalene. |
| 11. Exempt mineral spirits | 8032–32–4 | 0 | None. |
| 12. Ligroines (VM & P) | 8032–32–4 | 0 | None. |
| 13. Lactol spirits | 64742–89–6 | 0.15 | Toluene. |
| 14. Low aromatic white spirit | 64742–82–1 | 0 | None. |
| 15. Mineral spirits | 64742–88–7 | 0.01 | Xylenes. |
| 16. Hydrotreated naphtha | 64742–48–9 | 0 | None. |
| 17. Hydrotreated light distillate | 64742–47–8 | 0.001 | Toluene. |
| 18. Stoddard solvent | 8052–41–3 | 0.01 | Xylenes. |
| 19. Super high-flash naphtha | 64742–95–6 | 0.05 | Xylenes. |
| 20. Varsol®solvent | 8052–49–3 | 0.01 | 0.5% xylenes, 0.5% ethylbenzene. |
| 21. VM & P naphtha | 64742–89–8 | 0.06 | 3% toluene, 3% xylene. |
| 22. Petroleum distillate mixture | 68477–31–6 | 0.08 | 4% naphthalene, 4% biphenyl. |

### Table 4 to Subpart PPPP of Part 63—Default Organic HAP Mass Fraction for Petroleum Solvent Groups[a]

You may use the mass fraction values in the following table for solvent blends for which you do not have test data or manufacturer's formulation data.

| Solvent type | Average organic HAP mass fraction | Typical organic HAP, percent by mass |
|---|---|---|

| | | |
|---|---|---|
| Aliphatic[b] | 0.03 | 1% Xylene, 1% Toluene, and 1% Ethylbenzene. |
| Aromatic[c] | 0.06 | 4% Xylene, 1% Toluene, and 1% Ethylbenzene. |

[a] Use this table only if the solvent blend does not match any of the solvent blends in Table 3 to this subpart by either solvent blend name or CAS number and you only know whether the blend is aliphatic or aromatic.

[b] Mineral Spirits 135, Mineral Spirits 150 EC, Naphtha, Mixed Hydrocarbon, Aliphatic Hydrocarbon, Aliphatic Naphtha, Naphthol Spirits, Petroleum Spirits, Petroleum Oil, Petroleum Naphtha, Solvent Naphtha, Solvent Blend.

[c] Medium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent.

## Appendix A to Subpart PPPP of Part 63—Determination of Weight Volatile Matter Content and Weight Solids Content of Reactive Adhesives

1.0 Applicability and Principle

1.1 *Applicability:* This method applies to the determination of weight volatile matter content and weight solids content for most one-part or multiple-part reactive adhesives. Reactive adhesives are composed, in large part, of monomers that react during the adhesive curing reaction, and, as a result, do not volatilize. The monomers become integral parts of the cured adhesive through chemical reaction. At least 70 weight percent of the system, excluding water and non-volatile solids such as fillers, react during the process. This method is not appropriate for cyanoacrylates. For cyanoacrylates, South Coast Air Quality Management District Test Method 316B should be used. This method is not appropriate for one-part moisture cure urethane adhesives or for silicone adhesives. For one-part moisture cure urethane adhesives and for silicone adhesives, EPA Method 24 should be used.

1.2 Principle: One-part and multiple-part reactive adhesives undergo a reactive conversion from liquid to solid during the application and assembly process. Reactive adhesives are applied to a single surface, but then are usually quickly covered with another mating surface to achieve a bonded assembly. The monomers employed in such systems typically react and are converted to non-volatile solids. If left uncovered, as in a Method 24 (ASTM D2369) test, the reaction is inhibited by the presence of oxygen and volatile loss of the reactive components competes more heavily with the cure reaction. If this were to happen under normal use conditions, the adhesives would not provide adequate performance. This method minimizes this undesirable deterioration of the adhesive performance.

2.0 Materials and Apparatus

2.1 Aluminum foil, aluminum sheet, non-leaching plastic film or non-leaching plastic sheet, approximately 3 inches by 3 inches. Precondition the foil, film, or sheet for 30 minutes in an oven at 110 ±5 degrees Celsius and store in a desiccator prior to use. Use tongs or rubber gloves or both to handle the foil, film, or sheet.

2.2 Flat, rigid support panels slightly larger than the foil, film, or sheet. Polypropylene with a minimum thickness of1/8inch is recommended for the support panels. Precondition the support panels for 30 minutes in an oven at 110 ±5 degrees Celsius and store in a desiccator prior to use. Use tongs or rubber gloves or both to handle the support panels.

2.3 Aluminum spacers,1/8inch thick. Precondition the spacers for 30 minutes in an oven at 110 ±5 degrees Celsius and store in a desiccator prior to use. Use tongs or rubber gloves or both to handle the spacers.

2.4 Forced draft oven, type IIA or IIB as specified in ASTM E145–94 (Reapproved 2001), “Standard Specification for Gravity-Convection and Forced-Ventilation Ovens” (incorporated by reference, see §63.14).

2.5 Electronic balance capable of weighing to ±0.0001 grams (0.1 mg).

2.6 Flat bottom weight (approximately 3 lbs) or clamps.

*Material and Apparatus Notes*

1—The foil, film, or sheet should be thick or rigid enough so that it can be easily handled in the test procedure.

3.0 Procedure

3.1 Two procedures are provided. In Procedure A the initial specimen weight is determined by weighing the foil, film, or sheet before and after the specimen is dispensed onto the foil, film, or sheet. In Procedure B the initial specimen weight is determined by weighing the adhesive cartridge (kit) before and after the specimen is dispensed.

3.2 At least four test specimens should be run for each test material. Run the test at room temperature, 74 degrees Fahrenheit (23 degrees Celsius).

*Procedure A*

1. Zero electronic balance.

2. Place 2 pieces of aluminum foil (or aluminum sheet, plastic film, or plastic sheet) on scale.

3. Record weight of aluminum foils. (A).

4. Tare balance.

5. Remove top piece of aluminum foil.

6. Dispense a 10 to 15 gram specimen of premixed adhesive onto bottom piece of aluminum foil. Place second piece of aluminum foil on top of the adhesive specimen to make a sandwich.

7. Record weight of sandwich (specimen and aluminum foils). (B).

8. Remove sandwich from scale, place sandwich between two support panels with aluminum spacers at the edges of the support panels to make a supported sandwich. The spacers provide a standard gap. Take care to mate the edges.

9. Place the supported sandwich on a flat surface.

10. Place the weight on top of the supported sandwich to spread the adhesive specimen to a uniform thickness within the sandwich. Check that no adhesive squeezes out from between the pieces of aluminum foil or through tears in the aluminum foil.

11. Allow to cure 24 hours.

12. Remove the sandwich from between the support panels. Record the weight of the sandwich. This is referred to as the 24 hr weight. (C).

13. Bake sandwich at 110 degrees Celsius for 1 hour.

14. Remove sandwich from the oven, place immediately in a desiccator, and cool to room temperature. Record post bake sandwich weight. (D).

*Procedure B*

1. Zero electronic balance.

2. Place two pieces of aluminum foil (or aluminum sheet, plastic film, or plastic sheet) on scale.

3. Record weight of aluminum foils. (A).

4. Tare balance.

5. Place one support panel on flat surface. Place first piece of aluminum foil on top of this support panel.

6. Record the weight of a pre-mixed sample of adhesive in its container. If dispensing the adhesive from a cartridge (kit), record the weight of the cartridge (kit) plus any dispensing tips. (F).

7. Dispense a 10 to 15 gram specimen of mixed adhesive onto the first piece of aluminum foil. Place second piece of aluminum foil on top of the adhesive specimen to make a sandwich.

8. Record weight of the adhesive container. If dispensing the adhesive from a cartridge (kit), record the weight of the cartridge (kit) plus any dispensing tips. (G).

9. Place the aluminum spacers at the edges of the bottom support panel polypropylene sheet. The spacers provide a standard gap.

10. Place the second support panel on top of the assembly to make a supported sandwich. Take care to mate the edges.

11. Place the supported sandwich on a flat surface.

12. Place the weight on top of the supported sandwich to spread the adhesive specimen to a uniform thickness within the sandwich. Check that no adhesive squeezes out from between the pieces of aluminum foil or through tears in the aluminum foil.

13. Allow to cure 24 hours.

14. Remove the sandwich from between the support panels. Record the weight of the sandwich. This is referred to as the 24 hr weight. (C).

15. Bake sandwich at 110 degrees Celsius for 1 hour.

16. Remove sandwich from the oven, place immediately in a desiccator, and cool to room temperature.

17. Record post-bake sandwich weight. (D).

*Procedural Notes*

1—The support panels may be omitted if the aluminum foil (or aluminum sheet, plastic film, or plastic sheet) will not tear and the adhesive specimen will spread to a uniform thickness within the sandwich when the flat weight is placed directly on top of the sandwich.

2—Clamps may be used instead of a flat bottom weight to spread the adhesive specimen to a uniform thickness within the sandwich.

3—When dispensing from a static mixer, purging is necessary to ensure uniform, homogeneous specimens. The weighing in Procedure B, Step 6 must be performed after any purging.

4—Follow the adhesive manufacturer's directions for mixing and for dispensing from a cartridge (kit).

## 4.0 Calculations

4.1 The total weight loss from curing and baking of each specimen is used to determine the weight percent volatile matter content of that specimen

*Procedure A*

Weight of original specimen (S) = (B)−(A)

Weight of post-bake specimen (P) = (D)−(A)

Total Weight Loss (L) = (S)−(P)

*Procedure B*

Weight of original specimen (S) = (F)−(G)

Weight of post-bake specimen (P) = (D)−(A)

Total Weight Loss (L) = (S)−(P)

*Procedure A and Procedure B*

Weight Percent Volatile Matter Content

(V) = [(Total weight loss)/(Initial specimen weight)] × 100 = [(L)/(S)] × 100

4.2 The weight volatile matter content of a material is the average of the weight volatile matter content of each specimen of that material. For example, if four specimens of a material were tested, then the weight percent volatile matter content for that material is:

$V = [V1 + V2 + V3 + V4]/4$

Where:

$Vi$ = the weight percent volatile matter content of specimen i of the material.

4.3 The weight percent solids content of the material is calculated from the weight percent volatile content of the material.

Weight Percent Solids Content (N) = 100−(V)

*Calculation Notes*

1—The weight loss during curing and the weight loss during baking may be calculated separately. These values may be useful for identifying sources of variation in the results obtained for different specimens of the same material.

2—For both Procedure A and Procedure B, the weight loss during curing is (S)−[(C)−(A)] and the weight loss during baking is (C)−(D).

## Attachment C

## Goldshield Fiberglass, Inc.

### Part 70 Operating Permit Renewal

## 40 CFR 63, Subpart VVVV—National Emission Standards for Hazardous Air Pollutants for Boat Manufacturing

SOURCE: 66 FR 44232, Aug. 22, 2001, unless otherwise noted.

### 63.5680 What is the purpose of this subpart?

(a) This subpart establishes national emission standards for hazardous air pollutants (HAP) for new and existing boat manufacturing facilities with resin and gel coat operations, carpet and fabric adhesive operations, or aluminum recreational boat surface coating operations. This subpart also establishes requirements to demonstrate initial and continuous compliance with the emission standards.

### § 63.5683 Does this subpart apply to me?

(a) This subpart applies to you if you meet both of the criteria listed in paragraphs (a)(1) and (2) of this section.

(1) You are the owner or operator of a boat manufacturing facility that builds fiberglass boats or aluminum recreational boats.

(2) Your boat manufacturing facility is a major source of HAP either in and of itself, or because it is collocated with other sources of HAP, such that all sources combined constitute a major source.

(b) A boat manufacturing facility is a facility that manufactures hulls or decks of boats from fiberglass or aluminum, or assembles boats from premanufactured hulls and decks, or builds molds to make fiberglass hulls or decks. A facility that manufactures only parts of boats (such as hatches, seats, or lockers) or boat trailers is not considered a boat manufacturing facility for the purpose of this subpart.

(c) A major source is any stationary source or group of stationary sources located within a contiguous area and under common control that emits or can potentially emit, considering controls, in the aggregate, 9.1 megagrams (10 tons) or more per year of a single HAP or 22.7 megagrams (25 tons) or more per year of a combination of HAP.

(d) This subpart does not apply to aluminum coating operations on aluminum boats intended for commercial or military (nonrecreational) use, antifoulant coatings, assembly adhesives, fiberglass hull and deck coatings, research and development activities, mold sealing and release agents, mold stripping and cleaning solvents, and wood coatings as defined in § 63.5779. This subpart does not apply to materials contained in handheld aerosol cans.

### § 63.5686 How do I demonstrate that my facility is not a major source?

You can demonstrate that your facility is not a major source by using the procedures in either paragraph (a) or (b) of this section.

(a) *Emission option.* You must demonstrate that your facility does not emit, and does not have the potential to emit as defined in § 63.2, considering federally enforceable permit limits, 9.1 megagrams (10 tons) or more per year of a single HAP or 22.7 megagrams (25 tons) or more per year of a combination of HAP. To calculate your facility's potential to emit, you must include emissions from the boat manufacturing facility and all other sources that are collocated and under common ownership or control with the boat manufacturing facility.

(b) *Material consumption option.* This option can be used if you manufacture either fiberglass boats or aluminum recreational boats at your facility. You must meet the criteria in paragraph (b)(1), (2), or (3) of this section and comply with the requirements in paragraph (c) of this section. If you initially rely on the limits and criteria specified in paragraph (b)(1), (2), or (3) of this section to become an area source, but then exceed the relevant limit (without first obtaining and complying with other limits that keep your potential to emit HAP below major source levels), your facility will then become a major source, and you must comply with all applicable provisions of this subpart beginning on the compliance date specified in § 63.5695. Nothing in this paragraph is intended to preclude you from limiting your facility's potential to emit through other federally enforceable mechanisms available through your permitting authority.

(1) If your facility is primarily a fiberglass boat manufacturing facility, you must demonstrate that you consume less than 45.4 megagrams per rolling 12-month period of all combined polyester-and vinylester-based resins and gel coats (including tooling and production resins and gel coats, and clear gel coats), and you must demonstrate that at least 90 percent of total annual HAP emissions at the facility (including emissions from aluminum recreational boat manufacturing or other source categories) originate from the fiberglass boat manufacturing materials.

(2) If your facility is primarily an aluminum recreational boat manufacturing facility, you must demonstrate that it consumes less than 18.2 megagrams per rolling 12-month period of all combined surface coatings, aluminum wipedown solvents, application gun cleaning solvents, and carpet and fabric adhesives; and you must demonstrate that at least 90 percent of total annual HAP emissions at the facility (including emissions from fiberglass boat manufacturing or other source categories) originate from the aluminum recreational boat manufacturing materials.

(3) If your facility is a fiberglass boat or an aluminum recreational boat manufacturing facility, you must demonstrate that the boat manufacturing materials consumed per rolling 12-month period contain a total of less than 4.6 megagrams of any single HAP and less than 11.4 megagrams of all combined HAP, and you must demonstrate that at least 90 percent of total annual HAP emissions at the facility (including emissions from other source categories) originate from these boat manufacturing materials.

(c) If you use the material consumption option described in paragraph (b) of this section to demonstrate that you are not a major source, you must comply with the requirements of paragraphs (c)(1) through (3) of this section.

(1) If your facility has HAP emissions that do not originate from boat manufacturing operations or materials described in paragraph (b), then you must keep any records necessary to demonstrate that the 90 percent criterion is met.

(2) A rolling 12-month period includes the previous 12 months of operation. You must maintain records of the total amount of materials described in paragraph (b) of this section used each month, and, if necessary, the HAP content of each material and the calculation of the total HAP consumed each month. Because records are needed for a 12-month period, you must keep records beginning no later

than 12 months before the compliance date specified in § 63.5695. Records must be kept for 5 years after they are created.

(3) In determining whether the 90 percent criterion included in paragraph (b) of this section is met, you do not need to include materials used in routine janitorial, building, or facility grounds maintenance; personal uses by employees or other persons; or products used for maintaining motor vehicles operated by the facility.

### § 63.5689 What parts of my facility are covered by this subpart?

The affected source (the portion of your boat manufacturing facility covered by this subpart) is the combination of all of the boat manufacturing operations listed in paragraphs (a) through (f) of this section.

(a) Open molding resin and gel coat operations (including pigmented gel coat, clear gel coat, production resin, tooling gel coat, and tooling resin).

(b) Closed molding resin operations.

(c) Resin and gel coat mixing operations.

(d) Resin and gel coat application equipment cleaning operations.

(e) Carpet and fabric adhesive operations.

(f) Aluminum hull and deck coating operations, including solvent wipedown operations and paint spray gun cleaning operations, on aluminum recreational boats.

### § 63.5692 How do I know if my boat manufacturing facility is a new source or an existing source?

(a) A boat manufacturing facility is a new source if it meets the criteria in paragraphs (a)(1) through (3) of this section.

(1) You commence construction of the affected source after July 14, 2000.

(2) It is a major source.

(3) It is a completely new boat manufacturing affected source where no other boat manufacturing affected source existed prior to the construction of the new source.

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

### § 63.5695 When must I comply with this subpart?

You must comply with the standards in this subpart by the compliance dates specified in Table 1 to this subpart.

## Standards for Open Molding Resin and Gel Coat Operations

### § 63.5698 What emission limit must I meet for open molding resin and gel coat operations?

(a) You must limit organic HAP emissions from the five open molding operations listed in paragraphs (a)(1) through (5) of this section to the emission limit specified in paragraph (b) of this section. Operations listed in paragraph (d) are exempt from this limit.

(1) Production resin.

(2) Pigmented gel coat.

(3) Clear gel coat.

(4) Tooling resin.

(5) Tooling gel coat.

(b) You must limit organic HAP emissions from open molding operations to the limit specified by equation 1 of this section, based on a 12-month rolling average.

$$HAP\ Limit = \left[46(M_R) + 159(M_{PG}) + 291(M_{CG}) + 54(M_{TR}) + 214(M_{TG})\right] \qquad (Eq.\ 1)$$

Where:

HAP Limit= total allowable organic HAP that can be emitted from the open molding operations, kilograms.

$M_R$ = mass of production resin used in the past 12 months, excluding any materials exempt under paragraph (d) of this section, megagrams.

$M_{PG}$ = mass of pigmented gel coat used in the past 12 months, excluding any materials exempt under paragraph (d) of this section, megagrams.

$M_{CG}$ = mass of clear gel coat used in the past 12 months, excluding any materials exempt under paragraph (d) of this section, megagrams.

$M_{TR}$ = mass of tooling resin used in the past 12 months, excluding any materials exempt under paragraph (d) of this section, megagrams.

$M_{TG}$ = mass of tooling gel coat used in the past 12 months, excluding any materials exempt under paragraph (d) of this section, megagrams.

(c) The open molding emission limit is the same for both new and existing sources.

(d) The materials specified in paragraphs (d)(1) through (3) of this section are exempt from the open molding emission limit specified in paragraph (b) of this section.

(1) Production resins (including skin coat resins) that must meet specifications for use in military vessels or must be approved by the U.S. Coast Guard for use in the construction of lifeboats, rescue boats, and other life-saving appliances approved under 46 CFR subchapter Q or the construction of small passenger vessels regulated by 46 CFR subchapter T. Production resins for which this exemption is used must be applied with nonatomizing (non-spray) resin application equipment. You must keep a record of the resins for which you are using this exemption.

(2) Pigmented, clear, and tooling gel coat used for part or mold repair and touch up. The total gel coat materials included in this exemption must not exceed 1 percent by weight of all gel coat used at your

facility on a 12-month rolling-average basis. You must keep a record of the amount of gel coats used per month for which you are using this exemption and copies of calculations showing that the exempt amount does not exceed 1 percent of all gel coat used.

(3) Pure, 100 percent vinylester resin used for skin coats. This exemption does not apply to blends of vinylester and polyester resins used for skin coats. The total resin materials included in the exemption cannot exceed 5 percent by weight of all resin used at your facility on a 12-month rolling-average basis. You must keep a record of the amount of 100 percent vinylester skin coat resin used per month that is eligible for this exemption and copies of calculations showing that the exempt amount does not exceed 5 percent of all resin used.

### § 63.5701 What are my options for complying with the open molding emission limit?

You must use one or more of the options listed in paragraphs (a) through (c) of this section to meet the emission limit in § 63.5698 for the resins and gel coats used in open molding operations at your facility.

(a) *Maximum achievable control technology (MACT) model point value averaging (emissions averaging) option.* (1) Demonstrate that emissions from the open molding resin and gel coat operations that you average meet the emission limit in § 63.5698 using the procedures described in § 63.5710. Compliance with this option is based on a 12-month rolling average.

(2) Those operations and materials not included in the emissions average must comply with either paragraph (b) or (c) of this section.

(b) *Compliant materials option.* Demonstrate compliance by using resins and gel coats that meet the organic HAP content requirements in Table 2 to this subpart. Compliance with this option is based on a 12-month rolling average.

(c) *Add-on control option.* Use an enclosure and add-on control device, and demonstrate that the resulting emissions meet the emission limit in § 63.5698. Compliance with this option is based on control device performance testing and control device monitoring.

### § 63.5704 What are the general requirements for complying with the open molding emission limit?

(a) *Emissions averaging option.* For those open molding operations and materials complying using the emissions averaging option, you must demonstrate compliance by performing the steps in paragraphs (a)(1) through (5) of this section.

(1) Use the methods specified in § 63.5758 to determine the organic HAP content of resins and gel coats.

(2) Complete the calculations described in § 63.5710 to show that the organic HAP emissions do not exceed the limit specified in § 63.5698.

(3) Keep records as specified in paragraphs (a)(3)(i) through (iv) of this section for each resin and gel coat.

(i) Hazardous air pollutant content.

(ii) Amount of material used per month.

(iii) Application method used for production resin and tooling resin. This record is not required if all production resins and tooling resins are applied with nonatomized technology.

(iv) Calculations performed to demonstrate compliance based on MACT model point values, as described in § 63.5710.

(4) Prepare and submit the implementation plan described in § 63.5707 to the Administrator and keep it up to date.

(5) Submit semiannual compliance reports to the Administrator as specified in § 63.5764.

(b) *Compliant materials option.* For each open molding operation complying using the compliant materials option, you must demonstrate compliance by performing the steps in paragraphs (b)(1) through (4) of this section.

(1) Use the methods specified in § 63.5758 to determine the organic HAP content of resins and gel coats.

(2) Complete the calculations described in § 63.5713 to show that the weighted-average organic HAP content does not exceed the limit specified in Table 2 to this subpart.

(3) Keep records as specified in paragraphs (b)(3)(i) through (iv) of this section for each resin and gel coat.

(i) Hazardous air pollutant content.

(ii) Application method for production resin and tooling resin. This record is not required if all production resins and tooling resins are applied with nonatomized technology.

(iii) Amount of material used per month. This record is not required for an operation if all materials used for that operation comply with the organic HAP content requirements.

(iv) Calculations performed, if required, to demonstrate compliance based on weighted-average organic HAP content as described in § 63.5713.

(4) Submit semiannual compliance reports to the Administrator as specified in § 63.5764.

(c) *Add-on control option.* If you are using an add-on control device, you must demonstrate compliance by performing the steps in paragraphs (c)(1) through (5) of this section.

(1) Conduct a performance test of the control device as specified in §§ 63.5719 and 63.5722 to demonstrate initial compliance.

(2) Use the performance test results to determine control device parameters to monitor after the performance test as specified in § 63.5725.

(3) Comply with the operating limits specified in § 63.5715 and the control device and emission capture system monitoring requirements specified in § 63.5725 to demonstrate continuous compliance.

(4) Keep the records specified in § 63.5767.

(5) Submit to the Administrator the notifications and reports specified in §§ 63.5761 and 63.5764.

### § 63.5707 What is an implementation plan for open molding operations and when do I need to prepare one?

(a) You must prepare an implementation plan for all open molding operations for which you comply by using the emissions averaging option described in § 63.5704(a).

(b) The implementation plan must describe the steps you will take to bring the open molding operations covered by this subpart into compliance. For each operation included in the emissions average, your implementation plan must include the elements listed in paragraphs (b)(1) through (3) of this section.

(1) A description of each operation included in the average.

(2) The maximum organic HAP content of the materials used, the application method used (if any atomized resin application methods are used in the average), and any other methods used to control emissions.

(3) Calculations showing that the operations covered by the plan will comply with the open molding emission limit specified in § 63.5698.

(c) You must submit the implementation plan to the Administrator with the notification of compliance status specified in § 63.5761.

(d) You must keep the implementation plan on site and provide it to the Administrator when asked.

(e) If you revise the implementation plan, you must submit the revised plan with your next semiannual compliance report specified in § 63.5764.

### § 63.5710 How do I demonstrate compliance using emissions averaging?

(a) Compliance using the emissions averaging option is demonstrated on a 12-month rolling-average basis and is determined at the end of every month (12 times per year). The first 12-month rolling-average period begins on the compliance date specified in § 63.5695.

(b) At the end of the twelfth month after your compliance date and at the end of every subsequent month, use equation 1 of this section to demonstrate that the organic HAP emissions from those operations included in the average do not exceed the emission limit in § 63.5698 calculated for the same 12-month period. (Include terms in equation 1 of § 63.5698 and equation 1 of this section for only those operations and materials included in the average.)

$$HAP\ \mathrm{emissions} = \left[(\mathrm{PV_R})(M_R) + (PV_{PG})(M_{PG}) + (PV_{CG})(M_{CG}) + (PV_{TR})(M_{TR}) + (PV_{TG})(M_{TG})\right]$$

Where:

HAP emissions= Organic HAP emissions calculated using MACT model point values for each operation included in the average, kilograms.

$PV_R$ = Weighted-average MACT model point value for production resin used in the past 12 months, kilograms per megagram.

$M_R$ = Mass of production resin used in the past 12 months, megagrams.

$PV_{PG}$ = Weighted-average MACT model point value for pigmented gel coat used in the past 12 months, kilograms per megagram.

$M_{PG}$ = Mass of pigmented gel coat used in the past 12 months, megagrams.

$PV_{CG}$ = Weighted-average MACT model point value for clear gel coat used in the past 12 months, kilograms per megagram.

$M_{CG}$ = Mass of clear gel coat used in the past 12 months, megagrams.

$PV_{TR}$ = Weighted-average MACT model point value for tooling resin used in the past 12 months, kilograms per megagram.

$M_{TR}$ = Mass of tooling resin used in the past 12 months, megagrams.

$PV_{TG}$ = Weighted-average MACT model point value for tooling gel coat used in the past 12 months, kilograms per megagram.

$M_{TG}$ = Mass of tooling gel coat used in the past 12 months, megagrams.

(c) At the end of every month, use equation 2 of this section to compute the weighted-average MACT model point value for each open molding resin and gel coat operation included in the average.

$$PV_{OP} = \frac{\sum_{i=1}^{n}(M_i \, PV_i)}{\sum_{i=1}^{n}(M_i)} \qquad (Eq.\ 2)$$

Where:

$PV_{OP}$ =weighted-average MACT model point value for each open molding operation ($PV_R$ , $PV_{PG}$ , $PV_{CG}$ , $PV_{TR}$ , and $PV_{TG}$ ) included in the average, kilograms of HAP per megagram of material applied.

$M_i$ =mass of resin or gel coat i used within an operation in the past 12 months, megagrams.

n=number of different open molding resins and gel coats used within an operation in the past 12 months.

$PV_i$ =the MACT model point value for resin or gel coat i used within an operation in the past 12 months, kilograms of HAP per megagram of material applied.

(d) You must use the equations in Table 3 to this subpart to calculate the MACT model point value ($PV_i$ ) for each resin and gel coat used in each operation in the past 12 months.

(e) If the organic HAP emissions, as calculated in paragraph (b) of this section, are less than the organic HAP limit calculated in § 63.5698(b) for the same 12-month period, then you are in compliance with the emission limit in § 63.5698 for those operations and materials included in the average.

[66 FR 44232, Aug. 22, 2001; 66 FR 50504, Oct. 3, 2001]

### § 63.5713 How do I demonstrate compliance using compliant materials?

(a) Compliance using the organic HAP content requirements listed in Table 2 to this subpart is based on a

12-month rolling average that is calculated at the end of every month. The first 12-month rolling-average period begins on the compliance date specified in § 63.5695. If you are using filled material (production resin or tooling resin), you must comply according to the procedure described in § 63.5714.

(b) At the end of the twelfth month after your compliance date and at the end of every subsequent month, review the organic HAP contents of the resins and gel coats used in the past 12 months in each operation. If all resins and gel coats used in an operation have organic HAP contents no greater than the applicable organic HAP content limits in Table 2 to this subpart, then you are in compliance with the emission limit specified in § 63.5698 for that 12-month period for that operation. In addition, you do not need to complete the weighted-average organic HAP content calculation contained in paragraph (c) of this section for that operation.

(c) At the end of every month, you must use equation 1 of this section to calculate the weighted-average organic HAP content for all resins and gel coats used in each operation in the past 12 months.

$$\textit{Weighted-Average}\ \text{HAP Content}\ (\%) = \frac{\sum_{i=1}^{n}(M_i\ \text{HAP}_i)}{\sum_{i=1}^{n}(M_i)} \qquad (\textit{Eq.}\ 1)$$

Where:

$M_i$ = mass of open molding resin or gel coat i used in the past 12 months in an operation, megagrams.

$HAP_i$ = Organic HAP content, by weight percent, of open molding resin or gel coat i used in the past 12 months in an operation. Use the methods in § 63.5758 to determine organic HAP content.

n = number of different open molding resins or gel coats used in the past 12 months in an operation.

(d) If the weighted-average organic HAP content does not exceed the applicable organic HAP content limit specified in Table 2 to this subpart, then you are in compliance with the emission limit specified in § 63.5698.

### § 63.5714 How do I demonstrate compliance if I use filled resins?

(a) If you are using a filled production resin or filled tooling resin, you must demonstrate compliance for the filled material on an as-applied basis using equation 1 of this section.

$$PV_F = PV_u \times \frac{(100 - \%\ \text{Filler})}{100} \qquad (\textit{Eq.}\ 1)$$

Where:

$PV_F$ = The as-applied MACT model point value for a filled production resin or tooling resin, kilograms organic HAP per megagram of filled material.

$PV_u$ = The MACT model point value for the neat (unfilled) resin, before filler is added, as calculated using the formulas in Table 3 to this subpart.

% Filler =The weight-percent of filler in the as-applied filled resin system.

(b) If the filled resin is used as a production resin and the value of $PV_F$ calculated by equation 1 of this section does not exceed 46 kilograms of organic HAP per megagram of filled resin applied, then the filled resin is in compliance.

(c) If the filled resin is used as a tooling resin and the value of $PV_F$ calculated by equation 1 of this section does not exceed 54 kilograms of organic HAP per megagram of filled resin applied, then the filled resin is in compliance.

(d) If you are including a filled resin in the emissions averaging procedure described in § 63.5710, then use the value of $PV_F$ calculated using equation 1 of this section for the value of PV i in equation 2 of § 63.5710.

## Demonstrating Compliance for Open Molding Operations Controlled by Add-On Control Devices

### § 63.5715 What operating limits must I meet?

(a) For open molding operations on which you use a thermal oxidizer as an add-on control device, you must meet the operating limits specified in Table 4 to this subpart that apply to the emission capture system and thermal oxidizer. You must establish the operating limits during the performance test according to the procedures in § 63.5725. You must meet the operating limits at all times after you establish them.

(b) If you use an add-on control device other than a thermal oxidizer, or wish to monitor an alternative parameter and comply with a different operating limit, you must apply to the Administrator for approval of alternative monitoring under § 63.8(f).

### § 63.5716 When must I conduct a performance test?

(a) If your source is an existing source, you must complete the add-on control device performance test no later than the compliance date specified in § 63.5695.

(b) If your source is a new source, you must complete the add-on control device performance test no later than 180 days after the compliance date specified in § 63.5695.

(c) You must conduct a performance test every 5 years as part of renewing your 40 CFR part 70 or 71 operating permit.

### § 63.5719 How do I conduct a performance test?

(a) You must capture the emissions using a permanent enclosure (such as a spray booth or similar containment device) and direct the captured emissions to the add-on control device.

(b) You must measure emissions as specified in paragraph (b)(1) or (2) of this section.

(1) If the enclosure vented to the control device is a permanent total enclosure as defined in Method 204 of appendix M to 40 CFR part 51, then you may measure emissions only at the outlet of the control device.

(2) If the permanent enclosure vented to the control device is not a total enclosure, you must build a temporary total enclosure, as defined in Method 204 of appendix M to 40 CFR part 51, around the permanent enclosure. You must then simultaneously measure emissions from the control device outlet

and the emissions from the temporary total enclosure outlet. You determine compliance from the combined emissions from the control device outlet and the temporary total enclosure outlet.

(c) You must conduct the control device performance test using the emission measurement methods specified in paragraphs (c)(1) through (4) of this section.

(1) Use either Method 1 or 1A of appendix A to 40 CFR part 60, as appropriate, to select the sampling sites.

(2) Use Method 2, 2A, 2C, 2D, 2F or 2G of appendix A to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate.

(3) Use Method 18 of appendix A to 40 CFR part 60 to measure organic HAP emissions or use Method 25A of appendix A to 40 CFR part 60 to measure total gaseous organic emissions as a surrogate for total organic HAP emissions. If you use Method 25A, you must assume that all gaseous organic emissions measured as carbon are organic HAP emissions. If you use Method 18 and the number of organic HAP in the exhaust stream exceeds five, you must take into account the use of multiple chromatographic columns and analytical techniques to get an accurate measure of at least 90 percent of the total organic HAP mass emissions. Do not use Method 18 to measure organic HAP emissions from a combustion device; use instead Method 25A and assume that all gaseous organic mass emissions measured as carbon are organic HAP emissions.

(4) You may use American Society for Testing and Materials (ASTM) D6420-99 (available for purchase from at least one of the following addresses: 100 Barr Harbor Drive, West Conshohocken, PA 19428-2959; or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.) in lieu of Method 18 of 40 CFR part 60, appendix A, under the conditions specified in paragraphs (c)(4)(i) through (iii) of this section.

(i) If the target compound(s) is listed in Section 1.1 of ASTM D6420-99 and the target concentration is between 150 parts per billion by volume and 100 parts per million by volume.

(ii) If the target compound(s) is not listed in Section 1.1 of ASTM D6420-99, but is potentially detected by mass spectrometry, an additional system continuing calibration check after each run, as detailed in Section 10.5.3 of ASTM D6420-99, must be followed, met, documented, and submitted with the performance test report even if you do not use a moisture condenser or the compound is not considered soluble.

(iii) If a minimum of one sample/analysis cycle is completed at least every 15 minutes.

(d) The control device performance test must consist of three runs and each run must last at least 1 hour. The production conditions during the test runs must represent normal production conditions with respect to the types of parts being made and material application methods. The production conditions during the test must also represent maximum potential emissions with respect to the organic HAP content of the materials being applied and the material application rates.

(e) During the test, you must also monitor and record separately the amounts of production resin, tooling resin, pigmented gel coat, clear gel coat, and tooling gel coat applied inside the enclosure that is vented to the control device.

## § 63.5722 How do I use the performance test data to demonstrate initial compliance?

Demonstrate initial compliance with the open molding emission limit as described in paragraphs (a) through (c) of this section:

(a) Calculate the organic HAP limit you must achieve using equation 1 of § 63.5698. For determining initial compliance, the organic HAP limit is based on the amount of material used during the performance test, in megagrams, rather than during the past 12 months. Calculate the limit using the megagrams of resin and gel coat applied inside the enclosure during the three runs of the performance test and equation 1 of § 63.5698.

(b) Add the total measured emissions, in kilograms, from all three of the 1-hour runs of the performance test.

(c) If the total emissions from the three 1-hour runs of the performance test are less than the organic HAP limit calculated in paragraph (a) of this section, then you have demonstrated initial compliance with the emission limit in § 63.5698 for those operations performed in the enclosure and controlled by the add-on control device.

### § 63.5725 What are the requirements for monitoring and demonstrating continuous compliance?

(a) You must establish control device parameters that indicate proper operation of the control device.

(b) You must install, operate, and maintain a continuous parameter monitoring system as specified in paragraphs (b)(1) through (8) of this section.

(1) The continuous parameter monitoring system must complete a minimum of one cycle of operation for each successive 15-minute period. You must have a minimum of four successive cycles of operation to have a valid hour of data.

(2) You must have valid data from at least 90 percent of the hours during which the process operated.

(3) You must determine the average of all recorded readings for each successive 3-hour period of the emission capture system and add-on control device operation.

(4) You must maintain the continuous parameter monitoring system at all times and have available necessary parts for routine repairs of the monitoring equipment.

(5) You must operate the continuous parameter monitoring system and collect emission capture system and add-on control device parameter data at all times that a controlled open molding operation is being performed, except during monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, if applicable, calibration checks and required zero and span adjustments).

(6) You must not use emission capture system or add-on control device parameter data recorded during monitoring malfunctions, associated repairs, out-of-control periods, or required quality assurance or control activities when calculating data averages. You must use all the data collected during all other periods in calculating the data averages for determining compliance with the emission capture system and add-on control device operating limits.

(7) You must record the results of each inspection, calibration, and validation check.

(8) Any period for which the monitoring system is out-of-control, as defined in § 63.7(d)(7), or malfunctioning, and data are not available for required calculations is a deviation from the monitoring requirements. A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of

the continuous parameter monitoring system to provide valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(c) *Enclosure bypass line.* You must meet the requirements of paragraphs (c)(1) and (2) of this section for each emission capture system enclosure that contains bypass lines that could divert emissions away from the add-on control device to the atmosphere.

(1) You must monitor or secure the valve or closure mechanism controlling the bypass line in a nondiverting position in such a way that the valve or closure mechanism cannot be opened without creating a record that the valve was opened. The method used to monitor or secure the valve or closure mechanism must meet one of the requirements specified in paragraphs (c)(1)(i) through (iv) of this section.

(i) *Flow control position indicator.* Install, calibrate, maintain, and operate according to the manufacturer's specifications a flow control position indicator that takes a reading at least once every 15 minutes and provides a record indicating whether the emissions are directed to the add-on control device or diverted from the add-on control device. The time of occurrence and flow control position must be recorded, as well as every time the flow direction is changed. The flow control position indicator must be installed at the entrance to any bypass line that could divert the emissions away from the add-on control device to the atmosphere.

(ii) *Car-seal or lock-and-key valve closures.* Secure any bypass line valve in the closed position with a car-seal or a lock-and-key type configuration. You must visually inspect the seal or closure mechanism at least once every month to ensure that the valve is maintained in the closed position, and the emissions are not diverted away from the add-on control device to the atmosphere.

(iii) *Valve closure continuous monitoring.* Ensure that any bypass line valve is in the closed (non-diverting) position through monitoring of valve position at least once every 15 minutes. You must inspect the monitoring system at least once every month to verify that the monitor will indicate valve position.

(iv) *Automatic shutdown system.* Use an automatic shutdown system in which the open molding operation is stopped when flow is diverted by the bypass line away from the add-on control device to the atmosphere when the open molding operation is running. You must inspect the automatic shutdown system at least once every month to verify that it will detect diversions of flow and shut down the open molding operation.

(2) If any bypass line is opened, you must include a description of why the bypass line was opened and the length of time it remained open in the semiannual compliance reports required in § 63.5764(d).

(d) *Thermal oxidizers.* If you are using a thermal oxidizer or incinerator as an add-on control device, you must comply with the requirements in paragraphs (d)(1) through (6) of this section.

(1) You must install a combustion temperature monitoring device in the firebox of the thermal oxidizer or incinerator, or in the duct immediately downstream of the firebox before any substantial heat exchange occurs. You must meet the requirements in paragraphs (b) and (d)(1)(i) through (vii) of this section for each temperature monitoring device.

(i) Locate the temperature sensor in a position that provides a representative temperature.

(ii) Use a temperature sensor with a minimum tolerance of 2.2 °C or 0.75 percent of the temperature value, whichever is larger.

(iii) Shield the temperature sensor system from electromagnetic interference and chemical contaminants.

(iv) If a chart recorder is used, it must have a sensitivity in the minor division of at least 10 °C.

(v) Perform an electronic calibration at least semiannually according to the procedures in the manufacturer's owners manual. Following the electronic calibration, you must conduct a temperature sensor validation check in which a second or redundant temperature sensor placed nearby the process temperature sensor must yield a reading within 16.7 °C of the process temperature sensor's reading.

(vi) Conduct calibration and validation checks any time the sensor exceeds the manufacturer's specified maximum operating temperature range or install a new temperature sensor.

(vii) At least monthly, inspect all components for integrity and all electrical connections for continuity, oxidation, and galvanic corrosion.

(2) Before or during the performance test, you must conduct a performance evaluation of the combustion temperature monitoring system according to § 63.8(e). Section 63.8(e) specifies the general requirements for continuous monitoring systems and requirements for notifications, the site-specific performance evaluation plan, conduct of the performance evaluation, and reporting of performance evaluation results.

(3) During the performance test required by § 63.5716, you must monitor and record the combustion temperature and determine the average combustion temperature for the three 1-hour test runs. This average temperature is the minimum operating limit for the thermal oxidizer.

(4) Following the performance test, you must continuously monitor the combustion temperature and record the average combustion temperature no less frequently than every 15 minutes.

(5) You must operate the incinerator or thermal oxidizer so that the average combustion temperature in any 3-hour period does not fall below the average combustion temperature recorded during the performance test.

(6) If the average combustion temperature in any 3-hour period falls below the average combustion temperature recorded during the performance test, or if you fail to collect the minimum data specified in paragraph (d)(4) of this section, it is a deviation for the operating limit in § 63.5715.

(e) *Other control devices.* If you are using a control device other a thermal oxidizer, then you must comply with alternative monitoring requirements and operating limits approved by the Administrator under § 63.8(f).

(f) *Emission capture system.* For each enclosure in the emission capture system, you must comply with the requirements in paragraphs (f)(1) through (5) of this section.

(1) You must install a device to measure and record either the flow rate or the static pressure in the duct from each enclosure to the add-on control device.

(2) You must install a device to measure and record the pressure drop across at least one opening in each enclosure.

(3) Each flow measurement device must meet the requirements in paragraphs (b) and (f)(3)(i) through (iv) of this section.

(i) Locate the flow sensor in a position that provides a representative flow measurement in the duct between each enclosure in the emission capture system and the add-on control device.

(ii) Reduce swirling flow or abnormal velocity distributions due to upstream and downstream disturbances.

(iii) Conduct a flow sensor calibration check at least semiannually.

(iv) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(4) For each pressure measurement device, you must comply with the requirements in paragraphs (a) and (f)(4)(i) through (vii) of this section.

(i) Locate each pressure drop sensor in or as close to a position that provides a representative measurement of the pressure drop across each enclosure opening you are monitoring.

(ii) Locate each duct static pressure sensor in a position that provides a representative measurement of the static pressure in the duct between the enclosure and control device.

(iii) Minimize or eliminate pulsating pressure, vibration, and internal and external corrosion.

(iv) Check the pressure tap for plugging daily.

(v) Use an inclined manometer with a measurement sensitivity of 0.0004 millimeters mercury (mmHg) to check gauge calibration quarterly and transducer calibration monthly.

(vi) Conduct calibration checks any time the sensor exceeds the manufacturer's specified maximum operating pressure range or install a new pressure sensor.

(vii) At least monthly, inspect all components for integrity, all electrical connections for continuity, and all mechanical connections for leakage.

(5) For each capture device that is not part of a permanent total enclosure as defined in Method 204 in appendix M to 40 CFR part 51, you must establish an operating limit for either the gas volumetric flow rate or duct static pressure, as specified in paragraphs (f)(5)(i) and (ii) of this section. You must also establish an operating limit for pressure drop across at least one opening in each enclosure according to paragraphs (f)(5)(iii) and (iv) of this section. The operating limits for a permanent total enclosure are specified in Table 4 to this subpart.

(i) During the emission test required by § 63.5716 and described in § 63.5719, you must monitor and record either the gas volumetric flow rate or the duct static pressure for each separate enclosure in your emission capture system at least once every 15 minutes during each of the three test runs at a point in the duct between the enclosure and the add-on control device inlet.

(ii) Following the emission test, calculate and record the average gas volumetric flow rate or duct static pressure for the three test runs for each enclosure. This average gas volumetric flow rate or duct static pressure is the minimum operating limit for that specific enclosure.

(iii) During the emission test required by § 63.5716 and described in § 63.5719, you must monitor and record the pressure drop across the opening of each enclosure in your emission capture system at least once every 15 minutes during each of the three test runs.

(iv) Following the emission test, calculate and record the average pressure drop for the three test runs for each enclosure. This average pressure drop is the minimum operating limit for that specific enclosure.

## Standards for Closed Molding Resin Operations

### § 63.5728 What standards must I meet for closed molding resin operations?

(a) If a resin application operation meets the definition of closed molding specified in § 63.5779, there is no requirement to reduce emissions from that operation.

(b) If the resin application operation does not meet the definition of closed molding, then you must comply with the limit for open molding resin operations specified in § 63.5698.

(c) Open molding resin operations that precede a closed molding operation must comply with the limit for open molding resin and gel coat operations specified in § 63.5698. Examples of these operations include gel coat or skin coat layers that are applied before lamination is performed by closed molding.

## Standards for Resin and Gel Coat Mixing Operations

### § 63.5731 What standards must I meet for resin and gel coat mixing operations?

(a) All resin and gel coat mixing containers with a capacity equal to or greater than 208 liters, including those used for on-site mixing of putties and polyputties, must have a cover with no visible gaps in place at all times.

(b) The work practice standard in paragraph (a) of this section does not apply when material is being manually added to or removed from a container, or when mixing or pumping equipment is being placed in or removed from a container.

(c) To demonstrate compliance with the work practice standard in paragraph (a) of this section, you must visually inspect all mixing containers subject to this standard at least once per month. The inspection should ensure that all containers have covers with no visible gaps between the cover and the container, or between the cover and equipment passing through the cover.

(d) You must keep records of which mixing containers are subject to this standard and the results of the inspections, including a description of any repairs or corrective actions taken.

## Standards for Resin and Gel Coat Application Equipment Cleaning Operations

### § 63.5734 What standards must I meet for resin and gel coat application equipment cleaning operations?

(a) For routine flushing of resin and gel coat application equipment (e.g., spray guns, flowcoaters, brushes, rollers, and squeegees), you must use a cleaning solvent that contains no more than 5 percent organic HAP by weight. For removing cured resin or gel coat from application equipment, no organic HAP content limit applies.

(b) You must store organic HAP-containing solvents used for removing cured resin or gel coat in containers with covers. The covers must have no visible gaps and must be in place at all times, except when equipment to be cleaned is placed in or removed from the container. On containers with a capacity greater than 7.6 liters, the distance from the top of the container to the solvent surface must be no less than 0.75 times the diameter of the container. Containers that store organic HAP-containing solvents used for removing cured resin or gel coat are exempt from the requirements of 40 CFR part 63, subpart T. Cured resin or gel coat means resin or gel coat that has changed from a liquid to a solid.

### § 63.5737 How do I demonstrate compliance with the resin and gel coat application equipment cleaning standards?

(a) Determine and record the organic HAP content of the cleaning solvents subject to the standards specified in § 63.5734 using the methods specified in § 63.5758.

(b) If you recycle cleaning solvents on site, you may use documentation from the solvent manufacturer or supplier or a measurement of the organic HAP content of the cleaning solvent as originally obtained from the solvent supplier for demonstrating compliance, subject to the conditions in § 63.5758 for demonstrating compliance with organic HAP content limits.

(c) At least once per month, you must visually inspect any containers holding organic HAP-containing solvents used for removing cured resin and gel coat to ensure that the containers have covers with no visible gaps. Keep records of the monthly inspections and any repairs made to the covers.

## Standards for Carpet and Fabric Adhesive Operations

### § 63.5740 What emission limit must I meet for carpet and fabric adhesive operations?

(a) You must use carpet and fabric adhesives that contain no more than 5 percent organic HAP by weight.

(b) To demonstrate compliance with the emission limit in paragraph (a) of this section, you must determine and record the organic HAP content of the carpet and fabric adhesives using the methods in § 63.5758.

## Standards for Aluminum Recreational Boat Surface Coating Operations

### § 63.5743 What standards must I meet for aluminum recreational boat surface coating operations?

(a) For aluminum wipedown solvent operations and aluminum surface coating operations, you must comply with either the separate emission limits in paragraphs (a)(1) and (2) of this section, or the combined emission limit in paragraph (a)(3) of this section. Compliance with these limitations is based on a 12-month rolling average that is calculated at the end of every month.

(1) You must limit emissions from aluminum wipedown solvents to no more than 0.33 kilograms of organic HAP per liter of total coating solids applied from aluminum primers, clear coats, and top coats combined. No limit applies when cleaning surfaces are receiving decals or adhesive graphics.

(2) You must limit emissions from aluminum recreational boat surface coatings (including thinners, activators, primers, topcoats, and clear coats) to no more than 1.22 kilograms of organic HAP per liter of total coating solids applied from aluminum primers, clear coats, and top coats combined.

(3) You must limit emissions from the combined aluminum surface coatings and aluminum wipedown solvents to no more than 1.55 kilograms of organic HAP per liter of total coating solids applied from aluminum primers, clear coats, and top coats combined.

(b) You must comply with the work practice standard in paragraph (b)(1), (2), (3), or (4) of this section when cleaning aluminum coating spray guns with solvents containing more than 5 percent organic HAP by weight.

(1) Clean spray guns in an enclosed device. Keep the device closed except when you place spray guns in or remove them from the device.

(2) Disassemble the spray gun and manually clean the components in a vat. Keep the vat closed when you are not using it.

(3) Clean spray guns by placing solvent in the pressure pot and forcing the solvent through the gun. Do not use atomizing air during this procedure. Direct the used cleaning solvent from the spray gun into a container that you keep closed when you are not using it.

(4) An alternative gun cleaning process or technology approved by the Administrator according to the procedures in § 63.6(g).

### § 63.5746 How do I demonstrate compliance with the emission limits for aluminum wipedown solvents and aluminum coatings?

To demonstrate compliance with the emission limits for aluminum wipedown solvents and aluminum coatings specified in § 63.5743(a), you must meet the requirements of paragraphs (a) through (f) of this section.

(a) Determine and record the organic HAP content (kilograms of organic HAP per kilogram of material, or weight fraction) of each aluminum wipedown solvent and aluminum coating (including primers, topcoats, clear coats, thinners, and activators). Use the methods in § 63.5758 to determine organic HAP content.

(b) Use the methods in § 63.5758(b) to determine the solids content (liters of solids per liter of coating, or volume fraction) of each aluminum surface coating, including primers, topcoats, and clear coats. Keep records of the solids content.

(c) Use the methods in § 63.5758(c) to determine the density of each aluminum surface coating and wipedown solvent.

(d) Compliance is based on a 12-month rolling average calculated at the end of every month. The first 12-month rolling-average period begins on the compliance date specified in § 63.5695.

(e) At the end of the twelfth month after your compliance date and at the end of every subsequent month, use the procedures in § 63.5749 to calculate the organic HAP from aluminum wipedown solvents per liter of coating solids, and use the procedures in § 63.5752 to calculate the kilograms of organic HAP from aluminum coatings per liter of coating solids.

(f) Keep records of the calculations used to determine compliance.

(g) *Approval of alternative means of demonstrating compliance.* You may apply to the Administrator for permission to use an alternative means (such as an add-on control system) of limiting emissions from aluminum wipedown solvent and coating operations and demonstrating compliance with the emission limits in § 63.5743(a).

(1) The application must include the information listed in paragraphs (g)(1)(i) through (iii) of this section.

(i) An engineering evaluation that compares the emissions using the alternative means to the emissions that would result from using the strategy specified in paragraphs (a) through (e) of this section. The engineering evaluation may include the results from an emission test that accurately measures the capture efficiency and control device efficiency achieved by the control system and the composition of the associated coatings so that the emissions comparison can be made.

(ii) A proposed monitoring protocol that includes operating parameter values to be monitored for compliance and an explanation of how the operating parameter values will be established through a performance test.

(iii) Details of appropriate recordkeeping and reporting procedures.

(2) The Administrator will approve the alternative means of limiting emissions if the Administrator determines that HAP emissions will be no greater than if the source uses the procedures described in paragraphs (a) through (e) of this section to demonstrate compliance.

(3) The Administrator's approval may specify operation, maintenance, and monitoring requirements to ensure that emissions from the regulated operations are no greater than those that would otherwise result from regulated operations in compliance with this subpart.

### § 63.5749 How do I calculate the organic HAP content of aluminum wipedown solvents?

(a) Use equation 1 of this section to calculate the weighted-average organic HAP content of aluminum wipedown solvents used in the past 12 months.

$$HAP_{WD} = \frac{\sum_{j=1}^{n} (Vol_j)(D_j)(W_j)}{\sum_{i=1}^{m} (Vol_i)(Solids_i)} \qquad (Eq.\ 1)$$

Where:

$HAP_{WD}$ = weighted-average organic HAP content of aluminum wipedown solvents, kilograms of HAP per liter of total coating solids from aluminum primers, top coats, and clear coats.

n = number of different wipedown solvents used in the past 12 months.

$Vol_j$ = volume of aluminum wipedown solvent j used in the past 12 months, liters.

$D_j$ = density of aluminum wipedown solvent j, kilograms per liter.

$W_j$ = mass fraction of organic HAP in aluminum wipedown solvent j.

m = number of different aluminum surface coatings (primers, top coats, and clear coats) used in the past 12 months.

$Vol_i$ = volume of aluminum primer, top coat, or clear coat i used in the past 12 months, liters.

$Solids_i$ = solids content aluminum primer, top coat, or clear coat i, liter solids per liter of coating.

(b) Compliance is based on a 12-month rolling average. If the weighted-average organic HAP content does not exceed 0.33 kilograms of organic HAP per liter of total coating solids, then you are in compliance with the emission limit specified in § 63.5743(a)(1).

### § 63.5752 How do I calculate the organic HAP content of aluminum recreational boat surface coatings?

(a) Use equation 1 of this section to calculate the weighted-average HAP content for all aluminum surface coatings used in the past 12 months.

$$HAP_{SC} = \frac{\sum_{i=1}^{m}(Vol_i)(D_i)(W_i) + \sum_{k=1}^{D}(Vol_k)(D_k)(W_k)}{\sum_{i=1}^{m}(Vol_i)(Solids_i)} \qquad (Eq.\ 1)$$

Where:

$HAP_{sc}$ = weighted-average organic HAP content for all aluminum coating materials, kilograms of organic HAP per liter of coating solids.

m = number of different aluminum primers, top coats, and clear coats used in the past 12 months.

$Vol_i$ = volume of aluminum primer, top coat, or clear coat i used in the past 12 months, liters.

$D_i$ = density of coating i, kilograms per liter.

$W_i$ = mass fraction of organic HAP in coating i, kilograms of organic HAP per kilogram of coating.

p = number of different thinners, activators, and other coating additives used in the past 12 months.

$Vol_k$ = total volume of thinner, activator, or additive k used in the past 12 months, liters.

$D_k$ = density of thinner, activator, or additive k, kilograms per liter.

$W_k$ = mass fraction of organic HAP in thinner, activator, or additive k, kilograms of organic HAP per kilogram of thinner or activator.

$Solids_i$ = solids content of aluminum primer, top coat, or clear coat i, liter solids per liter of coating.

(b) Compliance is based on a 12-month rolling average. If the weighted-average organic HAP content does not exceed 1.22 kilograms of organic HAP per liter of coating solids, then you are in compliance with the emission limit specified in § 63.5743(a)(2).

### § 63.5753 How do I calculate the combined organic HAP content of aluminum wipedown solvents and aluminum recreational boat surface coatings?

(a) Use equation 1 of this section to calculate the combined weighted-average organic HAP content of aluminum wipedown solvents and aluminum recreational boat surface coatings.

$$HAP_{Combined} = HAP_{WD} + HAP_{SC} \qquad (Eq.\ 1)$$

Where:

$HAP_{WD}$ = the weighted-average organic HAP content of aluminum wipedown solvents used in the past 12 months, calculated using equation 1 of § 63.5749.

$HAP_{SC}$ = the weighted average organic HAP content of aluminum recreational boat surface coatings used in the past 12 months, calculated using equation 1 of § 63.5752.

(b) Compliance is based on a 12-month rolling average. If the combined organic HAP content does not exceed 1.55 kilograms of organic HAP per liter of total coating solids, then you are in compliance with the emission limit specified in § 63.5743(a)(3).

### § 63.5755 How do I demonstrate compliance with the aluminum recreational boat surface coating spray gun cleaning work practice standards?

You must demonstrate compliance with the aluminum coating spray gun cleaning work practice standards by meeting the requirements of paragraph (a) or (b) of this section.

(a) Demonstrate that solvents used to clean the aluminum coating spray guns contain no more than 5 percent organic HAP by weight by determining organic HAP content with the methods in § 63.5758. Keep records of the organic HAP content determination.

(b) For solvents containing more than 5 percent organic HAP by weight, comply with the requirements in paragraph (b)(1) or (b)(2), and paragraph (b)(3) of this section.

(1) If you are using an enclosed spray gun cleaner, visually inspect it at least once per month to ensure that covers are in place and the covers have no visible gaps when the cleaner is not in use, and that there are no leaks from hoses or fittings.

(2) If you are manually cleaning the gun or spraying solvent into a container that can be closed, visually inspect all solvent containers at least once per month to ensure that the containers have covers and the covers fit with no visible gaps.

(3) Keep records of the monthly inspections and any repairs that are made to the enclosed gun cleaners or the covers.

## Methods for Determining Hazardous Air Pollutant Content

### § 63.5758 How do I determine the organic HAP content of materials?

(a) *Determine the organic HAP content for each material used.* To determine the organic HAP content for each material used in your open molding resin and gel coat operations, carpet and fabric adhesive operations, or aluminum recreational boat surface coating operations, you must use one of the options in paragraphs (a)(1) through (6) of this section.

(1) *Method 311 (appendix A to 40 CFR part 63).* You may use Method 311 for determining the mass fraction of organic HAP. Use the procedures specified in paragraphs (a)(1)(i) and (ii) of this section when determining organic HAP content by Method 311.

(i) Include in the organic HAP total each organic HAP that is measured to be present at 0.1 percent by mass or more for Occupational Safety and Health Administration (OSHA)-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is measured to be 0.5 percent of the material by mass, you do not need to include it in the organic HAP total. Express the mass fraction of each organic HAP you measure as a value truncated to four places after the decimal point (for example, 0.1234).

(ii) Calculate the total organic HAP content in the test material by adding up the individual organic HAP contents and truncating the result to three places after the decimal point (for example, 0.123).

(2) *Method 24 (appendix A to 40 CFR part 60).* You may use Method 24 to determine the mass fraction of non-aqueous volatile matter of aluminum coatings and use that value as a substitute for mass fraction of organic HAP.

(3) *ASTM D1259-85 (Standard Test Method for Nonvolatile Content of Resins).* You may use ASTM D1259-85 (available for purchase from ASTM) to measure the mass fraction of volatile matter of resins and gel coats for open molding operations and use that value as a substitute for mass fraction of organic HAP.

(4) *Alternative method.* You may use an alternative test method for determining mass fraction of organic HAP if you obtain prior approval by the Administrator. You must follow the procedure in § 63.7(f) to submit an alternative test method for approval.

(5) *Information from the supplier or manufacturer of the material.* You may rely on information other than that generated by the test methods specified in paragraphs (a)(1) through (4) of this section, such as manufacturer's formulation data, according to paragraphs (a)(5)(i) through (iii) of this section.

(i) Include in the organic HAP total each organic HAP that is present at 0.1 percent by mass or more for OSHA-defined carcinogens as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other compounds. For example, if toluene (not an OSHA carcinogen) is 0.5 percent of the material by mass, you do not have to include it in the organic HAP total.

(ii) If the organic HAP content is provided by the material supplier or manufacturer as a range, then you must use the upper limit of the range for determining compliance. If a separate measurement of the total organic HAP content using the methods specified in paragraphs (a)(1) through (4) of this section 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.

(iii) If the organic HAP content is provided as a single value, you may assume the value is a manufacturing target value and actual organic HAP content may vary from the target value. If a separate measurement of the total organic HAP content using the methods specified in paragraphs (a)(1) through (4) of this section is less than 2 percentage points higher than the value for total organic HAP content provided by the material supplier or manufacturer, then you 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.

(6) *Solvent blends.* Solvent blends may be listed as single components for some regulated materials in certifications provided by manufacturers or suppliers. Solvent blends may contain organic HAP which must be counted toward the total organic HAP content of the materials. When detailed organic HAP content data for solvent blends are not available, you may use the values for organic HAP content that are listed in Table 5 or 6 to this subpart. You may use Table 6 to this subpart only if the solvent blends in the materials you use do not match any of the solvent blends in Table 5 to this subpart and you know only whether the blend is either aliphatic or aromatic. However, if test results indicate higher values than those listed in Table 5 or 6 to this subpart, then the test results must be used for determining compliance.

(b) *Determine the volume fraction solids in aluminum recreational boat surface coatings.* To determine the volume fraction of coating solids (liters of coating solids per liter of coating) for each aluminum recreational boat surface coating, you must use one of the methods specified in paragraphs (b)(1) through (3) of this section. If the results obtained with paragraphs (b)(2) or (3) of this section do not to agree with those obtained according to paragraph (b)(1) of this section, you must use the results obtained with paragraph (b)(1) of this section to determine compliance.

(1) *ASTM Method D2697-86(1998) or D6093-97.* You may use ASTM Method D2697-86(1998) or D6093-97 (available for purchase from ASTM) to determine the volume fraction of coating solids for each coating. Divide the nonvolatile volume percent obtained with the methods by 100 to calculate volume fraction of coating solids.

(2) *Information from the supplier or manufacturer of the material.* You may obtain the volume fraction of coating solids for each coating from the supplier or manufacturer.

(3) *Calculation of volume fraction of coating solids.* You may determine it using equation 1 of this section:

$$\text{Solids} = 1 - \frac{m_{\text{volatiles}}}{D_{\text{avg}}} \qquad (Eq.\ 1)$$

Where:

Solids=volume fraction of coating solids, liters coating solids per liter coating.

$^{m}$ volatiles=Total volatile matter content of the coating, including organic HAP, volatile organic compounds, water, and exempt compounds, determined according to Method 24 in appendix A of 40 CFR part 60, grams volatile matter per liter coating.

$D_{avg}$ =average density of volatile matter in the coating, grams volatile matter per liter volatile matter, determined from test results using ASTM Method D1475-90 (available for purchase from ASTM), information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-90 test results and other information sources, the test results will take precedence.

(c) *Determine the density of each aluminum recreational boat wipedown solvent and surface coating.* Determine the density of all aluminum recreational boat wipedown solvents, surface coatings, thinners, and other additives from test results using ASTM Method D1475-90, information from the supplier or manufacturer of the material, or reference sources providing density or specific gravity data for pure materials. If there is disagreement between ASTM Method D1475-90 test results and other information sources, you must use the test results to demonstrate compliance.

## Notifications, Reports, and Records

### § 63.5761 What notifications must I submit and when?

(a) You must submit all of the notifications in Table 7 to this subpart that apply to you by the dates in the table. The notifications are described more fully in 40 CFR part 63, subpart A, General Provisions, referenced in Table 8 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.

### § 63.5764 What reports must I submit and when?

(a) You must submit the applicable reports specified in paragraphs (b) through (e) of this section. To the extent possible, you must organize each report according to the operations covered by this subpart and the compliance procedure followed for that operation.

(b) Unless the Administrator has approved a different schedule for submission of reports under § 63.10(a), you must submit each report by the dates in paragraphs (b)(1) through (5) of this section.

(1) If your source is not controlled by an add-on control device (i.e., you are complying with organic HAP content limits, application equipment requirements, or MACT model point value averaging provisions), the first compliance report must cover the period beginning 12 months after the compliance date specified for your source in § 63.5695 and ending on June 30 or December 31, whichever date is the first date following the end of the first 12-month period after the compliance date that is specified for your source in § 63.5695. If your source is controlled by an add-on control device, the first compliance report must cover the period beginning on the compliance date specified for your source in § 63.5695 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 § 63.5695.

(2) The first compliance report must be postmarked or delivered no later than 60 calendar days after the end of the compliance reporting period specified in paragraph (b)(1) of this section.

(3) Each subsequent compliance report must cover the applicable semiannual reporting period from January 1 through June 30 or from July 1 through December 31.

(4) Each subsequent compliance report must be postmarked or delivered no later than 60 calendar days after the end of the semiannual reporting period.

(5) For each affected source that is subject to permitting regulations pursuant to 40 CFR part 70 or 71, and if the permitting authority has established dates for submitting semiannual reports pursuant to 40 CFR 70.6(a)(3)(iii)(A) or 40 CFR 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 include the information specified in paragraphs (c)(1) through (7) of this section.

(1) Company name and address.

(2) A statement by a responsible official with that official's name, title, and signature, certifying the truth, accuracy, and completeness of the report.

(3) The date of the report and the beginning and ending dates of the reporting period.

(4) A description of any changes in the manufacturing process since the last compliance report.

(5) A statement or table showing, for each regulated operation, the applicable organic HAP content limit, application equipment requirement, or MACT model point value averaging provision with which you are complying. The statement or table must also show the actual weighted-average organic HAP content or weighted-average MACT model point value (if applicable) for each operation during each of the rolling 12-month averaging periods that end during the reporting period.

(6) If you were in compliance with the emission limits and work practice standards during the reporting period, you must include a statement to that effect.

(7) If you deviated from an emission limit or work practice standard during the reporting period, you must also include the information listed in paragraphs (c)(7)(i) through (iv) of this section in the semiannual compliance report.

(i) A description of the operation involved in the deviation.

(ii) The quantity, organic HAP content, and application method (if relevant) of the materials involved in the deviation.

(iii) A description of any corrective action you took to minimize the deviation and actions you have taken to prevent it from happening again.

(iv) A statement of whether or not your facility was in compliance for the 12-month averaging period that ended at the end of the reporting period.

(d) If your facility has an add-on control device, you must submit semiannual compliance reports and quarterly excess emission reports as specified in § 63.10(e). The contents of the reports are specified in § 63.10(e).

(e) If your facility has an add-on control device, you must complete a startup, shutdown, and malfunction plan as specified in § 63.6(e), and you must submit the startup, shutdown, and malfunction reports specified in § 63.10(e)(5).

### § 63.5767 What records must I keep?

You must keep the records specified in paragraphs (a) through (d) of this section in addition to records specified in individual sections of this subpart.

(a) You must keep a copy of each notification and report that you submitted to comply with this subpart.

(b) You must keep all documentation supporting any notification or report that you submitted.

(c) If your facility is not controlled by an add-on control device (i.e., you are complying with organic HAP content limits, application equipment requirements, or MACT model point value averaging provisions), you must keep the records specified in paragraphs (c)(1) through (3) of this section.

(1) The total amounts of open molding production resin, pigmented gel coat, clear gel coat, tooling resin, and tooling gel coat used per month and the weighted-average organic HAP contents for each operation, expressed as weight-percent. For open molding production resin and tooling resin, you must also record the amounts of each applied by atomized and nonatomized methods.

(2) The total amount of each aluminum coating used per month (including primers, top coats, clear coats, thinners, and activators) and the weighted-average organic HAP content as determined in § 63.5752.

(3) The total amount of each aluminum wipedown solvent used per month and the weighted-average organic HAP content as determined in § 63.5749.

(d) If your facility has an add-on control device, you must keep the records specified in § 63.10(b) relative to control device startup, shut down, and malfunction events; control device performance tests; and continuous monitoring system performance evaluations.

### § 63.5770 In what form and for how long must I keep my records?

(a) Your records must be readily available and in a form so they can be easily inspected and reviewed.

(b) You must keep each record for 5 years following the date that each record is generated.

(c) You must keep each record on site for at least 2 years after the date that each record is generated. You can keep the records offsite for the remaining 3 years.

(d) You can keep the records on paper or an alternative media, such as microfilm, computer, computer disks, magnetic tapes, or on microfiche.

## Other Information You Need To Know

### § 63.5773 What parts of the General Provisions apply to me?

You must comply with the requirements of the General Provisions in 40 CFR part 63, subpart A, as specified in Table 8 to this subpart.

### § 63.5776 Who implements and enforces this subpart?

(a) If the Administrator has delegated authority to your State or local agency, the State or local agency has the authority to implement and enforce this subpart.

(b) In delegating implementation and enforcement authority of this subpart to a State or local agency under 40 CFR part 63, subpart E, the authorities that are retained by the Administrator of the U.S. EPA and are not transferred to the State or local agency are listed in paragraphs (b)(1) through (4) of this section.

(1) Under § 63.6(g), the authority to approve alternatives to the standards listed in paragraphs (b)(1)(i) through (vii) of this section is not delegated.

(i) § 63.5698—Emission limit for open molding resin and gel coat operations.

(ii) § 63.5728—Standards for closed molding resin operations.

(iii) § 63.5731(a)—Standards for resin and gel coat mixing operations.

(iv) § 63.5734—Standards for resin and gel coat application equipment cleaning operations.

(v) § 63.5740(a)—Emission limit for carpet and fabric adhesive operations.

(vi) § 63.5743—Standards for aluminum recreational boat surface coating operations.

(vii) § 63.5746(g)—Approval of alternative means of demonstrating compliance with the emission limits for aluminum recreational boat surface coating operations.

(2) Under § 63.7(e)(2)(ii) and (f), the authority to approve alternatives to the test methods listed in paragraphs (b)(2)(i) through (iv) of this section is not delegated.

(i) § 63.5719(b)—Method for determining whether an enclosure is a total enclosure.

(ii) § 63.5719(c)—Methods for measuring emissions from a control device.

(iii) § 63.5725(d)(1)—Performance specifications for thermal oxidizer combustion temperature monitors.

(iv) § 63.5758—Method for determining hazardous air pollutant content of regulated materials.

(3) Under § 63.8(f), the authority to approve major alternatives to the monitoring requirements listed in § 63.5725 is not delegated. A “major alternative” is defined in § 63.90.

(4) Under § 63.10(f), the authority to approve major alternatives to the reporting and recordkeeping requirements listed in §§ 63.5764, 63.5767, and 63.5770 is not delegated. A “major alternative” is defined in § 63.90.

## Definitions

### § 63.5779 What definitions apply to this subpart?

Terms used in this subpart are defined in the Clean Air Act, in § 63.2, and in this section as follows:

*Add-on control* means an air pollution control device, such as a thermal oxidizer, that reduces pollution in an air stream by destruction or removal before discharge to the atmosphere.

*Administrator* means the Administrator of the United States Environmental Protection Agency (U.S. EPA) or an authorized representative (for example, a State delegated the authority to carry out the provisions of this subpart).

*Aluminum recreational boat* means any marine or freshwater recreational boat that has a hull or deck constructed primarily of aluminum. A recreational boat is a vessel which by design and construction is intended by the manufacturer to be operated primarily for pleasure, or to be leased, rented or chartered to another for the latter's pleasure (rather than for commercial or military purposes); and whose major structural components are fabricated and assembled in an indoor, production-line manufacturing plant or similar land-side operation and not in a dry dock, graving dock, or marine railway on the navigable waters of the United States.

*Aluminum recreational boat surface coating operation* means the application of primers or top coats to aluminum recreational boats. It also includes the application of clear coats over top coats. Aluminum recreational boat surface coating operations do not include the application of wood coatings or antifoulant coatings to aluminum recreational boats.

*Aluminum coating spray gun cleaning* means the process of flushing or removing paints or coatings from the interior or exterior of a spray gun used to apply aluminum primers, clear coats, or top coats to aluminum recreational boats.

*Aluminum wipedown solvents* means solvents used to remove oil, grease, welding smoke, or other contaminants from the aluminum surfaces of a boat before priming or painting. Aluminum wipedown solvents contain no coating solids; aluminum surface preparation materials that contain coating solids are considered coatings for the purpose of this subpart and are not wipedown solvents.

*Antifoulant coating* means any coating that is applied to the underwater portion of a boat specifically to prevent or reduce the attachment of biological organisms and that is registered with EPA as a pesticide under the Federal Insecticide, Fungicide, and Rodenticide Act (7 U.S.C. section 136, *et seq.* ). For the purpose of this subpart, primers used with antifoulant coatings to prepare the surface to accept the antifoulant coating are considered antifoulant coatings.

*Assembly adhesive* means any chemical material used in the joining of one fiberglass, metal, foam, or wood parts to another to form a temporary or permanently bonded assembly. Assembly adhesives include, but are not limited to, methacrylate adhesives and putties made from polyester or vinylester resin mixed with inert fillers or fibers.

*Atomized resin application* means a resin application technology in which the resin leaves the application equipment and breaks into droplets or an aerosol as it travels from the application equipment to the surface of the part. Atomized resin application includes, but is not limited to, resin spray guns and resin chopper spray guns.

*Boat* means any type of vessel, other than a seaplane, that can be used for transportation on the water.

*Boat manufacturing facility* means a facility that manufactures the hulls or decks of boats from fiberglass or aluminum or assembles boats from premanufactured hulls and decks, or builds molds to make fiberglass hulls or decks. A facility that manufactures only parts of boats (such as hatches, seats, or lockers) or boat trailers, but no boat hulls or decks or molds for fiberglass boat hulls or decks, is not considered a boat manufacturing facility for the purpose of this subpart.

*Carpet and fabric adhesive* means any chemical material that permanently attaches carpet, fabric, or upholstery to any surface of a boat.

*Clear gel coat* means gel coats that are clear or translucent so that underlying colors are visible. Clear gel coats are used to manufacture parts for sale. Clear gel coats do not include tooling gel coats used to build or repair molds.

*Closed molding* means any molding process in which pressure is used to distribute the resin through the reinforcing fabric placed between two mold surfaces to either saturate the fabric or fill the mold cavity. The pressure may be clamping pressure, fluid pressure, atmospheric pressure, or vacuum pressure used either alone or in combination. The mold surfaces may be rigid or flexible. Closed molding includes, but is not limited to, compression molding with sheet molding compound, infusion molding, resin injection molding (RIM), vacuum-assisted resin transfer molding (VARTM), resin transfer molding (RTM), and vacuum-assisted compression molding. Processes in which a closed mold is used only to compact saturated fabric or remove air or excess resin from the fabric (such as in vacuum bagging), are not considered closed molding. Open molding steps, such as application of a gel coat or skin coat layer by conventional open molding prior to a closed molding process, are not closed molding.

*Cured resin and gel coat* means resin or gel coat that has been polymerized and changed from a liquid to a solid.

*Deviation* means any instance in which an affected source subject to this subpart or an owner or operator of such a source:

(1) Fails to meet any requirement or obligation established by this subpart, including, but not limited to, any emission limit, operating limit, or work practice requirement;

(2) Fails to meet any term or condition which is adopted to implement an applicable requirement in this subpart and which is included in the operating permit for any affected source required to obtain such permit; or

(3) Fails to meet any emission limit, operating limit, or work practice requirement in this subpart during any startup, shutdown, or malfunction, regardless of whether or not such failure is permitted by this subpart.

*Enclosure* means a structure, such as a spray booth, that surrounds a source of emissions and captures and directs the emissions to an add-on control device.

*Fiberglass boat* means a vessel in which either the hull or deck is built from a composite material consisting of a thermosetting resin matrix reinforced with fibers of glass, carbon, aramid, or other material.

*Fiberglass hull and deck coatings* means coatings applied to the exterior or interior surface of fiberglass boat hulls and decks on the completed boat. Polyester and vinylester resins and gel coats used in building fiberglass parts are not fiberglass hull and deck coatings for the purpose of this subpart.

*Filled resin* means a resin to which an inert material has been added to change viscosity, density, shrinkage, or other physical properties.

*Gel coat* means a thermosetting resin surface coating containing styrene (Chemical Abstract Service or CAS No. 100-42-5) or methyl methacrylate (CAS No. 80-62-6), either pigmented or clear, that provides a cosmetic enhancement or improves resistance to degradation from exposure to the elements. Gel coat layers do not contain any reinforcing fibers and gel coats are applied directly to mold surfaces or to a finished laminate.

*Hazardous air pollutant or HAP* means any air pollutant listed in, or pursuant to section 112(b) of the Clean Air Act.

*Hazardous air pollutant content or HAP content* means the amount of HAP contained in a regulated material at the time it is applied to the part being manufactured. If no HAP is added to a material as a thinner or diluent, then the HAP content is the same as the HAP content of the material as purchased from the supplier. For resin and gel coat, HAP content does not include any HAP contained in the catalyst added to the resin or gel coat during application to initiate curing.

*Hazardous air pollutant data sheet (HDS)* means documentation furnished by a material supplier or an outside laboratory to provide the organic HAP content of the material by weight, measured using an EPA Method, manufacturer's formulation data, or an equivalent method. For aluminum coatings, the HDS also documents the solids content by volume, determined from the manufacturer's formulation data. The purpose of the HDS is to help the affected source in showing compliance with the organic HAP content limits contained in this subpart. The HDS must state the maximum total organic HAP concentration, by weight, of the material. It must include any organic HAP concentrations equal to or greater than 0.1 percent by weight for individual organic HAP that are carcinogens, as defined by the Occupational Safety and Health Administration Hazard Communication Standard (29 CFR part 1910), and 1.0 percent by weight for all other individual organic HAP, as formulated. The HDS must also include test conditions if EPA Method 311 is used for determining organic HAP content.

*Maximum achievable control technology (MACT) model point value* means a number calculated for open molding operations that is a surrogate for emissions and is used to determine if your open molding operations are in compliance with the provisions of this subpart. The units for MACT model point values are kilograms of organic HAP per megagram of resin or gel coat applied.

*Manufacturer's certification* means documentation furnished by a material supplier that shows the organic HAP content of a material and includes a HDS.

*Mold* means the cavity or surface into or on which gel coat, resin, and fibers are placed and from which finished fiberglass parts take their form.

*Mold sealing and release agents* means materials applied to a mold to seal, polish, and lubricate the mold to prevent parts from sticking to the mold. Mold sealers, waxes, and glazing and buffing compounds are considered mold sealing and release agents for the purposes of this subpart.

*Mold stripping and cleaning solvents* means materials used to remove mold sealing and release agents from a mold before the mold surface is repaired, polished, or lubricated during normal mold maintenance.

*Month* means a calendar month.

*Neat resin* means a resin to which no filler has been added.

*Nonatomized resin application* means any application technology in which the resin is not broken into droplets or an aerosol as it travels from the application equipment to the surface of the part. Nonatomized resin application technology includes, but is not limited to, flowcoaters, chopper flowcoaters, pressure fed resin rollers, resin impregnators, and hand application (for example, paint brush or paint roller).

*Open molding resin and gel coat operation* means any process in which the reinforcing fibers and resin are placed in the mold and are open to the surrounding air while the reinforcing fibers are saturated with resin. For the purposes of this subpart, open molding includes operations in which a vacuum bag or similar cover is used to compress an uncured laminate to remove air bubbles or excess resin, or to achieve a bond between a core material and a laminate.

*Pigmented gel coat* means opaque gel coats used to manufacture parts for sale. Pigmented gel coats do not include tooling gel coats used to build or repair molds.

*Production resin* means any resin used to manufacture parts for sale. Production resins do not include tooling resins used to build or repair molds, or assembly adhesives as defined in this section.

*Recycled resin and gel coat application equipment cleaning solvent* means cleaning solvents recycled on-site or returned to the supplier or another party to remove resin or gel coat residues so that the solvent can be reused.

*Research and development activities* means:

(1) Activities conducted at a laboratory to analyze air, soil, water, waste, or product samples for contaminants, environmental impact, or quality control;

(2) Activities conducted to test more efficient production processes or methods for preventing or reducing adverse environmental impacts, provided that the activities do not include the production of an intermediate or final product for sale or exchange for commercial profit, except in a *de minimis* manner; and

(3) Activities conducted at a research or laboratory facility that is operated under the close supervision of technically trained personnel, the primary purpose of which is to conduct research and development into new processes and products and that is not engaged in the manufacture of products for sale or exchange for commercial profit, except in a *de minimis* manner.

*Resin* means any thermosetting resin with or without pigment containing styrene (CAS No. 100-42-5) or methyl methacrylate (CAS No. 80-62-6) and used to encapsulate and bind together reinforcement fibers in the construction of fiberglass parts.

*Resin and gel coat application equipment cleaning* means the process of flushing or removing resins and gel coats from the interior or exterior of equipment that is used to apply resin or gel coat in the manufacture of fiberglass parts.

*Resin and gel coat mixing operation* means any operation in which resin or gel coat, including the mixing of putties or polyputties, is combined with additives that include, but are not limited to, fillers, promoters, or catalysts.

*Roll-out* means the process of using rollers, squeegees, or similar tools to compact reinforcing materials saturated with resin to remove trapped air or excess resin.

*Skin coat* is a layer of resin and fibers applied over the gel coat to protect the gel coat from being deformed by the next laminate layers.

*Tooling resin* means the resin used to build or repair molds (also known as tools) or prototypes (also known as plugs) from which molds will be made.

*Tooling gel coat* means the gel coat used to build or repair molds (also known as tools) or prototypes (also known as plugs) from which molds will be made.

*Vacuum bagging* means any molding technique in which the reinforcing fabric is saturated with resin and then covered with a flexible sheet that is sealed to the edge of the mold and where a vacuum is applied under the sheet to compress the laminate, remove excess resin, or remove trapped air from the laminate during curing. Vacuum bagging does not include processes that meet the definition of closed molding.

*Vinylester resin* means a thermosetting resin containing esters of acrylic or methacrylic acids and having double-bond and ester linkage sites only at the ends of the resin molecules.

*Volume fraction of coating solids* means the ratio of the volume of coating solids (also known as volume of nonvolatiles) to the volume of coating; liters of coating solids per liter of coating.

*Wood coatings* means coatings applied to wooden parts and surfaces of boats, such as paneling, cabinets, railings, and trim. Wood coatings include, but are not limited to, primers, stains, sealers, varnishes, and enamels. Polyester and vinylester resins or gel coats applied to wooden parts to encapsulate them or bond them to other parts are not wood coatings.

**Table 1 to Subpart VVVV of Part 63—Compliance Dates for New and Existing Boat Manufacturing Facilities**

As specified in § 63.5695, you must comply by the dates in the following table:

| If your facility is— | And— | Then you must comply by this date— |
|---|---|---|
| 1. An existing source | Is a major source on or before August 22, 2001[1] | August 23, 2004. |
| 2. An existing or new area source | Becomes a major source after August 22, 2001[1] | 1 year after becoming a major source or August 22, 2002, whichever is later. |
| 3. A new source | Is a major source at startup [1] | Upon startup or August 22, 2001, whichever is later. |

[1] Your facility is a major source if it is a stationary source or group of stationary sources located within a contiguous area and under common control that emits or can potentially emit, considering controls, in the

aggregate, 9.1 megagrams or more per year of a single hazardous air pollutant or 22.7 megagrams or more per year of a combination of hazardous air pollutants.

## Table 2 to Subpart VVVV of Part 63—Alternative Organic HAP Content Requirements for Open Molding Resin and Gel Coat Operations

As specified in §§ 63.5701(b), 63.5704(b)(2), and 63.5713(a), (b), and (d), you must comply with the requirements in the following table:

| For this operation— | And this application method— | You must not exceed this weighted-average organic HAP content (weight percent) requirement— |
|---|---|---|
| 1. Production resin operations | Atomized (spray) | 28 percent. |
| 2. Production resin operations | Nonatomized (nonspray) | 35 percent. |
| 3. Pigmented gel coat operations | Any method | 33 percent. |
| 4. Clear gel coat operations | Any method | 48 percent |
| 5. Tooling resin operations | Atomized (spray) | 30 percent. |
| 6. Tooling resin operations | Nonatomized (nonspray) | 39 percent. |
| 7. Tooling gel coat operations | Any method | 40 percent. |

## Table 3 to Subpart VVVV of Part 63—MACT Model Point Value Formulas for Open Molding Operations [1]

As specified in §§ 63.5710(d) and 63.5714(a), you must calculate point values using the formulas in the following table:

| For this operation— | And this application method— | Use this formula to calculate the MACT model plant value for each resin and gel coat— |
|---|---|---|
| 1. Production resin, tooling resin | a. Atomized | $0.014 \times (\text{Resin HAP\%})^{2.425}$ |
| | b. Atomized, plus vacuum bagging with roll-out | $0.01185 \times (\text{Resin HAP\%})^{2.425}$ |
| | c. Atomized, plus vacuum bagging without roll-out | $0.00945 \times (\text{Resin HAP\%})^{2.425}$ |
| | d. Nonatomized | $0.014 \times (\text{Resin HAP\%})^{2.275}$ |
| | e. Nonatomized, plus vaccum bagging with roll-out | $0.0110 \times (\text{Resin HAP\%})^{2.275}$ |

| | | |
|---|---|---|
| | f. Nonatomized, plus vacuum bagging without roll-out | 0.0076 × (Resin HAP%)$^{2.275}$ |
| 2. Pigmented gel coat, clear gel coat, tooling gel coat | All methods | 0.445 × (Gel coat HAP%)$^{1.675}$ |

[1] Equations calculate MACT model point value in kilograms of organic HAP per megagrams of resin or gel coat applied. The equations for vacuum bagging with roll-out are applicable when a facility rolls out the applied resin and fabric prior to applying the vacuum bagging materials. The equations for vacuum bagging without roll-out are applicable when a facility applies the vacuum bagging materials immediately after resin application without rolling out the resin and fabric. HAP% = organic HAP content as supplied, expressed as a weight-percent value between 0 and 100 percent.

[66 FR 44232, Aug. 22, 2001; 66 FR 50504, Oct. 3, 2001]

### Table 4 to Subpart VVVV of Part 63—Operating Limits if Using an Add-on Control Device for Open Molding Operations

As specified in §§ 63.5715(a) and 63.5725(f)(5), you must meet the operating limits in the following table:

| For the following device— | You must meet the following operating limit— | And you must demonstrate continuous compliance with the operating limit by— |
|---|---|---|
| 1. Thermal oxidizer | The average combustion temperature in any 3-hour period must not fall below the combustion temperature limit established according to § 63.5725(d) | a. Collecting the combustion temperature data according to § 63.5725(d); b. reducing the data to 3-hour block averages; and c. maintaining the 3-hour average combustion temperature at or above the temperature limit. |
| 2. Other control devices | An operating limit approved by the Administrator according to § 63.8(f) | a. Collecting parameter monitoring as approved by the Administrator according to § 63.8(f); and b. maintaining the parameters within the operating limits approved according to § 63.8(f). |
| 3. Emission capture system that is a PTE according to § 63.5719(b) | a. The direction of the air flow at all times must be into the enclosure; and b. in any 3-hour period, either the average facial velocity of air through all natural draft openings in the enclosure must be at least 200 feet per minute; or c. the pressure drop across the enclosure must be at least 0.007 inch $H_2O$, as established in Method 204 of appendix M to 40 CFR part 51 | i. Collecting the direction of air flow, and either the facial velocity of air through all natural draft openings according to § 63.5725(f)(3) or the pressure drop across the enclosure according to § 63.5725(f)(4); and ii. reducing the data for facial velocity or pressure drop to 3-hour block averages; and iii. maintaining the 3-hour average facial velocity of air flow through all natural draft openings or the pressure drop at or above the facial velocity limit or pressure drop limit, and maintaining the direction of air flow into the enclosure at all times. |
| 4. Emission capture system | a. The average gas volumetric flow rate or duct static pressure in each duct between a | i. Collecting the gas volumetric flow rate or duct static pressure for each capture |

| | | |
|---|---|---|
| that is not a PTE according to § 63.5719(b) | capture device and add-on control device inlet in any 3-hour period must not fall below the average volumetric flow rate or duct static pressure limit established for that capture device according to § 63.5725(f)(5); and b. the average pressure drop across an opening in each enclosure in any 3-hour period must not fall below the average pressure drop limit established for that capture device according to § 63.5725(f)(5) | device according to § 63.5725(f)(1) and (3); ii. reducing the data to 3-hour block averages; iii. maintaining the 3-hour average gas volumetric flow rate or duct static pressure for each capture device at or above the gas volumetric flow rate or duct static pressure limit; iv. collecting data for the pressure drop across an opening in each enclosure according to § 63.5725(f)(2) and (4); v. reducing the data to 3-hour block averages; and vi. maintaining the 3-hour average pressure drop across the opening for each enclosure at or above the gas volumetric flow rate or duct static pressure limit. |

## Table 5 to Subpart VVVV of Part 63—Default Organic HAP Contents of Solvents and Solvent Blends

As specified in § 63.5758(a)(6), when detailed organic HAP content data for solvent blends are not available, you may use the values in the following table:

| Solvent/solvent blend | CAS No. | Average organic HAP content, percent by mass | Typical organic HAP, percent by mass |
|---|---|---|---|
| 1. Toluene | 108-88-3 | 100 | Toluene. |
| 2. Xylene(s) | 1330-20-7 | 100 | Xylenes, ethylbenzene. |
| 3. Hexane | 110-54-3 | 50 | n-hexane. |
| 4. n-hexane | 110-54-3 | 100 | n-hexane. |
| 5. Ethylbenzene | 100-41-4 | 100 | Ethylbenzene. |
| 6. Aliphatic 140 | | 0 | None. |
| 7. Aromatic 100 | | 2 | 1% xylene, 1% cumene. |
| 8. Aromatic 150 | | 9 | Naphthalene. |
| 9. Aromatic naptha | 64742-95-6 | 2 | 1% xylene, 1% cumene. |
| 10. Aromatic solvent | 64742-94-5 | 10 | Naphthalene. |
| 11. Exempt mineral spirits | 8032-32-4 | 0 | None. |
| 12. Ligroines (VM & P) | 8032-32-4 | 0 | None. |
| 13. Lactol spirits | 64742-89-6 | 15 | Toluene. |
| 14. Low aromatic white | 64742- | 0 | None. |

| | | | |
|---|---|---|---|
| spirit | 82-1 | | |
| 15. Mineral spirits | 64742-88-7 | 1 | Xylenes. |
| 16. Hydrotreated naphtha | 64742-48-9 | 0 | None. |
| 17. Hydrotreated light distillate | 64742-47-8 | 0.1 | Toluene. |
| 18. Stoddard solvent | 8052-41-3 | 1 | Xylenes. |
| 19. Super high-flash naphtha | 64742-95-6 | 5 | Xylenes. |
| 20. Varol ®solvent | 8052-49-3 | 1 | 0.5% xylenes, 0.5% ethyl benzene. |
| 21. VM & P naphtha | 64742-89-8 | 6 | 3% toluene, 3% xylene. |
| 22. Petroleum distillate mixture | 68477-31-6 | 8 | 4% naphthalene, 4% biphenyl. |

## Table 6 to Subpart VVVV of Part 63—Default Organic HAP Contents of Petroleum Solvent Groups

As specified in § 63.5758(a)(6), when detailed organic HAP content data for solvent blends are not available, you may use the values in the following table:

| Solvent type | Average organic HAP content, percent by mass | Typical organic HAP, percent by mass |
|---|---|---|
| Aliphatic (Mineral Spirits 135, Mineral Spirits 150 EC, Naphtha, Mixed Hydrocarbon, Aliphatic Hydrocarbon, Aliphatic Naptha, Naphthol Spirits, Petroleum Spirits, Petroleum Oil, Petroleum Naphtha, Solvent Naphtha, Solvent Blend.) | 3 | 1% Xylene, 1% Toluene, and 1% Ethylbenzene. |
| Aromatic (Medium-flash Naphtha, High-flash Naphtha, Aromatic Naphtha, Light Aromatic Naphtha, Light Aromatic Hydrocarbons, Aromatic Hydrocarbons, Light Aromatic Solvent.) | 6 | 4% Xylene, 1% Toluene, and 1% Ethylbenzene. |

## Table 7 to Subpart VVVV of Part 63—Applicability and Timing of Notifications

As specified in § 63.5761(a), you must submit notifications according to 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). |
| 2. Is a new source subject to this | The notifications specified in | No later than the dates specified |

| | | |
|---|---|---|
| subpart | § 63.9(b) (3) to (5) | § 63.9(b)(4) and (5). |
| 3. Qualifies for a compliance extension as specified in § 63.9(c) | A request for a compliance extension as specified in § 63.9(c) | No later than the dates specified in § 63.6(i). |
| 4. Is complying with organic HAP content limits, application equipment requirements; or MACT model point value averaging provisions | A notification of compliance status as specified in § 63.9(h) | No later than 30 calendar days after the end of the first 12-month averaging period after your facility's compliance date. |
| 5. Is complying by using an add-on control device | a. notification of intent to conduct a performance test as specified in § 63.9(e) | No later than the date specified in § 63.9(e). |
| | b. A notification of the date for the continuous monitoring system performance evaluation as specified in § 63.9(g) | With the notification of intent to conduct a performance test. |
| | c. A notification of compliance status as specified in § 63.9(h) | No later than 60 calendar days after the completion of the add-on control device performance test and continuous monitoring system performance evaluation. |

### Table 8 to Subpart VVVV of Part 63—Applicability of General Provisions (40 CFR Part 63, Subpart A) to Subpart VVVV

As specified in § 63.5773, you must comply with the applicable requirements of the General Provisions according to the following table:

| Citation | Requirement | Applies to subpart VVVV | Explanation |
|---|---|---|---|
| § 63.1(a) | General Applicability | Yes. | |
| § 63.1(b) | Initial Applicability Determination | Yes. | |
| § 63.1(c)(1) | Applicability After Standard Established | Yes. | |
| § 63.1(c)(2) | | Yes | Area sources are not regulated by subpart VVVV. |
| § 63.1(c)(3) | | No | [Reserved] |
| § 63.1(c)(4)-(5) | | Yes. | |
| § 63.1(d) | | No | [Reserved] |
| § 63.1(e) | Applicability of Permit Program | Yes. | |
| § 63.2 | Definitions | Yes | Additional definitions are found in § 63.5779. |

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| § 63.3 | Units and Abbreviations | Yes. | |
| § 63.4(a) | Prohibited Activities | Yes. | |
| § 63.4(b)-(c) | Circumvention/Severability | Yes. | |
| § 63.5(a) | Construction/Reconstruction | Yes. | |
| § 63.5(b) | Requirements for Existing, Newly Constructed, and Reconstructed Sources | Yes. | |
| § 63.5(c) | | No | [Reserved] |
| § 63.5(d) | Application for Approval of Construction/Reconstruction | Yes. | |
| § 63.5(e) | Approval of Construction/Reconstruction | Yes. | |
| § 63.5(f) | Approval of Construction/Reconstruction Based on prior State Review | Yes. | |
| § 63.6(a) | Compliance with Standards and Maintenance Requirements—Applicability | Yes. | |
| § 63.6(b) | Compliance Dates for New and Reconstructed Sources | Yes | § 63.695 specifies compliance dates, including the compliance date for new area sources that become major sources after the effective date of the rule. |
| § 63.6(c) | Compliance Dates for Existing Sources | Yes | § 63.5695 specifies compliance dates, including the compliance date for existing area sources that become major sources after the effective date of the rule. |
| § 63.6(d) | | No | [Reserved] |
| § 63.6(e)(1)-(2) | Operation and Maintenance Requirements | No | Operating requirements for open molding operations with add-on controls are specified in § 63.5725. |
| § 63.6(e)(3) | Startup, Shut Down, and Malfunction Plans | Yes | Only sources with add-on controls must complete startup, shutdown, and malfunction plans. |
| § 63.6(f) | Compliance with Nonopacity Emission Standards | Yes. | |
| § 63.6(g) | Use of an Alternative Nonopacity Emission Standard | Yes. | |
| § 63.6(h) | Compliance with Opacity/Visible Emissions Standards | No | Subpart VVVV does not specify opacity or visible emission standards. |
| § 63.6(i) | Extension of Compliance with | Yes. | |

| | | | |
|---|---|---|---|
| | Emission Standards | | |
| § 63.6(j) | Exemption from Compliance with Emission Standards | Yes. | |
| § 63.7(a)(1) | Performance Test Requirements | Yes. | |
| § 63.7(a)(2) | Dates for performance tests | No | § 63.5716 specifies performance test dates. |
| § 63.7(a)(3) | Performance testing at other times | Yes. | |
| § 63.7(b)-(h) | Other performance testing requirements | Yes. | |
| § 63.8(a)(1)-(2) | Monitoring Requirements—Applicability | Yes | All of § 63.8 applies only to sources with add-on controls. Additional monitoring requirements for sources with add-on controls are found in § 63.5725. |
| § 63.8(a)(3) | | No | [Reserved] |
| § 63.8(a)(4) | | No | Subpart VVVV does not refer directly or indirectly to § 63.11. |
| § 63.8(b)(1) | Conduct of Monitoring | Yes. | |
| § 63.8(b)(2)-(3) | Multiple Effluents and Multiple Continuous Monitoring Systems (CMS) | Yes | Applies to sources that use a CMS on the control device stack. |
| § 63.8(c)(1)-(4) | Continuous Monitoring System Operation and Maintenance | Yes. | |
| § 63.8(c)(5) | Continuous Opacity Monitoring Systems (COMS) | No | Subpart VVVV does not have opacity or visible emission standards. |
| § 63.8(c)(6)-(8) | Continuous Monitoring System Calibration Checks and Out-of-Control Periods | Yes. | |
| § 63.8(d) | Quality Control Program | Yes. | |
| § 63.8(e) | CMS Performance Evaluation | Yes. | |
| § 63.8(f)(1)-(5) | Use of an Alternative Monitoring Method | Yes. | |
| § 63.8(f)(6) | Alternative to Relative Accuracy Test | Yes | Applies only to sources that use continuous emission monitoring systems (CEMS). |
| § 63.8(g) | Data Reduction | Yes | |
| § 63.9(a) | Notification Requirements—Applicability | Yes. | |
| § 63.9(b) | Initial Notifications | Yes | |
| § 63.9(c) | Request for Compliance Extension | Yes. | |

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|---|---|---|---|
| § 63.9(d) | Notification That a New Source Is Subject to Special Compliance Requirements | Yes. | |
| § 63.9(e) | Notification of Performance Test | Yes | Applies only to sources with add-on controls. |
| § 63.9(f) | Notification of Visible Emissions/Opacity Test | No | Subpart VVVV does not have opacity or visible emission standards. |
| § 63.9(g)(1) | Additional CMS Notifications—Date of CMS Performance Evaluation | Yes | Applies only to sources with add-on controls. |
| § 63.9(g)(2) | Use of COMS Data | No | Subpart VVVV does not require the use of COMS. |
| § 63.9(g)(3) | Alternative to Relative Accuracy Testing | Yes | Applies only to sources with CEMS. |
| § 63.9(h) | Notification of Compliance Status | Yes. | |
| § 63.9(i) | Adjustment of Deadlines | Yes. | |
| § 63.9(j) | Change in Previous Information | Yes. | |
| § 63.10(a) | Recordkeeping/Reporting—Applicability | Yes. | |
| § 63.10(b)(1) | General Recordkeeping Requirements | Yes | §§ 63.567 and 63.5770 specify additional recordkeeping requirements. |
| § 63.10(b)(2)(i)-(xi) | Recordkeeping Relevant to Startup, Shutdown, and Malfunction Periods and CMS | Yes | Applies only to sources with add-on controls. |
| § 63.10(b)(2)(xii)-(xiv) | General Recordkeeping Requirements | Yes. | |
| § 63.10(b)(3) | Recordkeeping Requirements for Applicability Determinations | Yes | § 63.5686 specifies applicability determinations for non-major sources. |
| § 63.10(c) | Additional Recordkeeping for Sources with CMS | Yes | Applies only to sources with add-on controls. |
| § 63.10(d)(1) | General Reporting Requirements | Yes | § 63.5764 specifies additional reporting requirements. |
| § 63.10(d)(2) | Performance Test Results | Yes | § 63.5764 specifies additional requirements for reporting performance test results. |
| § 63.10(d)(3) | Opacity or Visible Emissions Observations | No | Subpart VVVV does not specify opacity or visible emission standards. |
| § 63.10(d)(4) | Progress Reports for Sources with Compliance Extensions | Yes. | |
| § 63.10(d)(5) | Startup, Shutdown, and Malfunction | Yes | Applies only to sources with add-on |

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|---|---|---|---|
| | Reports | | controls. |
| § 63.10(e)(1) | Additional CMS Reports—General | Yes | Applies only to sources with add-on controls. |
| § 63.10(e)(2) | Reporting Results of CMS Performance Evaluations | Yes | Applies only to sources with add-on controls. |
| § 63.10(e)(3) | Excess Emissions/CMS Performance Reports | Yes | Applies only to sources with add-on controls. |
| § 63.10(e)(4) | COMS Data Reports | No | Subpart VVVV does not specify opacity or visible emission standards. |
| § 63.10(f) | Recordkeeping/Reporting Waiver | Yes. | |
| § 63.11 | Control Device Requirements—Applicability | No | Facilities subject to subpart VVVV do not use flares as control devices. |
| § 63.12 | State Authority and Delegations | Yes | § 63.5776 lists those sections of subpart A that are not delegated. |
| § 63.13 | Addresses | Yes. | |
| § 63.14 | Incorporation by Reference | Yes. | |
| § 63.15 | Availability of Information/Confidentiality | Yes. | |

## Attachment D

# Goldshield Fiberglass, Inc.

## Part 70 Operating Permit Renewal

### 40 CFR 63 Subpart WWWW—National Emissions Standards for Hazardous Air Pollutants: Reinforced Plastic Composites Production

**Source:** 68 FR 19402, Apr. 21, 2003, unless otherwise noted.

### 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.

(b) You are not subject to this subpart if your facility only repairs reinforced plastic composites. Repair includes the non-routine manufacture of individual components or parts intended to repair a larger item as defined in §63.5935

(c) You are not subject to this subpart if your facility is a research and development facility as defined in section 112(c)(7) of the Clean Air Act (CAA).

(d) You are not subject to this subpart if your reinforced plastic composites operations use less than 1.2 tons per year (tpy) of thermoset resins and gel coats that contain styrene combined.

### § 63.5787 What if I also manufacture fiberglass boats or boat parts?

(a) If your source meets the applicability criteria in §63.5785, and is not subject to the Boat Manufacturing NESHAP (40 CFR part 63, subpart VVVV), you are subject to this subpart regardless of the final use of the parts you manufacture.

(b) If your source is subject to 40 CFR part 63, subpart VVVV, and all the reinforced plastic composites you manufacture are used in manufacturing your boats, you are not subject to this subpart.

(c) If you are subject to 40 CFR part 63, subpart VVVV, and meet the applicability criteria in §63.5785, and produce reinforced plastic composites that are not used in fiberglass boat manufacture at your facility, all operations associated with the manufacture of the reinforced plastic composites parts that are not used in fiberglass boat manufacture at your facility are subject to this subpart, except as noted in paragraph (d) of this section.

(d) Facilities potentially subject to both this subpart and 40 CFR part 63, subpart VVVV may elect to have the operations in paragraph (c) of this section covered by 40 CFR part 63, subpart VVVV, in lieu of this subpart, if they can demonstrate that this will not result in any organic HAP emissions increase compared to complying with this subpart.

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

(a) This subpart applies to each new or existing affected source at reinforced plastic composites production facilities.

(b) The affected source consists of all parts of your facility engaged in the following operations: Open molding, closed molding, centrifugal casting, continuous lamination, continuous casting, polymer casting, pultrusion, sheet molding compound (SMC) manufacturing, bulk molding compound (BMC) manufacturing, mixing, cleaning of equipment used in reinforced plastic composites manufacture, HAP-containing materials storage, and repair operations on parts you also manufacture.

(c) The following operations are specifically excluded from any requirements in this subpart: application of mold sealing and release agents; mold stripping and cleaning; repair of parts that you did not manufacture, including non-routine manufacturing of parts; personal activities that are not part of the manufacturing operations (such as hobby shops on military bases); prepreg materials as defined in §63.5935; non-gel coat surface coatings; application of putties, polyputties, and adhesives; repair or production materials that do not contain resin or gel coat; research and development operations as defined in section 112(c)(7) of the CAA; polymer casting; and closed molding operations (except for compression/injection molding). Note that the exclusion of certain operations from any requirements applies only to operations specifically listed in this paragraph. The requirements for any co-located operations still apply.

(d) Production resins that must meet military specifications are allowed to meet the organic HAP limit contained in that specification. In order for this exemption to be used, you must supply to the permitting authority the specifications certified as accurate by the military procurement officer, and those specifications must state a requirement for a specific resin, or a specific resin HAP content. Production resins for which this exemption is used must be applied with nonatomizing resin application equipment unless you can demonstrate this is infeasible. You must keep a record of the resins for which you are using this exemption.

[68 FR 19402, Apr. 21, 2003, as amended at 70 FR 50124, Aug. 25, 2005]

### § 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.

[70 FR 50124, Aug. 25, 2005]

## Calculating Organic HAP Emissions Factors for Open Molding and Centrifugal Casting

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

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

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

In order to determine the organic HAP content of resins and gel coats, you may rely on information provided by the material manufacturer, such as manufacturer's formulation data and material safety data sheets (MSDS), using the procedures specified in paragraphs (a) through (c) of this section, as applicable.

(a) Include in the organic HAP total each organic HAP that is present at 0.1 percent by mass or more for Occupational Safety and Health Administration-defined carcinogens, as specified in 29 CFR 1910.1200(d)(4) and at 1.0 percent by mass or more for other organic HAP compounds.

(b) If the organic HAP content is provided by the material supplier or manufacturer as a range, you must use the upper limit of the range for determining compliance. If a separate measurement of the total organic HAP content, such as an analysis of the material by EPA Method 311 of appendix A to 40 CFR part 63, exceeds the upper limit of the range of the total organic HAP content provided by the material supplier or manufacturer, then you must use the measured organic HAP content to determine compliance.

(c) If the organic HAP content is provided as a single value, you may use that value to determine compliance. If a separate measurement of the total organic HAP content is made and is less than 2 percentage points higher than the value for total organic HAP content provided by the material supplier or manufacturer, then you still may use the provided value to demonstrate compliance. If the measured total organic HAP content exceeds the provided value by 2 percentage points or more, then you must use the measured organic HAP content to determine compliance.

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

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

(a) Perform an organic HAP emissions test to determine a site-specific organic HAP emissions factor using the test procedures in §63.5850.

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

### § 63.5799 How do I calculate my facility's organic HAP emissions on a tpy basis for purposes of determining which paragraphs of §63.5805 apply?

To calculate your facility's organic HAP emissions in tpy for purposes of determining which paragraphs in §63.5805 apply to you, you must use the procedures in either paragraph (a) of this section for new facilities prior to startup, or paragraph (b) of this section for existing facilities and new facilities after startup. You are not required to calculate or report emissions under this section if you are an existing facility that does not have centrifugal casting or continuous lamination/casting operations, or a new facility that does not have any of the following operations: Open molding, centrifugal casting, continuous lamination/casting, pultrusion, SMC and BMC manufacturing, and mixing. Emissions calculation and emission reporting procedures in other sections of this subpart still apply. Calculate organic HAP emissions prior to any add-on control device, and do not include organic HAP emissions from any resin or gel coat used in operations subject to the Boat Manufacturing NESHAP, 40 CFR part 63, subpart VVVV, or from the manufacture of large parts as defined in §63.5805(d)(2). For centrifugal casting operations at existing facilities, do not include any organic HAP emissions where resin or gel coat is applied to an open centrifugal mold using open molding application techniques. Table 1 and the Table 1 footnotes to this subpart present more information on calculating centrifugal casting organic HAP emissions. The timing and reporting of these calculations is discussed in paragraph (c) of this section.

(a) For new facilities prior to startup, calculate a weighted average organic HAP emissions factor for the operations specified in §63.5805(c) and (d) on a lbs/ton of resin and gel coat basis. Base the weighted average on your projected operation for the 12 months subsequent to facility startup. Multiply the weighted average organic HAP emissions factor by projected resin use over the same period. You may calculate your organic HAP emissions factor based on the factors in Table 1 to this subpart, or you may use any HAP emissions factor approved by us, such as factors from the "Compilation of Air Pollutant Emissions Factors, Volume I: Stationary Point and Area Sources (AP–42)," or organic HAP emissions test data from similar facilities.

(b) For existing facilities and new facilities after startup, you may use the procedures in either paragraph (b)(1) or (2) of this section. If the emission factors for an existing facility have changed over the period of time prior to their initial compliance date due to incorporation of pollution-prevention control techniques, existing facilities may base the average emission factor on their operations as they exist on the compliance date. If an existing facility has accepted an enforceable permit limit that would result in less than 100 tpy of HAP measured prior to any add-on controls, and can demonstrate that they will operate at that level subsequent to the compliance date, they can be deemed to be below the 100 tpy threshold.

(1) *Use a calculated emission factor.* Calculate a weighted average organic HAP emissions factor on a lbs/ton of resin and gel coat basis. Base the weighted average on the prior 12 months of operation. Multiply the weighted average organic HAP emissions factor by resin and gel coat use over the same period. You may calculate this organic HAP emissions factor based on the equations in Table 1 to this subpart, or you may use any organic HAP emissions factor approved by us, such as factors from AP–42, or site-specific organic HAP emissions factors if they are supported by HAP emissions test data.

(2) *Conduct performance testing.* Conduct performance testing using the test procedures in §63.5850 to determine a site-specific organic HAP emissions factor in units of lbs/ton of resin and gel coat used. Conduct the test under conditions expected to result in the highest possible organic HAP emissions. Multiply this factor by annual resin and gel coat use to determine annual organic HAP emissions. This calculation must be repeated and reported annually.

(c) Existing facilities must initially perform this calculation based on their 12 months of operation prior to April 21, 2003, and include this information with their initial notification report. Existing facilities must repeat the calculation based on their resin and gel coat use in the 12 months prior to their initial compliance date, and submit this information with their initial compliance report. After their initial compliance date, existing and new facilities must recalculate organic HAP emissions over the 12-month period ending June 30 or December 31, whichever date is the first date following their compliance date specified in §63.5800. Subsequent calculations should cover the periods in the semiannual compliance reports.

[68 FR 19402, Apr. 21, 2003, as amended at 70 FR 50124, Aug. 25, 2005]

## Compliance Dates and Standards

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

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

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

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

(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.

(c) If you have a new facility that emits less than 100 tpy of HAP from the combination of all open molding, centrifugal casting, continuous lamination/casting, pultrusion, SMC manufacturing, mixing, and BMC manufacturing, you 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 to you.

(d)(1) Except as provided in paragraph (d)(2) of this section, if you have a new facility that emits 100 tpy or more of HAP from the combination of all open molding, centrifugal casting, continuous lamination/casting, pultrusion, SMC manufacturing, mixing, and BMC manufacturing, you must reduce the total organic HAP emissions from these operations by at least 95 percent by weight and meet any applicable work practice standards in Table 4 to this subpart that apply to you. As an alternative to meeting 95 percent by weight, you may meet the organic HAP emissions limits in Table 5 to this subpart. If you have a continuous lamination/casting operation, that operation may alternatively meet an organic HAP emissions limit of 1.47 lbs/ton of neat resin plus and neat gel coat plus applied.

(2)(i) If your new facility manufactures large reinforced plastic composites parts using open molding or pultrusion operations, the specific open molding and pultrusion operations used to produce large parts are not required to reduce HAP emissions by 95 weight percent, but must meet the emission limits in Table 3 to this subpart.

(ii) A large open molding part is defined as a part that, when the final finished part is enclosed in the smallest rectangular six-sided box into which the part can fit, the total interior volume of the box exceeds 250 cubic feet, or any interior sides of the box exceed 50 square feet.

(iii) A large pultruded part is a part that exceeds an outside perimeter of 24 inches or has more than 350 reinforcements.

(e) If you have a new or existing facility subject to paragraph (a)(2) or (c) of this section at its initial compliance date that subsequently meets or exceeds the 100 tpy threshold in any calendar year, you must notify your permitting authority in your compliance report. You may at the same time request a one-time exemption from the requirements of paragraph (a)(1) or (d) of this section in your compliance report if you can demonstrate all of the following:

(1) The exceedance of the threshold was due to circumstances that will not be repeated.

(2) The average annual organic HAP emissions from the potentially affected operations for the last 3 years were below 100 tpy.

(3) Projected organic HAP emissions for the next calendar year are below 100 tpy, based on projected resin and gel coat use and the HAP emission factors calculated according to the procedures in §63.5799.

(f) If you apply for an exemption in paragraph (e) of this section and subsequently exceed the HAP emission thresholds specified in paragraph (a)(2) or (c) of this section over the next 12-month period, you must notify the permitting authority in your semiannual report, the exemption is removed, and your facility must comply with paragraph (a)(1) or (d) of this section within 3 years from the time your organic HAP emissions first exceeded the threshold.

(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.

(h) If you use an add-on control device to comply with this subpart, you must meet all requirements contained in 40 CFR part 63, subpart SS.

[70 FR 50124, Aug. 25, 2005]

## Options for Meeting Standards

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

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

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

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

Where:

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

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

(b) *Demonstrate that, on average, you meet the individual organic HAP emissions limits for each combination of operation type and resin application method or gel coat type.* Demonstrate that on average you meet the individual organic HAP emissions limits for each unique combination of operation type and resin application method or gel coat type shown in Table 3 to this subpart that applies to you.

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

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

Where:

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

$\text{Material}_i$=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.

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

Where:

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

$\text{Material}_i$=neat resin plus or neat gel coat plus used during the last 12-month period for operation type i, tons;

n=number of operations.

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

$$\begin{array}{c}\text{Actual Weighted}\\ \text{Average organic}\\ \text{HAP Emissions}\\ \text{Factor}\end{array} = \frac{\sum_{i=1}^{n}(\text{Actual Operation EF}_i * \text{Material}_i)}{\sum_{i=1}^{n} Material_i} \qquad \text{(Eq. 4)}$$

Where:

Actual Individual $\text{EF}_i$=Actual organic HAP emissions factor for operation type i, lbs/ton;

$\text{Material}_i$=neat resin plus or neat gel coat plus used during the last 12 calendar months for operation type i, tons;

n=number of operations.

(3) Compare the values calculated in paragraphs (c)(1) and (2) of this section. If each 12-month rolling average organic HAP emissions factor is less than or equal to the corresponding 12-month rolling average organic HAP emissions limit, then you are in compliance.

(d) *Meet the organic HAP emissions limit for one application method and use the same resin(s) for all application methods of that resin type.* This option is limited to resins of the same type. The resin types for which this option may be used are noncorrosion-resistant, corrosion-resistant and/or high strength, and tooling.

(1) For any combination of manual resin application, mechanical resin application, filament application, or centrifugal casting, you may elect to meet the organic HAP emissions limit for any one of these application methods and use the same resin in all of the resin application methods listed in this paragraph (d)(1). Table 7 to this subpart presents the possible combinations based on a facility selecting the application process that results in the highest allowable organic HAP content resin. If the resin organic HAP content is below the applicable value shown in Table 7 to this subpart, the resin is in compliance.

(2) You may also use a weighted average organic HAP content for each application method described in paragraph (d)(1) of this section. Calculate the weighted average organic HAP content monthly. Use Equation 2 in paragraph (b)(1) of this section except substitute organic HAP content for organic HAP emissions factor. You are in compliance if the weighted average organic HAP content based on the last 12 months of resin use is less than or equal to the applicable organic HAP contents in Table 7 to this subpart.

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

(4) You do not have to keep records of resin use for any of the individual resins where you demonstrate compliance under the option in paragraph (d)(1) of this section unless you elect to include that resin in the averaging calculations described in paragraph (d)(2) of this section.

[70 FR 50125, Aug. 25, 2005]

### § 63.5820 What are my options for meeting the standards for continuous lamination/casting operations?

You must use one or more of the options in paragraphs (a) through (d) of this section to meet the standards in §63.5805. Use the calculation procedures in §§63.5865 through 63.5890.

(a) *Compliant line option.* Demonstrate that each continuous lamination line and each continuous casting line complies with the applicable standard.

(b) *Averaging option.* Demonstrate that all continuous lamination and continuous casting lines combined, comply with the applicable standard.

(c) *Add-on control device option.* If your operation must meet the 58.5 weight percent organic HAP emissions reduction limit in Table 3 to this subpart, you have the option of demonstrating that you achieve 95 percent reduction of all wet-out area organic HAP emissions.

(d) *Combination option.* Use any combination of options in paragraphs (a) and (b) of this section or, for affected sources at existing facilities, any combination of options in paragraphs (a), (b), and (c) of this section (in which one or more lines meet the standards on their own, two or more lines averaged together meet the standards, and one or more lines have their wet-out areas controlled to a level of 95 percent).

### § 63.5830 What are my options for meeting the standards for pultrusion operations subject to the 60 weight percent organic HAP emissions reductions requirement?

You must use one or more of the options in paragraphs (a) through (e) of this section to meet the 60 weight percent organic HAP emissions limit in Table 3 to this subpart, as required in §63.5805.

(a) Achieve an overall reduction in organic HAP emissions of 60 weight percent by capturing the organic HAP emissions and venting them to a control device or any combination of control devices. Conduct capture and destruction efficiency testing as specified in 63.5850 to this subpart to determine the percent organic HAP emissions reduction.

(b) Design, install, and operate wet area enclosures and resin drip collection systems on pultrusion machines that meet the criteria in paragraphs (b)(1) through (10) of this section.

(1) The enclosure must cover and enclose the open resin bath and the forming area in which reinforcements are pre-wet or wet-out and moving toward the die(s). The surfaces of the enclosure must be closed except for openings to allow material to enter and exit the enclosure.

(2) For open bath pultrusion machines with a radio frequency pre-heat unit, the enclosure must extend from the beginning of the resin bath to within 12.5 inches or less of the entrance of the radio frequency pre-heat unit. If the stock that is within 12.5 inches or less of the entrance to the radio frequency pre-heat unit has any drip, it must be enclosed. The stock exiting the radio frequency pre-heat unit is not required to be in an enclosure if the stock has no drip between the exit of the radio frequency pre-heat unit to within 0.5 inches of the entrance of the die.

(3) For open bath pultrusion machines without a radio frequency pre-heat unit, the enclosure must extend from the beginning of the resin bath to within 0.5 inches or less of the die entrance.

(4) For pultrusion lines with pre-wet area(s) prior to direct die injection, no more than 12.5 inches of open wet stock is permitted between the entrance of the first pre-wet area and the entrance to the die. If the pre-wet stock has any drip, it must be enclosed.

(5) The total open area of the enclosure must not exceed two times the cross sectional area of the puller window(s) and must comply with the requirements in paragraphs (b)(5)(i) through (iii) of this section.

(i) All areas that are open need to be included in the total open area calculation with the exception of access panels, doors, and/or hatches that are part of the enclosure.

(ii) The area that is displaced by entering reinforcement or exiting product is considered open.

(iii) Areas that are covered by brush covers are considered closed.

(6) Open areas for level control devices, monitoring devices, agitation shafts, and fill hoses must have no more than 1.0 inch clearance.

(7) The access panels, doors, and/or hatches that are part of the enclosure must close tightly. Damaged access panels, doors, and/or hatches that do not close tightly must be replaced.

(8) The enclosure may not be removed from the pultrusion line, and access panels, doors, and/or hatches that are part of the enclosure must remain closed whenever resin is in the bath, except for the time period discussed in paragraph (b)(9) of this section.

(9) The maximum length of time the enclosure may be removed from the pultrusion line or the access panels, doors, and/or hatches and may be open, is 30 minutes per 8 hour shift, 45 minutes per 12 hour shift, or 90 minutes per day if the machine is operated for 24 hours in a day. The time restrictions do not apply if the open doors or panels do not cause the limit of two times the puller window area to be exceeded. Facilities may average the times that access panels, doors, and/or hatches are open across all operating lines. In that case the average must not exceed the times shown in this paragraph (b)(9). All lines included in the average must have operated the entire time period being averaged.

(10) No fans, blowers, and/or air lines may be allowed within the enclosure. The enclosure must not be ventilated.

(c) Use direct die injection pultrusion machines with resin drip collection systems that meet all the criteria specified in paragraphs (c)(1) through (3) of this section.

(1) All the resin that is applied to the reinforcement is delivered directly to the die.

(2) No exposed resin is present, except at the face of the die.

(3) Resin drip is captured in a closed system and recycled back to the process.

(d) Use a preform injection system that meets the definition in §63.5935

(e) Use any combination of options in paragraphs (a) through (d) of this section in which different pultrusion lines comply with different options described in paragraphs (a) through (d) of this section, and

(1) Each individual pultrusion machine meets the 60 percent reduction requirement, or

(2) The weighted average reduction based on resin throughput of all machines combined is 60 percent. For purposes of the average percent reduction calculation, wet area enclosures reduce organic HAP emissions by 60 percent, and direct die injection and preform injection reduce organic HAP emissions by 90 percent.

[68 FR 19402, Apr. 21, 2003, as amended at 70 FR 50127, Aug. 25, 2005]

## 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.

(b) You must be in compliance with all organic HAP emissions limits in this subpart that you meet using add-on controls, except during periods of startup, shutdown, and malfunction.

(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).

(d) You must develop a written startup, shutdown, and malfunction plan according to the provisions in §63.6(e)(3) for any organic HAP emissions limits you meet using an add-on control.

[68 FR 19402, Apr. 21, 2003, as amended at 71 FR 20466, Apr. 20, 2006]

## Testing and Initial Compliance Requirements

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

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

### § 63.5845 When must I conduct subsequent performance tests?

You must conduct a performance test every 5 years following the initial performance test for any standard you meet with an add-on control device.

### § 63.5850 How do I conduct performance tests, performance evaluations, and design evaluations?

(a) If you are using any add-on controls to meet an organic HAP emissions limit in this subpart, you must conduct each performance test, performance evaluation, and design evaluation in 40 CFR part 63, subpart SS, that applies to you. The basic requirements for performance tests, performance evaluations, and design evaluations are presented in Table 6 to this subpart.

(b) Each performance test must be conducted according to the requirements in §63.7(e)(1) and under the specific conditions that 40 CFR part 63, subpart SS, specifies.

(c) Each performance evaluation must be conducted according to the requirements in §63.8(e) as applicable and under the specific conditions that 40 CFR part 63, subpart SS, specifies.

(d) You may not conduct performance tests or performance evaluations during periods of startup, shutdown, or malfunction, as specified in §63.7(e)(1).

(e) You must conduct the control device performance test using the emission measurement methods specified in paragraphs (e)(1) through (5) of this section.

(1) Use either Method 1 or 1A of appendix A to 40 CFR part 60, as appropriate, to select the sampling sites.

(2) Use Method 2, 2A, 2C, 2D, 2F or 2G of appendix A to 40 CFR part 60, as appropriate, to measure gas volumetric flow rate.

(3) Use Method 18 of appendix A to 40 CFR part 60 to measure organic HAP emissions or use Method 25A of appendix A to 40 CFR part 60 to measure total gaseous organic emissions as a surrogate for total organic HAP emissions. If you use Method 25A, you must assume that all gaseous organic emissions measured as carbon are organic HAP emissions. If you use Method 18 and the number of organic HAP in the exhaust stream exceeds five, you must take into account the use of multiple chromatographic columns and analytical techniques to get an accurate measure of at least 90 percent of the total organic HAP mass emissions. Do

not use Method 18 to measure organic HAP emissions from a combustion device; use instead Method 25A and assume that all gaseous organic mass emissions measured as carbon are organic HAP emissions.

(4) You may use American Society for Testing and Materials (ASTM) D6420–99 (available for purchase from at least one of the following addresses: 100 Barr Harbor Drive, West Conshohocken, PA 19428–2959; or University Microfilms International, 300 North Zeeb Road, Ann Arbor, MI 48106.) in lieu of Method 18 of 40 CFR part 60, appendix A, under the conditions specified in paragraphs (c)(4)(i) through (iii) of this section.

(i) If the target compound(s) is listed in Section 1.1 of ASTM D6420–99 and the target concentration is between 150 parts per billion by volume and 100 parts per million by volume.

(ii) If the target compound(s) is not listed in Section 1.1 of ASTM D6420–99, but is potentially detected by mass spectrometry, an additional system continuing calibration check after each run, as detailed in Section 10.5.3 of ASTM D6420–99, must be followed, met, documented, and submitted with the performance test report even if you do not use a moisture condenser or the compound is not considered soluble.

(iii) If a minimum of one sample/analysis cycle is completed at least every 15 minutes.

(5) Use the procedures in EPA Method 3B of appendix A to 40 CFR part 60 to determine an oxygen correction factor if required by §63.997(e)(2)(iii)(C). You may use American Society of Mechanical Engineers (ASME) PTC 19–10–1981–Part 10 (available for purchase from ASME, P.O. Box 2900, 22 Law Drive, Fairfield, New Jersey, 07007–2900, or online at *www.asme.org/catalog* ) as an alternative to EPA Method 3B of appendix A to 40 CFR part 60.

(f) The control device performance test must consist of three runs and each run must last at least 1 hour. The production conditions during the test runs must represent normal production conditions with respect to the types of parts being made and material application methods. The production conditions during the test must also represent maximum potential emissions with respect to the organic HAP content of the materials being applied and the material application rates.

(g) If you are using a concentrator/oxidizer control device, you must test the combined flow upstream of the concentrator, and the combined outlet flow from both the oxidizer and the concentrator to determine the overall control device efficiency. If the outlet flow from the concentrator and oxidizer are exhausted in separate stacks, you must test both stacks simultaneously with the inlet to the concentrator to determine the overall control device efficiency.

(h) During the test, you must also monitor and record separately the amounts of production resin, tooling resin, pigmented gel coat, clear gel coat, and tooling gel coat applied inside the enclosure that is vented to the control device.

### § 63.5855 What are my monitor installation and operation requirements?

You must monitor and operate all add-on control devices according to the procedures in 40 CFR part 63, subpart SS.

### § 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.

(b) If using an add-on control device to demonstrate compliance, you must also establish each control device operating limit in 40 CFR part 63, subpart SS, that applies to you.

Emission Factor, Percent Reduction, and Capture Efficiency Calculation Procedures for Continuous Lamination/Casting Operations

### § 63.5865 What data must I generate to demonstrate compliance with the standards for continuous lamination/casting operations?

(a) For continuous lamination/casting affected sources complying with a percent reduction requirement, you must generate the data identified in Tables 10 and 11 to this subpart for each data requirement that applies to your facility.

(b) For continuous lamination/casting affected sources complying with a lbs/ton limit, you must generate the data identified in Tables 11 and 12 to this subpart for each data requirement that applies to your facility.

### § 63.5870 How do I calculate annual uncontrolled and controlled organic HAP emissions from my wet-out area(s) and from my oven(s) for continuous lamination/casting operations?

To calculate your annual uncontrolled and controlled organic HAP emissions from your wet-out areas and from your ovens, you must develop uncontrolled and controlled wet-out area and uncontrolled and controlled oven organic HAP emissions estimation equations or factors to apply to each formula applied on each line, determine how much of each formula for each end product is applied each year on each line, and assign uncontrolled and controlled wet-out area and uncontrolled and controlled oven organic HAP emissions estimation equations or factors to each formula. You must determine the overall capture efficiency using the procedures in §63.5850 to this subpart.

(a) To develop uncontrolled and controlled organic HAP emissions estimation equations and factors, you must, at a minimum, do the following, as specified in paragraphs (a)(1) through (6) of this section:

(1) Identify each end product and the thickness of each end product produced on the line. Separate end products into the following end product groupings, as applicable: corrosion-resistant gel coated end products, noncorrosion-resistant gel coated end products, corrosion-resistant nongel coated end products, and noncorrosion-resistant nongel coated end products. This step creates end product/thickness combinations.

(2) Identify each formula used on the line to produce each end product/thickness combination. Identify the amount of each such formula applied per year. Rank each formula used to produce each end product/thickness combination according to usage within each end product/thickness combination.

(3) For each end product/thickness combination being produced, select the formula with the highest usage rate for testing.

(4) If not already selected, also select the worst-case formula (likely to be associated with the formula with the highest organic HAP content, type of HAP, application of gel coat, thin product, low line speed, higher resin table temperature) amongst all formulae. (You may use the results of the worst-case formula test for all formulae if desired to limit the amount of testing required.)

(5) For each formula selected for testing, conduct at least one test (consisting of three runs). During the test, track information on organic HAP content and type of HAP, end product thickness, line speed, and resin temperature on the wet-out area table.

(6) Using the test results, develop uncontrolled and controlled organic HAP emissions estimation equations (or factors) or series of equations (or factors) that best fit the results for estimating uncontrolled and controlled organic HAP emissions, taking into account the organic HAP content and type of HAP, end product thickness, line speed, and resin temperature on the wet-out area table.

(b) In lieu of using the method specified in paragraph (a) of this section for developing uncontrolled and controlled organic HAP emissions estimation equations and factors, you may either method specified in paragraphs (b)(1) and (2) of this section, as applicable.

(1) For either uncontrolled or controlled organic HAP emissions estimates, you may use previously established, facility-specific organic HAP emissions equations or factors, provided they allow estimation of both wet-out area and oven organic HAP emissions, where necessary, and have been approved by your permitting authority. If a previously established equation or factor is specific to the wet-out area only, or to the oven only, then you must develop the corresponding uncontrolled or controlled equation or factor for the other organic HAP emissions source.

(2) For uncontrolled (controlled) organic HAP emissions estimates, you may use controlled (uncontrolled) organic HAP emissions estimates and control device destruction efficiency to calculate your uncontrolled (controlled) organic HAP emissions provided the control device destruction efficiency was calculated at the same time you collected the data to develop your facility's controlled (uncontrolled) organic HAP emissions estimation equations and factors.

(c) Assign to each formula an uncontrolled organic HAP emissions estimation equation or factor based on the end product/thickness combination for which that formula is used.

(d)(1) To calculate your annual uncontrolled organic HAP emissions from wet-out areas that do not have any capture and control and from wet-out areas that are captured by an enclosure but are vented to the atmosphere and not to a control device, multiply each formula's annual usage by its appropriate organic HAP emissions estimation equation or factor and sum the individual results.

(2) To calculate your annual uncontrolled organic HAP emissions that escape from the enclosure on the wet-out area, multiply each formula's annual usage by its appropriate uncontrolled organic HAP emissions estimation equation or factor, sum the individual results, and multiply the summation by 1 minus the percent capture (expressed as a fraction).

(3) To calculate your annual uncontrolled oven organic HAP emissions, multiply each formula's annual usage by its appropriate uncontrolled organic HAP emissions estimation equation or factor and sum the individual results.

(4) To calculate your annual controlled organic HAP emissions, multiply each formula's annual usage by its appropriate organic HAP emissions estimation equation or factor and sum the individual results to obtain total annual controlled organic HAP emissions.

(e) Where a facility is calculating both uncontrolled and controlled organic HAP emissions estimation equations and factors, you must test the same formulae. In addition, you must develop both sets of equations and factors from the same tests.

### § 63.5875 How do I determine the capture efficiency of the enclosure on my wet-out area and the capture efficiency of my oven(s) for continuous lamination/casting operations?

(a) The capture efficiency of a wet-out area enclosure is assumed to be 100 percent if it meets the design and operation requirements for a permanent total enclosure (PTE) specified in EPA Method 204 of appendix M to 40 CFR part 51. If a PTE does not exist, then a temporary total enclosure must be constructed and verified using EPA Method 204, and capture efficiency testing must be determined using EPA Methods 204B through E of appendix M to 40 CFR part 51.

(b) The capture efficiency of an oven is to be considered 100 percent, provided the oven is operated under negative pressure.

### § 63.5880 How do I determine how much neat resin plus is applied to the line and how much neat gel coat plus is applied to the line for continuous lamination/casting operations?

Use the following procedures to determine how much neat resin plus and neat gel coat plus is applied to the line each year.

(a) Track formula usage by end product/thickness combinations.

(b) Use in-house records to show usage. This may be either from automated systems or manual records.

(c) Record daily the usage of each formula/end product combination on each line. This is to be recorded at the end of each run ( *i.e.,* when a changeover in formula or product is made) and at the end of each shift.

(d) Sum the amounts from the daily records to calculate annual usage of each formula/end product combination by line.

### § 63.5885 How do I calculate percent reduction to demonstrate compliance for continuous lamination/casting operations?

You may calculate percent reduction using any of the methods in paragraphs (a) through (d) of this section.

(a) *Compliant line option.* If all of your wet-out areas have PTE that meet the requirements of EPA Method 204 of appendix M of 40 CFR part 51, and all of your wet-out area organic HAP emissions and oven organic HAP emissions are vented to an add-on control device, use Equation 1 of this section to demonstrate compliance. In all other situations, use Equation 2 of this section to demonstrate compliance.

$$PR = \frac{(\mathrm{Inlet}) - (\mathrm{Outlet})}{(\mathrm{Inlet})} \times 100 \qquad (\mathrm{Eq.\ 1})$$

Where:

PR=percent reduction;

Inlet+HAP emissions entering the control device, lbs per year;

Outlet=HAP emissions existing the control device to the atmosphere, lbs per year.

$$PR = \frac{(\mathrm{WAE}_{\mathrm{ci}} + O_{ci}) - (\mathrm{WAE}_{\mathrm{co}} + O_{co})}{(\mathrm{WAE}_{\mathrm{ci}} + \mathrm{WAE}_{\mathrm{u}} + \mathrm{O}_{\mathrm{ci}} + \mathrm{O}_{\mathrm{u}})} \times 100 \qquad (\mathrm{Eq.\ 2})$$

Where:

PR=percent reduction;

$\mathrm{WAEi}_{ci}$=wet-out area organic HAP emissions, lbs per year, vented to a control device;

$\mathrm{WAEi}_{u}$=wet-out area organic HAP emissions, lbs per year, not vented to a control device;

$\mathrm{Oj}_{u}$=oven organic HAP emissions, lbs per year, not vented to a control device;

$\mathrm{Oj}_{ci}$=oven organic HAP emissions, lbs per year, vented to a control device;

$\mathrm{WAEi}_{co}$=wet-out area organic HAP emissions, lbs per year, from the control device outlet;

$\mathrm{Oj}_{co}$=oven organic HAP emissions, lbs per year, from the control device outlet.

(b) *Averaging option.* Use Equation 3 of this section to calculate percent reduction.

$$PR = \frac{\left(\sum_{i=1}^{m} \mathrm{WAEi}_{\mathrm{ci}} + \sum_{j=1}^{n} Oj_{ci}\right) - \left(\sum_{i=1}^{m} \mathrm{WAEi}_{\mathrm{co}} + \sum_{j=1}^{n} Oj_{co}\right)}{\left(\sum_{i=1}^{m} \mathrm{WAEi}_{\mathrm{ci}} + \sum_{j=1}^{n} Oj_{ci} + \sum_{i=1}^{m} \mathrm{WAEi}_{\mathrm{u}} + \sum_{j=1}^{n} Oj_{u}\right)} \times 100 \qquad (\mathrm{Eq.\ 3})$$

Where:

PR=percent reduction;

$\mathrm{WAEi}_{ci}$=wet-out area organic HAP emissions from wet-out area i, lbs per year, sent to a control device;

$\mathrm{WAEi}_{u}$=wet-out area organic HAP emissions from wet-out area i, lbs per year, not sent to a control device;

$WAEi_{co}$=wet-out area organic HAP emissions from wet-out area i, lbs per year, at the outlet of a control device;

$Oj_{u}$=organic HAP emissions from oven j, lbs per year, not sent to a control device;

$Oj_{ci}$=organic HAP emissions from oven j, lbs per year, sent to a control device;

$Oj_{co}$=organic HAP emissions from oven j, lbs per year, at the outlet of the control device;

m=number of wet-out areas;

n=number of ovens.

(c) *Add-on control device option.* Use Equation 1 of this section to calculate percent reduction.

(d) *Combination option.* Use Equations 1 through 3 of this section, as applicable, to calculate percent reduction.

[70 FR 50127, Aug. 25, 2005]

## § 63.5890 How do I calculate an organic HAP emissions factor to demonstrate compliance for continuous lamination/casting operations?

(a) *Compliant line option.* Use Equation 1 of this section to calculate an organic HAP emissions factor in lbs/ton.

$$E=\frac{WAE_{u}+WAE_{c}+O_{u}+O_{c}}{(R+G)} \quad (Eq.\ 1)$$

Where:

E=HAP emissions factor in lbs/ton of resin and gel coat

$WAE_{u}$=uncontrolled wet-out area organic HAP emissions, lbs per year

$WAE_{c}$=controlled wet-out area organic HAP emissions, lbs per year

$O_{u}$=uncontrolled oven organic HAP emissions, lbs per year

$O_{c}$=controlled oven organic HAP emissions, lbs per year

R=total usage of neat resin plus, tpy

G=total usage of neat gel coat plus, tpy

(b) *Averaging option.* Use Equation 2 of this section to demonstrate compliance.

$$E=\frac{\sum_{i=1}^{m}WAE_{ui}+\sum_{i=1}^{o}WAE_{ci}+\sum_{j=1}^{n}O_{uj}+\sum_{j=1}^{p}O_{cj}}{(R+G)} \qquad (Eq.\ 2)$$

Where:

E=HAP emissions factor in lbs/ton of resin and gel coat

$WAE_{ui}$=uncontrolled organic HAP emissions from wet-out area i, lbs per year

$WAE_{ci}$=controlled organic HAP emissions from wet-out area i, lbs per year

$O_{uj}$=uncontrolled organic HAP emissions from oven j, lbs per year

$O_{cj}$=controlled organic HAP emissions from oven j, lbs per year

i=number of wet-out areas

j=number of ovens

m=number of wet-out areas uncontrolled

n=number of ovens uncontrolled

o=number of wet-out areas controlled

p=number of ovens controlled

R=total usage of neat resin plus, tpy

G=total usage of neat gel coat plus, tpy

(c) *Combination option.* Use Equations 1 and 2 of this section, as applicable, to demonstrate compliance.

## Continuous Compliance Requirements

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

(a) During production, you must collect and keep a record of data as indicated in 40 CFR part 63, subpart SS, if you are using an add-on control device.

(b) You must monitor and collect data as specified in paragraphs (b)(1) through (4) of this section.

(1) Except for monitoring malfunctions, associated repairs, and required quality assurance or control activities (including, as applicable, calibration checks and required zero and span adjustments), you must conduct all monitoring in continuous operation (or collect data at all required intervals) at all times that the affected source is operating.

(2) You may not use data recorded during monitoring malfunctions, associated repairs, and required quality assurance or control activities for purposes to this subpart, including data averages and calculations, or fulfilling a minimum data availability requirement, if applicable. You must use all the data collected during all other periods in assessing the operation of the control device and associated control system.

(3) At all times, you must maintain necessary parts for routine repairs of the monitoring equipment.

(4) A monitoring malfunction is any sudden, infrequent, not reasonably preventable failure of the monitoring equipment to provide

valid data. Monitoring failures that are caused in part by poor maintenance or careless operation are not malfunctions.

(c) You must collect and keep records of resin and gel coat use, organic HAP content, and operation where the resin is used if you are meeting any organic HAP emissions limits based on an organic HAP emissions limit in Tables 3 or 5 to this subpart. You must collect and keep records of resin and gel coat use, organic HAP content, and operation where the resin is used if you are meeting any organic HAP content limits in Table 7 to this subpart if you are averaging organic HAP contents. Resin use records may be based on purchase records if you can reasonably estimate how the resin is applied. The organic HAP content records may be based on MSDS or on resin specifications supplied by the resin supplier.

(d) Resin and gel coat use records are not required for the individual resins and gel coats that are demonstrated, as applied, to meet their applicable emission as defined in §63.5810(a). However, you must retain the records of resin and gel coat organic HAP content, and you must include the list of these resins and gel coats and identify their application methods in your semiannual compliance reports. If after you have initially demonstrated that a specific combination of an individual resin or gel coat, application method, and controls meets its applicable emission limit, and the resin or gel coat changes or the organic HAP content increases, or you change the application method or controls, then you again must demonstrate that the individual resin or gel coat meets its emission limit as specified in paragraph (a) of §63.5810. If any of the previously mentioned changes results in a situation where an individual resin or gel coat now exceeds its applicable emission limit in Table 3 or 5 of this subpart, you must begin collecting resin and gel coat use records and calculate compliance using one of the averaging options on a 12-month rolling average.

(e) For each of your pultrusion machines, you must record all times that wet area enclosures doors or covers are open and there is resin present in the resin bath.

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

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

(a) You must demonstrate continuous compliance with each standard in §63.5805 that applies to you according to the methods specified in paragraphs (a)(1) through (3) of this section.

(1) Compliance with organic HAP emissions limits for sources using add-on control devices is demonstrated following the procedures in 40 CFR part 63, subpart SS. Sources using add-on controls may also use continuous emissions monitors to demonstrate continuous compliance as an alternative to control parameter monitoring.

(2) Compliance with organic HAP emissions limits is demonstrated by maintaining an organic HAP emissions factor value less than or equal to the appropriate organic HAP emissions limit listed in Table 3 or 5 to this subpart, on a 12-month rolling average, and/or by including in each compliance report a statement that individual resins and gel coats, as applied, meet the appropriate organic HAP emissions limits, as discussed in §63.5895(d).

(3) Compliance with organic HAP content limits in Table 7 to this subpart is demonstrated by maintaining an average organic HAP content value less than or equal to the appropriate organic HAP contents listed in Table 7 to this subpart, on a 12-month rolling average, and/or by including in each compliance report a statement that resins and gel coats individually meet the appropriate organic HAP content limits in Table 7 to this subpart, as discussed in §63.5895(d).

(4) Compliance with the work practice standards in Table 4 to this subpart is demonstrated by performing the work practice required for your operation.

(b) You must report each deviation from each standard in §63.5805 that applies to you. The deviations must be reported according to the requirements in §63.5910.

(c) Except as provided in paragraph (d) of this section, during periods of startup, shutdown or malfunction, you must meet the organic HAP emissions limits and work practice standards that apply to you.

(d) When you use an add-on control device to meet standards in §63.5805, you are not required to meet those standards during periods of startup, shutdown, or malfunction, but you must operate your affected source to minimize emissions in accordance with §63.6(e)(1).

(e) Consistent with §§63.6(e) and 63.7(e)(1), deviations that occur during a period of malfunction for those affected sources and standards specified in paragraph (d) of this section are not violations if you demonstrate to the Administrator's satisfaction that you were operating in accordance with §63.6(e)(1). The Administrator will determine whether deviations that occur during a period of startup, shutdown, and malfunction are violations, according to the provisions in §63.6(e).

[68 FR 19402, Apr. 21, 2003, as amended at 70 FR 50128, Aug. 25, 2005; 71 FR 20466, Apr. 20, 2006]

## 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.

(4) If you had a startup, shutdown, or malfunction during the reporting period and you took actions consistent with your startup, shutdown, and malfunction plan, the compliance report must include the information in §63.10(d)(5)(i).

(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.

(6) If there were no periods during which the continuous monitoring system (CMS), including a continuous emissions monitoring system (CEMS) and an operating parameter monitoring system were out of control, as specified in §63.8(c)(7), a statement that there were no periods during which the CMS was out of control during the reporting period.

(d) For each deviation from an organic HAP emissions limitation ( *i.e.,* emissions limit and operating limit) and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMS to comply with the organic HAP emissions limitations or work practice standards in this subpart, the compliance report must contain the information in paragraphs (c)(1) through (4) of this section and in paragraphs (d)(1) and (2) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The total operating time of each affected source during the reporting period.

(2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.

(e) For each deviation from an organic HAP emissions limitation ( *i.e.,* emissions limit and operating limit) occurring at an affected source where you are using a CMS to comply with the organic HAP emissions limitation in this subpart, you must include the information in paragraphs (c)(1) through (4) of this section and in paragraphs (e)(1) through (12) of this section. This includes periods of startup, shutdown, and malfunction.

(1) The date and time that each malfunction started and stopped.

(2) The date and time that each CMS was inoperative, except for zero (low-level) and high-level checks.

(3) The date, time, and duration that each CMS was out of control, including the information in §63.8(c)(8).

(4) The date and time that each deviation started and stopped, and whether each deviation occurred during a period of startup, shutdown, or malfunction, or during another period.

(5) A summary of the total duration of the deviation during the reporting period and the total duration as a percent of the total source operating time during that reporting period.

(6) A breakdown of the total duration of the deviations during the reporting period into those that are due to startup, shutdown, control equipment problems, process problems, other known causes, and other unknown causes.

(7) A summary of the total duration of CMS downtime during the reporting period and the total duration of CMS downtime as a percent of the total source operating time during that reporting period.

(8) An identification of each organic HAP that was monitored at the affected source.

(9) A brief description of the process units.

(10) A brief description of the CMS.

(11) The date of the latest CMS certification or audit.

(12) A description of any changes in CMS, processes, or controls since the last reporting period.

(f) You must report if you have exceeded the 100 tpy organic HAP emissions threshold if that exceedance would make your facility subject to §63.5805(a)(1) or (d). Include with this report any request for an exemption under §63.5805(e). If you receive an exemption under §63.5805(e) and subsequently exceed the 100 tpy organic HAP emissions threshold, you must report this exceedance as required in §63.5805(f).

(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.

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

## § 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).

(b) If you use an add-on control device, you must keep all records required in 40 CFR part 63, subpart SS, to show continuous compliance with this subpart.

(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.

(e) For a new or existing continuous lamination/ casting operation, you must keep the records listed in paragraphs (e)(1) through (4) of this section, when complying with the percent reduction and/or lbs/ton requirements specified in paragraphs (a) and (c) through (d) of §63.5805.

(1) You must keep all data, assumptions, and calculations used to determine percent reduction and/or lbs/ton as applicable;

(2) You must keep a brief description of the rationale for the assignment of an equation or factor to each formula;

(3) When using facility-specific organic HAP emissions estimation equations or factors, you must keep all data, assumptions, and calculations used to derive the organic HAP emissions estimation equations and factors and identification and rationale for the worst-case formula; and

(4) For all organic HAP emissions estimation equations and organic HAP emissions factors, you must keep documentation that the appropriate permitting authority has approved them.

[68 FR 19402, Apr. 21, 2003, as amended at 70 FR 50129, Aug. 25, 2005]

### § 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.

[68 FR 19402, Apr. 21, 2003, as amended at 70 FR 50129, Aug. 25, 2005]

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

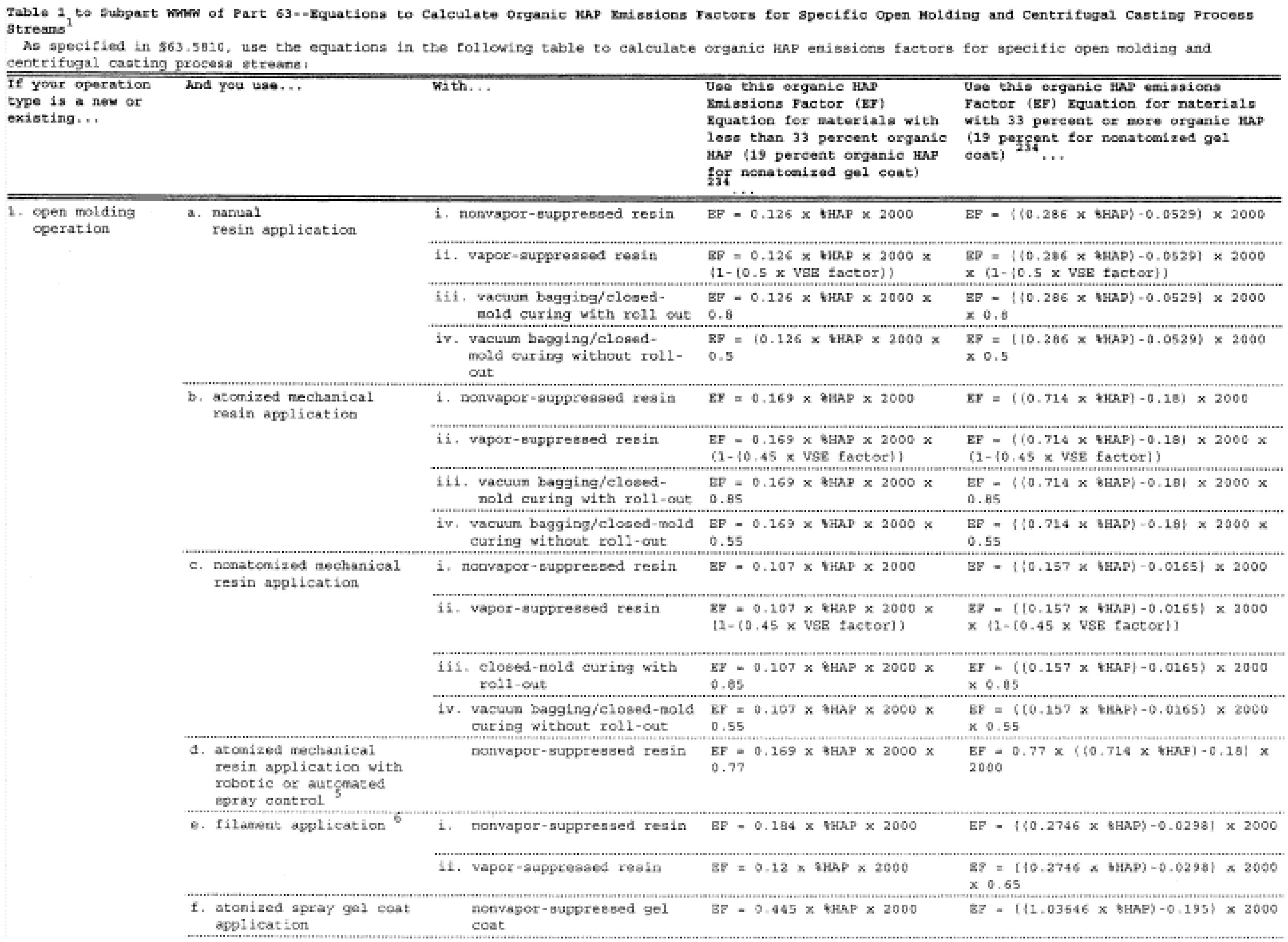

**Table 1 to Subpart WWWW of Part 63--Equations to Calculate Organic HAP Emissions Factors for Specific Open Molding and Centrifugal Casting Process Streams**[1]

As specified in §63.5810, use the equations in the following table to calculate organic HAP emissions factors for specific open molding and centrifugal casting process streams:

| 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)[234]... | Use this organic HAP emissions Factor (EF) Equation for materials with 33 percent or more organic HAP (19 percent for nonatomized gel coat)[234]... |
|---|---|---|---|---|
| 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-mold curing with roll out | EF = 0.126 x %HAP x 2000 x 0.8 | EF = [(0.286 x %HAP)-0.0529] x 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 = 0.445 x %HAP x 2000 | EF = ((1.03646 x %HAP)-0.195) x 2000 |

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| | | | | |
|---|---|---|---|---|
| | 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 application 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 |
| 2. centrifugal casting operations [7][8] | a. heated air blown through molds | nonvapor-suppressed resin | EF = 0.558 x (%HAP) x 2000 | EF = 0.558 x (%HAP) x 2000 |
| | b. vented molds, but air vented through the molds is not heated | nonvapor-suppressed resin | EF = 0.026 x (%HAP) x 2000 | EF = 0.026 x (%HAP) x 2000 |

**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 emission estimates for other purposes. However, this does not preclude a facilit from using the equations in this table to calculate emission factors for purposes other then 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.

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[70 FR 50129, Aug. 26, 2005]

## 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<br>ii. You must accept and meet an enforceable HAP emissions limit below the major source threshold prior to April 21, 2006. |
| 2. An existing source that is an area source | Becomes a major source after the publication date of this subpart | 3 years after becoming a major source or April 21, 2006, whichever is later. |
| 3. An existing source, and emits less than 100 tpy of organic HAP from the combination of all centrifugal casting and continuous lamination/casting operations at the time of initial compliance with this subpart | Subsequently increases its actual organic HAP emissions to 100 tpy or more from these operations, which requires that the facility must now comply with the standards in §63.5805(b) | 3 years of the date your semi-annual compliance report indicates your facility meets or exceeds the 100 tpy threshold. |
| 4. A new source | Is a major source at startup | Upon startup or April 21, 2003, whichever is later. |
| 5. A new source | Is an area source at startup and becomes a major source | Immediately upon becoming a major source. |
| 6. A new source, and emits less than 100 tpy of organic HAP from the combination of all open molding, centrifugal casting, continuous lamination/casting, pultrusion, SMC and BMC manufacturing, and mixing operations at the time of initial compliance with this subpart | Subsequently increases its actual organic HAP emissions to 100 tpy or more from the combination of these operations, which requires that the facility must now meet the standards in §63.5805(d) | 3 years from the date that your semi-annual compliance report indicates your facility meets or exceeds the 100 tpy threshold. |

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

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

| If your operation type is . . | And you use . . . | [1]Your organic HAP emissions limit is . . . |
|---|---|---|

| . | | |
|---|---|---|
| 1. open molding—corrosion-resistant and/or high strength (CR/HS) | a. mechanical resin application<br>b. filament application<br>c. manual resin application | 113 lb/ton.<br>171 lb/ton.<br>123 lb/ton. |
| 2. open molding—non-CR/HS | a. mechanical resin application<br>b. filament application<br>c. manual resin application | 88 lb/ton.<br>188 lb/ton.<br>87 lb/ton. |
| 3. open molding—tooling | a. mechanical resin application<br>b. manual resin application | 254 lb/ton.<br>157 lb/ton. |
| 4. open molding—low-flame spread/low-smoke products | a. mechanical resin application<br>b. filament application<br>c. manual resin application | 497 lb/ton.<br>270 lb/ton.<br>238 lb/ton. |
| 5. open molding—shrinkage controlled resins[2] | a. mechanical resin application<br>b. filament application<br>c. manual resin application | 354 lb/ton.<br>215 lb/ton.<br>180 lb/ton. |
| 6. open molding—gel coat[3] | a. tooling gel coating<br>b. white/off white pigmented gel coating<br>c. all other pigmented gel coating<br>d. CR/HS or high performance gel coat<br>e. fire retardant gel coat<br>f. clear production gel coat | 440 lb/ton.<br>267 lb/ton.<br>377 lb/ton.<br>605 lb/ton.<br>854 lb/ton.<br>522 lb/ton. |
| 7. centrifugal casting—CR/HS | a. resin application with the mold closed, and the mold is vented during spinning and cure<br>b. resin application with the mold closed, and the mold is not vented during spinning and cure<br>c. resin application with the mold open, and the mold is vented during spinning and cure | 25 lb/ton.[4]<br>NA—this is considered to be a closed molding operation.<br>25 lb/ton.[4]<br>Use the appropriate open molding emission limit.[5] |

| | | |
|---|---|---|
| | d. resin application with the mold open, and the mold is not vented during spinning and cure | |
| 8. centrifugal casting—non-CR/HS | a. resin application with the mold closed, and the mold is vented during spinning and cure<br>b. resin application with the mold closed, and mold is not vented during the spinning and cure<br>c. resin application with the mold open, and the mold is vented during spinning and cure<br>d. resin application with the mold open, and the mold is not vented during spinning and cure | 20 lb/ton.[4]<br>NA—this is considered to be a closed molding operation.<br>20 lb/ton.[4]<br>Use the appropriate open molding emission limit.[5] |
| 9. pultrusion[6] | N/A | reduce total organic HAP emissions by at least 60 weight percent. |
| 10. continuous lamination/casting | N/A | reduce total organic HAP emissions by at least 58.5 weight percent or not exceed an organic HAP emissions limit of 15.7 lbs of organic HAP per ton of neat resin plus and neat gel coat plus. |

[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.

[70 FR 50131, Aug. 25, 2005]

### 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. |
| 4. an existing or new SMC manufacturing operation | close or cover the resin delivery system to the doctor box on each SMC manufacturing machine. The doctor box itself may be open. |
| 5. an existing or new SMC manufacturing operation | use a nylon containing film to enclose SMC. |
| 6. all mixing or BMC manufacturing operations[1] | use mixer covers with no visible gaps present in the mixer covers, except that gaps of up to 1 inch are permissible around mixer shafts and any required instrumentation. |
| 7. all mixing or BMC manufacturing operations[1] | close any mixer vents when actual mixing is occurring, except that venting is allowed during addition of materials, or as necessary prior to adding |

| | |
|---|---|
| | materials or opening the cover for safety. Vents routed to a 95 percent efficient control device are exempt from this requirement. |
| 8. all mixing or BMC manufacturing operations[1] | keep the mixer covers closed while actual mixing is occurring except when adding materials or changing covers to the mixing vessels. |
| 9. a new or existing pultrusion operation manufacturing 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 that is not subject to the 95 percent organic HAP emission reduction requirement | i. not allow vents from the building ventilation system, or local or portable fans to blow directly on or across the wet-out area(s),<br>ii. not permit point suction of ambient air in the wet-out area(s) unless that air is directed to a control device,<br>iii. use devices such as deflectors, baffles, and curtains when practical to reduce air flow velocity across the wet-out area(s),<br>iv. direct any compressed air exhausts away from resin and wet-out area(s), |
| | v. convey resin collected from drip-off pans or other devices to reservoirs, tanks, or sumps via covered troughs, pipes, or other covered conveyance that shields the resin from the ambient air,<br>vi. cover all reservoirs, tanks, sumps, or HAP-containing materials storage vessels except when they are being charged or filled, and<br>vii. cover or shield from ambient air resin delivery systems to the wet-out area(s) from reservoirs, tanks, or sumps where practical. |

[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.

[70 FR 50133, Aug. 25, 2005]

### Alternative Organic HAP Emissions Limits for Open Molding, Centrifugal Casting, and SMC Manufacturing Operations Where the Standards Are Based on a 95 Percent Reduction Requirement

As specified in §63.5805, as an alternative to the 95 percent organic HAP emissions reductions requirement, you may meet the appropriate organic HAP emissions limits in the following table:

| If your operation type is . . . | And you use . . . | LYour organic HAP emissions limit is a[1]. . . |
|---|---|---|
| 1. Open molding—corrosion-resistant and/or high strength (CR/HS) | a. Mechanical resin application | 6 lb/ton. |

| | | |
|---|---|---|
| | b. Filament application | 9 lb/ton. |
| | c. Manual resin application | 7 lb/ton. |
| 2. Open molding—non-CR/HS | a. mechanical resin application | 13 lb/ton. |
| | b. Filament application | 10 lb/ton. |
| | c. Manual resin application | 5 lb/ton. |
| 3. Open molding—tooling | a. Mechanical resin application | 13 lb/ton. |
| | b. Manual resin application | 8 lb/ton. |
| 4. Open molding—low flame spread/low smoke products | a. Mechanical resin application | 25 lb/ton. |
| | b. Filament application | 14 lb/ton. |
| | c. Manual resin application | 12 lb/ton. |
| 5. Open molding—shrinkage controlled resins | a. Mechanical resin application | 18 lb/ton. |
| | b. Filament application | 11 lb/ton. |
| | c. Manual resin application | 9 lb/ton. |
| 6. Open molding—gel coat[2] | a. Tooling gel coating | 22 lb/ton. |
| | b. White/off white pigmented gel coating | 22 lb/ton. |
| | c. All other pigmented gel coating | 19 lb/ton. |
| | d. CR/HS or high performance gel coat | 31 lb/ton. |
| | e. Fire retardant gel coat | 43 lb/ton. |
| | f. Clear production gel coat | 27 lb/ton. |
| 7. Centrifugal casting—CR/HS[3,4] | A vent system that moves heated air through the mold | 27 lb/ton. |
| 8. Centrifugal casting—non-CR/HS[3,4] | A vent system that moves heated air through the mold | 21 lb/ton. |
| 7. Centrifugal casting—CR/HS[3,4] | A vent system that moves ambient air through the mold | 2 lb/ton. |
| 8. Centrifugal casting—non-CR/HS[3,4] | A vent system that moves ambient air through the mold | 1 lb/ton. |
| 9. SMC Manufacturing | N/A | 2.4 lb/ton. |

[1] Organic HAP emissions limits for open molding and centrifugal casting expressed as lb/ton are calculated using the equations shown in Table 1 to this subpart. You must be at or below these values based on a 12-month rolling average.

[2] These limits are for spray application of gel coat. Manual gel coat application must be included as part of spray gel coat application for compliance purposes using the same organic HAP emissions factor equation and organic HAP emissions limit. If you only apply gel coat with manual application, treat the manually applied gel coat as if it were applied with atomized spray for compliance determinations.

[3] Centrifugal casting operations where the mold is not vented during spinning and cure are considered to be closed molding and are not subject to any emissions limit. Centrifugal casting operations where the mold is not vented during spinning and cure, and the resin is applied to the open centrifugal casting mold using mechanical or manual open molding resin application techniques are considered to be open molding operations and the appropriate open molding emission limits apply.

[4] Centrifugal casting operations where the mold is vented during spinning and the resin is applied to the open centrifugal casting mold using mechanical or manual open molding resin application techniques, use the appropriate centrifugal casting emission limit to determine compliance. Calculate your emission factor using the appropriate centrifugal casting emission factor in Table 1 to this subpart, or a site specific emission factor as discussed in §63.5796.

[68 FR 19402, Apr. 21, 2003, as amended at 70 FR 50133, Aug. 25, 2005]

## Table 6 to Subpart WWWW of Part 63—Basic Requirements for Performance Tests, Performance Evaluations, and Design Evaluations for New and Existing Sources Using Add-On Control Devices

As required in §63.5850 you must conduct performance tests, performance evaluations, and design evaluation according to the requirements in the following table:

| For . . . | You must . . . | Using . . . | According to the following requirements . . . |
|---|---|---|---|
| 1. Each enclosure used to collect and route organic HAP emissions to an add-on control device that is a PTE | Meet the requirements for a PTE | EPA method 204 of appendix M of 40 CFR part 51 | Enclosures that meet the requirements of EPA Method 204 of appendix M of 40 CFR part 51 for a PTE are assumed to have a capture efficiency of 100%. Note that the criteria that all access doors and windows that are not treated as natural draft openings shall be closed during routine operation of the process is not intended to require that these doors and windows be closed at all times. It means that doors and windows must be closed any time that you are not actually moving parts or equipment through them. Also, any styrene retained in hollow parts and liberated outside the PTE is not considered to be a violation of the EPA Method 204 criteria. |
| 2. Each enclosure used to collect and | a. Determine the capture efficiency of | i. EPA methods 204B through E of | (1) Enclosures that do not meet the requirements for a PTE must determine |

| | | | |
|---|---|---|---|
| route organic HAP emissions to an add-on control device that is not a PTE | each enclosure used to capture organic HAP emissions sent to an add-on control device | appendix M of 40 CFR part 51, or | the capture efficiency by constructing a temporary total enclosure according to the requirements of EPA Method 204 of appendix M of 40 CFR part 51 and measuring the mass flow rates of the organic HAP in the exhaust streams going to the atmosphere and to the control device. Test runs for EPA Methods 204B through E of appendix M of 40 CFR part 51 must be at least 3 hours. |
| | | ii. An alternative test method that meets the requirements in 40 CFR part 51, appendix M | (1) The alternative test method must the data quality objectives and lower confidence limit approaches for alternative capture efficiency protocols requirements contained in 40 CFR part 63 subpart KK, appendix A. |
| 3. Each control device used to comply with a percent reduction requirement, or an organic HAP emissions limit | Determine the control efficiency of each control device used to control organic HAP emissions | The test methods specified in §63.5850 to this subpart | Testing and evaluation requirements are contained in 40 CFR part 63, subpart SS, and §63.5850 to this subpart. |
| 4. Determining organic HAP emission factors for any operation | Determine the mass organic HAP emissions rate | The test methods specified in §63.5850 to this subpart | Testing and evaluation requirements are contained in 40 CFR part 63, subpart SS, and §63.5850 to this subpart. |

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

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

| If your facility has the following resin type and application method . . . | The highest resin weight is* * * percent organic HAP content, or weighted average weight percent organic HAP content, you can use for . . . | is . . . |
|---|---|---|
| 1. CR/HS resins, centrifugal casting[1,2] | a. CR/HS mechanical | [3]48.0 |
| | b. CR/HS filament application | 48.0 |

| | | |
|---|---|---|
| | c. CR/HS manual | 48.0 |
| 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[1,2] | 45.0 |
| 5. non-CR/HS resins, nonatomized mechanical | a. non-CR/HS manual | 38.5 |
| | b. non-CR/HS centrifugal casting[1,2] | 38.5 |
| 6. non-CR/HS resins, centrifugal casting[1,2] | non-CR/HS manual | 37.5 |
| 7. tooling resins, nonatomized mechanical | tooling manual | 91.4 |
| 8. tooling resins, manual | tooling atomized mechanical | 45.9 |

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

[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.

[70 FR 50133, Aug. 25, 2005]

### 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 | 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 |

| | | |
|---|---|---|
| | subpart, or an organic HAP content limit shown in Table 7 to this subpart | rolling average 1 year after the appropriate compliance date, and/or<br>ii. you demonstrate that any individual resins or gel coats not included in (i) above, as applied, meet their applicable emission limits, or<br>iii. you demonstrate 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. |
| 3. continuous lamination/casting operations | a. reduce total organic HAP emissions, by at least 58.5 weight percent, or | total organic HAP emissions, based on the results of the capture efficiency and destruction efficiency in Table 6 to this subpart and the calculation procedures specified in §§63.5865 through 63.5890, are reduced by at least 58.5 percent by weight. |
| | b. not exceed an organic HAP emissions limit of 15.7 lbs of organic HAP per ton of neat resin plus and neat gel coat plus | total organic HAP emissions, based on the results of the capture efficiency and destruction efficiency testing specified in Table 6 to this subpart and the calculation procedures specified in §§63.5865 through 63.5890, do not exceed 15.7 lbs of organic HAP per ton of neat resin plus and neat gel coat plus. |
| 4. continuous lamination/casting operations | a. reduce total organic HAP emissions by at least 95 weight percent or | total organic HAP emissions, based on the results of the capture efficiency and destruction efficiency testing specified in Table 6 to this subpart and the calculation procedures specified in §§63.5865 through 63.5890, are reduced by at least 95 percent by weight |
| | b. not exceed an organic HAP emissions limit of 1.47 lbs of organic HAP per ton of neat resin plus and neat gel coat plus | total organic HAP emissions, based on the results of the capture efficiency and destruction efficiency testing specified in Table 6 and the calculation procedures specified in §§63.5865 through 63.5890, do not exceed 1.47 lbs of organic HAP of per ton of neat resin plus and neat gel coat plus. |
| 5. pultrusion operations | a. reduce total organic | i. total organic HAP emissions, based on the |

| | | |
|---|---|---|
| | HAP emissions by at least 60 percent by weight | results of the capture efficiency and add-on control device destruction efficiency testing specified in Table 6 to this subpart, are reduced by at least 60 percent by weight, and/or<br>ii. as part of the notification of initial compliance status, the owner/operator submits a certified statement that all pultrusion lines not controlled with an add-on control device, but for which an emission reduction is being claimed, are using direct die injection, and/or wet-area enclosures that meet the criteria of §63.5830. |
| 6. pultrusion operations | a. reduce total organic HAP emissions by at least 95 percent by weight | i. total organic HAP emissions, based on the results of the capture efficiency and add-on control device destruction efficiency testing specified in Table 6 to this subpart, are reduced by at least 95 percent by weight. |

[70 FR 50134, Aug. 25, 2005]

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

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

| For . . . | That must meet the following standards . . . | You have demonstrated initial compliance if . . . |
|---|---|---|
| 1. a new or existing closed molding operation using compression/injection molding | uncover, unwrap or expose only one charge per mold cycle per compression/injection molding machine. For machines with multiple molds, one charge means sufficient material to fill all molds for one cycle. For machines with robotic loaders, no more than one charge may be exposed prior to the loader. For machines fed by hoppers, sufficient material may be uncovered to fill the hopper. Hoppers must be closed when not adding materials. Materials may be uncovered to feed to slitting machines. Materials must be recovered after slitting | the owner or operator submits a certified statement in the notice of compliance status that only one charge is uncovered, unwrapped, or exposed per mold cycle per compression/injection molding machine, or prior to the loader, hoppers are closed except when adding materials, and materials are recovered after slitting. |

| | | |
|---|---|---|
| 2. a new or existing cleaning operation | not use cleaning solvents that contain HAP, except that styrene may be used in closed systems, and organic HAP containing materials may be used to clean cured resin from application equipment. Application equipment includes any equipment that directly contacts resin between storage and applying resin to the mold or reinforcement | the owner or operator submits a certified statement in the notice of compliance status that all cleaning materials, except styrene contained in closed systems, or materials used to clean cured resin from application equipment, contain no HAP. |
| 3. a new or existing materials HAP-containing materials storage operation | keep containers that store HAP-containing materials closed or covered except during the addition or removal of materials. Bulk HAP-containing materials storage tanks may be vented as necessary for safety | the owner or operator submits a certified statement in the notice of compliance status that all HAP-containing storage containers are kept closed or covered except when adding or removing materials, and that any bulk storage tanks are vented only as necessary for safety. |
| 4. an existing or new SMC manufacturing operation | close or cover the resin delivery system to the doctor box on each SMC manufacturing machine. The doctor box itself may be open | the owner or operator submits a certified statement in the notice of compliance status that the resin delivery system is closed or covered. |
| 5. an existing or new SMC manufacturing operation | use a nylon containing film to enclose SMC | the owner or operator submits a certified statement in the notice of compliance status that a nylon-containing film is used to enclose SMC. |
| 6. an existing or new mixing or BMC manufacturing operation | use mixer covers with no visible gaps present in the mixer covers, except that gaps of up to 1 inch are permissible around mixer shafts and any required instrumentation | the owner or operator submits a certified statement in the notice of compliance status that mixer covers are closed during mixing except when adding materials to the mixers, and that gaps around mixer shafts and required instrumentation are less than 1 inch. |
| 7. an existing mixing or BMC manufacturing operation | not actively vent mixers to the atmosphere while the mixing agitator is turning, except that | the owner or operator submits a certified statement in the notice of compliance status that mixers are |

| | | |
|---|---|---|
| | venting is allowed during addition of materials, or as necessary prior to adding materials for safety | not actively vented to the atmosphere when the agitator is turning except when adding materials or as necessary for safety. |
| 8. a new or existing mixing or BMC manufacturing operation | keep the mixer covers closed during mixing except when adding materials to the mixing vessels | the owner or operator submits a certified statement in the notice of compliance status that mixers closed except when adding materials to the mixing vessels. |
| 9. a new or existing pultrusion operation manufacturing 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 that is not subject to the 95 percent organic HAP emission reduction requirement | i. Not allow vents from the building ventilation system, or local or portable fans to blow directly on or across the wet-out area(s),<br>ii. not permit point suction of ambient air in the wet-out area(s) unless that air is directed to a control device,<br>iii. use devices such as deflectors, baffles, and curtains when practical to reduce air flow velocity across the wet-out area(s),<br>iv. direct any compressed air exhausts away from resin and wet-out area(s),<br>v. convey resin collected from drip-off pans or other devices to reservoirs, tanks, or sumps via covered troughs, pipes, or other covered conveyance that shields the resin from the ambient air,<br>vi. clover all reservoirs, tanks, sumps, or HAP-containing materials storage vessels except when they are being charged or filled, and<br>vii. cover or shield from ambient air resin delivery systems to the wet-out area(s) from reservoirs, tanks, or sumps where practical. | the owner or operator submits a certified statement in the notice of compliance status that they have complied with all the requirements listed in 9.i through 9.vii. |

[70 FR 50135, Aug. 25, 2005]

## Table 10 to Subpart WWWW of Part 63—Data Requirements for New and Existing Continuous Lamination Lines and Continuous Casting Lines Complying With a Percent Reduction Limit on a Per Line Basis

As required in §63.5865(a), in order to comply with a percent reduction limit for continuous lamination lines and continuous casting lines you must determine the data in the following table:

| For each line where the wet-out area . . . | And the oven . . . | You must determine . . . |
|---|---|---|
| 1. Has an enclosure that is not a permanent total enclosure (PTE) and the captured organic HAP emissions are controlled by an add-on control device | a. Is uncontrolled | i. Annual uncontrolled wet-out area organic HAP emissions,<br>ii. Annual controlled wet-out area organic HAP emissions,<br>iii. Annual uncontrolled oven organic HAP emissions,<br>iv. The capture efficiency of the wet-out area enclosure,<br>v. The destruction efficiency of the add-on control device, and<br>vi. The amount of neat resin plus and neat gel coat plus applied. |
| 2. Has an enclosure that is a PTE and the captured organic HAP emissions are controlled by an add-on control device | a. Is uncontrolled | i. Annual uncontrolled wet-out area organic HAP emissions,<br>ii. Annual controlled wet-out area organic HAP emissions,<br>iii. Annual uncontrolled oven organic HAP emissions,<br>iv. That the wet-out area enclosure meets the requirements of EPA Method 204 of appendix M to 40 CFR part 51 for a PTE,<br>v. The destruction efficiency of the add-on control device, and<br>vi. The amount of neat resin plus and neat gel coat plus applied. |

| | | |
|---|---|---|
| 3. Is uncontrolled | a. Is controlled by an add-on control device | i. Annual uncontrolled wet-out area organic HAP emissions,<br>ii. Annual uncontrolled oven organic HAP emissions,<br>iii. Annual controlled oven organic HAP emissions,<br>iv. The capture efficiency of the oven,<br>v. the destruction efficiency of the add-on control device, and<br>vi. the amount of neat resin plus and neat gel coat plus applied. |
| 4. Has an enclosure that is not a PTE and the captured organic HAP emissions are controlled by an add-on control device | a. Is controlled by an add-on control device | i. Annual uncontrolled wet-out area organic HAP emissions,<br>ii. Annual controlled wet-out area organic HAP emissions,<br>iii. Annual uncontrolled oven organic HAP emissions,<br>iv. Annual controlled oven organic HAP emissions;<br>v. The capture efficiency of the wet-out area enclosure,<br>vi. Inlet organic HAP emissions to the add-on control device,<br>vii. Outlet organic HAP emissions from the add-on control device, and<br>viii. The amount of neat resin plus and neat gel coat plus applied. |
| 5. Has an enclosure that is a PTE and the captured organic HAP emissions are controlled by an add-on control device | a. Is controlled by an add-on control device | i. That the wet-out area enclosure meets the requirements of EPA Method 204 of appendix M to 40 CFR part 51 for a PTE,<br>ii. The capture efficiency of the oven, and |
| | | iii. The destruction efficiency of the add-on control device. |

### Table 11 to Subpart WWWW of Part 63—Data Requirements for New and Existing Continuous Lamination and Continuous Casting Lines Complying With a Percent Reduction Limit or a Lbs/Ton Limit on an Averaging Basis

As required in §63.5865, in order to comply with a percent reduction limit or a lbs/ton limit on an averaging basis for continuous lamination lines and continuous casting lines you must determine the data in the following table:

| For each . . . | That . . . | You must determine . . . |
|---|---|---|

| | | |
|---|---|---|
| 1. Wet-out area | Is uncontrolled | Annual uncontrolled wet-out area organic HAP emissions. |
| 2. Wet-out area | a. Has an enclosure that is not a PTE | i. The capture efficiency of the enclosure, and<br>ii. Annual organic HAP emissions that escape the enclosure. |
| 3. Wet-out area | Has an enclosure that is a PTE | That the enclosure meets the requirements of EPA Method 204 of appendix M to 40 CFR part 51 for a PTE. |
| 4. Oven | Is uncontrolled | Annual uncontrolled oven organic HAP emissions. |
| 5. Line | a. Is controlled or uncontrolled | i. The amount of neat resin plus applied, and<br>ii. The amount of neat gel coat plus applied. |
| 6. Add-on control device | | i. Total annual inlet organic HAP emissions, and total annual outlet organic HAP emissions. |

### Table 12 to Subpart WWWW of Part 63—Data Requirements for New and Existing Continuous Lamination Lines and Continuous Casting Lines Complying With a Lbs/Ton Organic HAP Emissions Limit on a Per Line Basis

As required in §63.5865(b), in order to comply with a lbs/ton organic HAP emissions limit for continuous lamination lines and continuous casting lines you must determine the data in the following table:

| For each line where the wet- out area . . . | And the oven . . . | You must determine . . . |
|---|---|---|
| 1. Is uncontrolled | a. Is uncontrolled | i. Annual uncontrolled wet-out area organic HAP emissions,<br>ii. Annual uncontrolled oven organic HAP emissions, and<br>iii. Annual neat resin plus and neat gel coat plus applied. |
| 2. Has an enclosure that is not a PTE and the captured organic HAP emissions are controlled by an add-on control device | a. Is uncontrolled | i. Annual uncontrolled wet-out area organic HAP emissions,<br>ii. Annual controlled wet-out area organic HAP emissions,<br>iii. Annual uncontrolled oven organic HAP emissions, |
| | | iv. The capture efficiency of the wet-out area enclosure,<br>v. The destruction efficiency of the add-on control device, and<br>vi. The amount of neat resin plus and neat gel coat plus applied. |
| 3. Has an enclosure that is a PTE, and the captured organic HAP emissions are | a. Is uncontrolled | i. Annual uncontrolled wet-out area organic HAP emissions, |

| | | |
|---|---|---|
| controlled by an add-on control device | | ii. Annual controlled wet-out area organic HAP emissions,<br>iii. Annual uncontrolled oven organic HAP emissions, |
| | | iv. That the wet-out area enclosure meets the requirements of EPA Method 204 of appendix M to 40 CFR part 51 for a PTE,<br>v. The destruction efficiency of the add-on control device, and<br>vi. The amount of neat resin plus and neat gel coat plus applied. |
| 4. Is uncontrolled | a. Is controlled by an add-on control device | i. Annual uncontrolled wet-out area organic HAP emissions,<br>ii. Annual uncontrolled oven organic HAP emissions,<br>iii. Annual controlled oven organic HAP emissions, |
| | | iv. The capture efficiency of the oven,<br>v. The destruction efficiency of the add-on control device, and<br>vi. The amount of neat resin plus and neat gel coat plus applied. |
| 5. Has an enclosure that is not a PTE and the captured organic HAP emissions are controlled by an add-on control device | a. Is controlled by an add-on control device | i. Annual uncontrolled wet-out area organic HAP emissions,<br>ii. Annual controlled wet-out area organic HAP emissions,<br>iii. Annual uncontrolled oven organic HAP emissions, |
| | | iv. Annual controlled oven organic HAP emissions,<br>v. The capture efficiency of the wet-out area enclosure,<br>vi. The capture efficiency of the oven, |
| | | vii. The destruction efficiency of the add-on control device, and<br>viii. The amount of neat resin plus and neat gel coat plus applied. |
| 6. Has an enclosure that is a PTE, and the captured organic HAP emissions are controlled by add-on control device | a. Is controlled by an add-on control device | i. That the wet-out area enclosure meets the requirements of EPA Method 204 of appendix M to 40 CFR part 51 for a PTE,<br>ii. The capture efficiency of the oven, |

| | | |
|---|---|---|
| | | iii. Inlet organic HAP emissions to the an add-on control device, and |
| | | iv. Outlet organic HAP emissions from the add-on control device. |

**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). |
| 2. Is a new source subject to this subpart | The notifications specified in §63.9(b)(4) and (5) | No later than the dates specified §63.9(b)(4) and (5). |
| 3. Qualifies for a compliance extension as specified in §63.9(c) | A request for a compliance extension as specified in §63.9(c) | No later than the dates specified in §63.6(i). |
| 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. |
| 6. Is complying by using an add-on control device | a. A notification of intent to conduct a performance test as specified in §63.9(e) | No later than the date specified in §63.9(e). |
| | b. A notification of the date for the CMS performance evaluation as specified in §63.9(g) | The date of submission of notification of intent to conduct a performance test. |
| | c. A Notification of Compliance Status as specified in §63.9(h) | No later than 60 calendar days after the completion of the add-on control device performance test and CMS performance evaluation. |

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

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

| You must submit a(n) | The report must contain . . . | You must submit the report . . . |
|---|---|---|
| 1. Compliance report | a. A statement that there were no deviations during that reporting period if there were no deviations from any emission limitations (emission limit, operating limit, opacity limit, and visible emission limit) that apply to you and there were no deviations from the requirements for work practice standards in Table 4 to this subpart that apply to you. If there were no periods during which the CMS, including CEMS, and operating parameter monitoring systems, was out of control as specified in §63.8(c)(7), the report must also contain a statement that there were no periods during which the CMS was out of control during the reporting period | Semiannually according to the requirements in §63.5910(b). |
| | b. The information in §63.5910(d) if you have a deviation from any emission limitation (emission limit, operating limit, or work practice standard) during the reporting period. If there were periods during which the CMS, including CEMS, and operating parameter monitoring systems, was out of control, as specified in §63.8(c)(7), the report must contain the information in §63.5910(e) | Semiannually according to the requirements in §63.5910(b). |
| | c. The information in §63.10(d)(5)(i) if you had a startup, shutdown or malfunction during the reporting period, and you took actions consistent with your startup, shutdown, and malfunction plan | Semiannually according to the requirements in §63.5910(b). |
| 2. An immediate startup, shutdown, and malfunction report if you had a startup, shutdown, or malfunction during the reporting period that is not consistent with your startup, shutdown, and malfunction plan | a. Actions taken for the event | By fax or telephone within 2 working days after starting actions inconsistent with the plan. |

| | | |
|---|---|---|
| | b. The information in §63.10(d)(5)(ii) | By letter within 7 working days after the end of the event unless you have made alternative arrangements with the permitting authority. (§63.10(d)(5)(ii)). |

**Table 15 to Subpart WWWW of Part 63—Applicability of General Provisions (Subpart A) to Subpart WWWW of Part 63**

As specified in §63.5925, the parts of the General Provisions which apply to you are shown in the following table:

| The general provisions reference . . . | That addresses . . . | And applies to subpart WWWW of part 63 . . . | Subject to the following additional information . . . |
|---|---|---|---|
| §63.1(a)(1) | General applicability of the general provisions | Yes | Additional terms defined in subpart WWWW of Part 63, when overlap between subparts A and WWWW of Part 63 of this part, subpart WWWW of Part 63 takes precedence. |
| §63.1(a)(2) through (4) | General applicability of the general provisions | Yes | |
| §63.1(a)(5) | Reserved | No | |
| §63.1(a)(6) | General applicability of the general provisions | Yes | |
| §63.1(a)(7) through (9) | Reserved | No | |
| §63.1(a)(10) through (14) | General applicability of the general provisions | Yes | |
| §63.1(b)(1) | Initial applicability determination | Yes | Subpart WWWW of Part 63 clarifies the applicability in §§63.5780 and 63.5785. |
| §63.1(b)(2) | Reserved | No. | |
| §63.1(b)(3) | Record of the applicability determination | Yes | |

| | | | |
|---|---|---|---|
| §63.1(c)(1) | Applicability of this part after a relevant standard has been set under this part | Yes | Subpart WWWW of Part 63 clarifies the applicability of each paragraph of subpart A to sources subject to subpart WWWW of Part 63. |
| §63.1(c)(2) | Title V operating permit requirement | Yes | All major affected sources are required to obtain a title V operating permit. Area sources are not subject to subpart WWWW of Part 63. |
| §63.1(c)(3) and (4) | Reserved | No | |
| §63.1(c)(5) | Notification requirements for an area source that increases HAP emissions to major source levels | Yes | |
| §63.1(d) | Reserved | No | |
| §63.1(e) | Applicability of permit program before a relevant standard has been set under this part | Yes | |
| §63.2 | Definitions | Yes | Subpart WWWW of Part 63 defines terms in §63.5935. When overlap between subparts A and WWWW of Part 63 occurs, you must comply with the subpart WWWW of Part 63 definitions, which take precedence over the subpart A definitions. |
| §63.3 | Units and abbreviations | Yes | Other units and abbreviations used in subpart WWWW of Part 63 are defined in subpart WWWW of Part 63. |
| §63.4 | Prohibited activities and circumvention | Yes | §63.4(a)(3) through (5) is reserved and does not apply. |
| §63.5(a)(1) and (2) | Applicability of construction and reconstruction | Yes | Existing facilities do not become reconstructed under subpart WWWW of Part 63. |
| §63.5(b)(1) | Relevant standards for new sources upon construction | Yes | Existing facilities do not become reconstructed under subpart WWWW of Part 63. |
| §63.5(b)(2) | Reserved | No | |

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| §63.5(b)(3) | New construction/reconstruction | Yes | Existing facilities do not become reconstructed under subpart WWWW of Part 63. |
| §63.5(b)(4) | Construction/reconstruction notification | Yes | Existing facilities do not become reconstructed under subpart WWWW of Part 63. |
| §63.5(b)(5) | Reserved | No | |
| §63.5(b)(6) | Equipment addition or process change | Yes | Existing facilities do not become reconstructed under subpart WWWW of Part 63. |
| §63.5(c) | Reserved | No | |
| §63.5(d)(1) | General application for approval of construction or reconstruction | Yes | Existing facilities do not become reconstructed under subpart WWWW of Part 63. |
| §63.5(d)(2) | Application for approval of construction | Yes | |
| §63.5(d)(3) | Application for approval of reconstruction | No | |
| §63.5(d)(4) | Additional information | Yes | |
| §63.5(e)(1) through (5) | Approval of construction or reconstruction | Yes | |
| §63.5(f)(1) and (2) | Approval of construction or reconstruction based on prior State preconstruction review | Yes | |
| §63.6(a)(1) | Applicability of compliance with standards and maintenance requirements | Yes | |
| §63.6(a)(2) | Applicability of area sources that increase HAP emissions to become major sources | Yes | |
| §63.6(b)(1) through (5) | Compliance dates for new and reconstructed sources | Yes | Subpart WWWW of Part 63 clarifies compliance dates in §63.5800. |
| §63.6(b)(6) | Reserved | No | |
| §63.6(b)(7) | Compliance dates for new operations or equipment that cause an area source to become a major source | Yes | New operations at an existing facility are not subject to new source standards. |
| §63.6(c)(1) and (2) | Compliance dates for existing sources | Yes | Subpart WWWW of Part 63 |

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| | | | clarifies compliance dates in §63.5800. |
| §63.6(c)(3) and (4) | Reserved | No | |
| §63.6(c)(5) | Compliance dates for existing area sources that become major | Yes | Subpart WWWW of Part 63 clarifies compliance dates in §63.5800. |
| §63.6(d) | Reserved | No | |
| §63.6(e)(1) and (2) | Operation & maintenance requirements | Yes | |
| §63.6(e)(3) | Startup, shutdown, and malfunction plan and recordkeeping | Yes | Subpart WWWW of Part 63 requires a startup, shutdown, and malfunction plan only for sources using add-on controls. |
| §63.6(f)(1) | Compliance except during periods of startup, shutdown, and malfunction | No | Subpart WWWW of Part 63 requires compliance during periods of startup, shutdown, and malfunction, except startup, shutdown, and malfunctions for sources using add-on controls. |
| §63.6(f)(2) and (3) | Methods for determining compliance | Yes | |
| §63.6(g)(1) through (3) | Alternative standard | Yes | |
| §63.6(h) | Opacity and visible emission Standards | No | Subpart WWWW of Part 63 does not contain opacity or visible emission standards. |
| §63.6(i)(1) through (14) | Compliance extensions | Yes | |
| §63.6(i)(15) | Reserved | No | |
| §63.6(i)(16) | Compliance extensions | Yes | |
| §63.6(j) | Presidential compliance exemption | Yes | |
| §63.7(a)(1) | Applicability of performance testing requirements | Yes | |
| §63.7(a)(2) | Performance test dates | No | Subpart WWWW of Part 63 initial compliance requirements are in §63.5840. |
| §63.7(a)(3) | CAA Section 114 authority | Yes | |
| §63.7(b)(1) | Notification of performance test | Yes | |

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|---|---|---|---|
| §63.7(b)(2) | Notification rescheduled performance test | Yes | |
| §63.7(c) | Quality assurance program, including test plan | Yes | Except that the test plan must be submitted with the notification of the performance test. |
| §63.7(d) | Performance testing facilities | Yes | |
| §63.7(e) | Conditions for conducting performance tests | Yes | Performance test requirements are contained in §63.5850. Additional requirements for conducting performance tests for continuous lamination/casting are included in §63.5870. |
| §63.7(f) | Use of alternative test method | Yes | |
| §63.7(g) | Performance test data analysis, recordkeeping, and reporting | Yes | |
| §63.7(h) | Waiver of performance tests | Yes | |
| §63.8(a)(1) and (2) | Applicability of monitoring requirements | Yes | |
| §63.8(a)(3) | Reserved | No | |
| §63.8(a)(4) | Monitoring requirements when using flares | Yes | |
| §63.8(b)(1) | Conduct of monitoring exceptions | Yes | |
| §63.8(b)(2) and (3) | Multiple effluents and multiple monitoring systems | Yes | |
| §63.8(c)(1) | Compliance with CMS operation and maintenance requirements | Yes | This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit. |
| §63.8(c)(2) and (3) | Monitoring system installation | Yes | This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit. |
| §63.8(c)(4) | CMS requirements | Yes | This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit. |
| §63.8(c)(5) | Continuous Opacity Monitoring System | No | Subpart WWWW of Part 63 does |

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|---|---|---|---|
| | (COMS) minimum procedures | | not contain opacity standards. |
| §63.8(c)(6) through (8) | CMS calibration and periods CMS is out of control | Yes | This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit. |
| §63.8(d) | CMS quality control program, including test plan and all previous versions | Yes | This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit. |
| §63.8(e)(1) | Performance evaluation of CMS | Yes | This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit. |
| §63.8(e)(2) | Notification of performance evaluation | Yes | This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit. |
| §63.8(e)(3) and (4) | CMS requirements/alternatives | Yes | This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit. |
| §63.8(e)(5)(i) | Reporting performance evaluation results | Yes | This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit. |
| §63.8(e)(5)(ii) | Results of COMS performance evaluation | No | Subpart WWWW of Part 63 does not contain opacity standards. |
| §63.8(f)(1) through (3) | Use of an alternative monitoring method | Yes | |
| §63.8(f)(4) | Request to use an alternative monitoring method | Yes | |
| §63.8(f)(5) | Approval of request to use an alternative monitoring method | Yes | |
| §63.8(f)(6) | Request for alternative to relative accuracy test and associated records | Yes | This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit. |
| §63.8(g)(1) | Data reduction | Yes | |

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|---|---|---|---|
| through (5) | | | |
| §63.9(a)(1) through (4) | Notification requirements and general information | Yes | |
| §63.9(b)(1) | Initial notification applicability | Yes | |
| §63.9(b)(2) | Notification for affected source with initial startup before effective date of standard | Yes | |
| §63.9(b)(3) | Reserved | No | |
| §63.9(b)(4)(i) | Notification for a new or reconstructed major affected source with initial startup after effective date for which an application for approval of construction or reconstruction is required | Yes | |
| §63.9(b)(4)(ii) through (iv) | Reserved | No | |
| §63.9(b)(4)(v) | Notification for a new or reconstructed major affected source with initial startup after effective date for which an application for approval of construction or reconstruction is required | Yes | Existing facilities do not become reconstructed under subpart WWWW of Part 63. |
| §63.9(b)(5) | Notification that you are subject to this subpart for new or reconstructed affected source with initial startup after effective date and for which an application for approval of construction or reconstruction is not required | Yes | Existing facilities do not become reconstructed under subpart WWWW of Part 63. |
| §63.9(c) | Request for compliance extension | Yes | |
| §63.9(d) | Notification of special compliance requirements for new source | Yes | |
| §63.9(e) | Notification of performance test | Yes | |
| §63.9(f) | Notification of opacity and visible emissions observations | No | Subpart WWWW of Part 63 does not contain opacity or visible emission standards. |
| §63.9(g)(1) | Additional notification requirements for sources using CMS | Yes | This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit. |

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|---|---|---|---|
| §63.9(g)(2) | Notification of compliance with opacity emission standard | No | Subpart WWWW of Part 63 does not contain opacity emission standards. |
| §63.9(g)(3) | Notification that criterion to continue use of alternative to relative accuracy testing has been exceeded | Yes | This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit. |
| §63.9(h)(1) through (3) | Notification of compliance status | Yes | |
| §63.9(h)(4) | Reserved | No | |
| §63.9(h)(5) and (6) | Notification of compliance status | Yes | |
| §63.9(i) | Adjustment of submittal deadlines | Yes | |
| §63.9(j) | Change in information provided | Yes | |
| §63.10(a) | Applicability of recordkeeping and reporting | Yes | |
| §63.10(b)(1) | Records retention | Yes | |
| §63.10(b)(2)(i) through (v) | Records related to startup, shutdown, and malfunction | Yes | Only applies to facilities that use an add-on control device. |
| §63.10(b)(2)(vi) through (xi) | CMS records, data on performance tests, CMS performance evaluations, measurements necessary to determine conditions of performance tests, and performance evaluations | Yes | |
| §63.10(b)(2)(xii) | Record of waiver of recordkeeping and reporting | Yes | |
| §63.10(b)(2)(xiii) | Record for alternative to the relative accuracy test | Yes | |
| §63.10(b)(2)(xiv) | Records supporting initial notification and notification of compliance status | Yes | |
| §63.10(b)(3) | Records for applicability determinations | Yes | |
| §63.10(c)(1) | CMS records | Yes | This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit. |
| §63.10(c)(2) | Reserved | No | |

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|---|---|---|---|
| through (4) | | | |
| §63.10(c)(5) through (8) | CMS records | Yes | This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit. |
| §63.10(c)(9) | Reserved | No | |
| §63.10(c)(10) through (15) | CMS records | Yes | This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit. |
| §63.10(d)(1) | General reporting requirements | Yes | |
| §63.10(d)(2) | Report of performance test results | Yes | |
| §63.10(d)(3) | Reporting results of opacity or visible emission observations | No | Subpart WWWW of Part 63 does not contain opacity or visible emission standards. |
| §63.10(d)(4) | Progress reports as part of extension of compliance | Yes | |
| §63.10(d)(5) | Startup, shutdown, and malfunction reports | Yes | Only applies if you use an add-on control device. |
| §63.10(e)(1) through (3) | Additional reporting requirements for CMS | Yes | This section applies if you have an add-on control device and elect to use a CEM to demonstrate continuous compliance with an emission limit. |
| §63.10(e)(4) | Reporting COMS data | No | Subpart WWWW of Part 63 does not contain opacity standards. |
| §63.10(f) | Waiver for recordkeeping or reporting | Yes | |
| §63.11 | Control device requirements | Yes | Only applies if you elect to use a flare as a control device. |
| §63.12 | State authority and delegations | Yes | |
| §63.13 | Addresses of State air pollution control agencies and EPA Regional Offices | Yes | |
| §63.14 | Incorporations by reference | Yes | |
| §63.15 | Availability of information and confidentiality | Yes | |

## Appendix A to Subpart WWWW of Part 63—Test Method for Determining Vapor Suppressant Effectiveness

### *1. Scope and Application*

1.1 *Applicability.* If a facility is using vapor suppressants to reduce hazardous air pollutant (HAP) emissions, the organic HAP emission factor equations in Table 1 to this subpart require that the vapor suppressant effectiveness factor be determined. The vapor suppressant effectiveness factor is then used as one of the inputs into the appropriate organic HAP emission factor equation. The vapor suppressant effectiveness factor test is not intended to quantify overall volatile emissions from a resin, nor to be used as a stand-alone test for emissions determination. This test is designed to evaluate the performance of film forming vapor suppressant resin additives. The results of this test are used only in combination with the organic HAP emissions factor equations in Table 1 to this subpart to generate emission factors.

1.1.1 The open molding process consists of application of resin and reinforcements to the mold surface, followed by a manual rollout process to consolidate the laminate, and the curing stage where the laminate surface is not disturbed. Emission studies have shown that approximately 50 percent to 55 percent of the emissions occur while the resin is being applied to the mold. Vapor suppressants have little effect during this portion of the lamination process, but can have a significant effect during the curing stage. Therefore, if a suppressant is 100 percent effective, the overall emissions from the process would be reduced by 45 percent to 50 percent, representing the emissions generated during the curing stage. In actual practice, vapor suppressant effectiveness will be less than 100 percent and the test results determine the specific effectiveness in terms of the vapor suppressant effectiveness factor. This factor represents the effectiveness of a specific combination of suppressant additive and resin formulation.

1.1.2 A resin manufacturer may supply a molder with a vapor-suppressed resin, and employ this test to provide the molder with the vapor suppressant effectiveness factor for that combination of resin and vapor suppressant. The factor qualifies the effectiveness of the vapor suppressant when the resin is tested in the specific formulation supplied to the molder. The addition of fillers or other diluents by the molder may impact the effectiveness of the vapor suppressant. The formulation, including resin/glass ratio and filler content, used in the test should be similar to the formulation to be used in production. The premise of this method is to compare laminate samples made with vapor suppressant additive and made without the additive. The difference in emissions between the two yields the vapor suppressant effectiveness factor.

1.1.3 The method uses a mass balance determination to establish the relative loss of the volatile component from unsaturated polyester or vinyl ester resins, with and without vapor suppressant additives. The effectiveness of a specific vapor suppressant and resin mixture is determined by comparing the relative volatile weight losses from vapor suppressed and non-suppressed resins. The volatile species are not separately analyzed. While the species contained in the volatile component are not determined, an extended listing of potential monomer that may be contained in unsaturated polyester or vinyl ester resins is provided in Table 1.1. However, most polyester and vinyl ester resin formulations presently used by the composites industry only contain styrene monomer.

**Table 1.1—List of Monomers Potentially Present in Unsaturated Polyester/Vinyl Ester Resins**

| Monomer | CAS No. |
|---|---|
| Styrene | 100–42–5. |
| Vinyl toluene | 25013–15–4. |
| Methyl methacrylate | 80–62–6. |
| Alpha methyl styrene | 98–83–9. |
| Para methyl styrene | Vinyl toluene isomer. |
| Chlorostyrene | 1331–28–8. |
| Diallyl phthalate | 131–17–9. |

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| Other volatile monomers | Various. |

*2. Summary of Method*

2.1 Differences in specific resin and suppressant additive chemistry affect the performance of a vapor suppressant. The purpose of this method is to quantify the effectiveness of a specific combination of vapor suppressant and unsaturated polyester or vinyl ester resin as they are to be used in production. This comparative test quantifies the loss of volatiles from a fiberglass reinforced laminate during the roll-out and curing emission phases, for resins formulated with and without a suppressant additive. A criterion for this method is the testing of a non-vapor suppressed resin system and testing the same resin with a vapor suppressant. The two resins are as identical as possible with the exception of the addition of the suppressant to one. The exact formulation used for the test will be determined by the in-use production requirements. Each formulation of resin, glass, fillers, and additives is developed to meet particular customer and or performance specifications.

2.2 The result of this test is used as an input factor in the organic HAP emissions factor equations in Table 1 to this subpart, which allows these equations to predict emissions from a specific combination of resin and suppressant. This test does not provide an emission rate for the entire lamination process.

*3. Definitions and Acronyms*

3.1 Definitions

3.1.1 *Vapor suppressant.* An additive that inhibits the evaporation of volatile components in unsaturated polyester or vinyl ester resins.

3.1.2 *Unsaturated polyester resin.* A thermosetting resin commonly used in composites molding.

3.1.3 *Unsaturated vinyl ester resin.* A thermosetting resin used in composites molding for corrosion resistant and high performance applications.

3.1.4 *Laminate.* A combination of fiber reinforcement and a thermoset resin.

3.1.5 *Chopped strand mat.* Glass fiber reinforcement with random fiber orientation.

3.1.6 *Initiator.* A curing agent added to an unsaturated polyester or vinyl ester resin.

3.1.7 *Resin application roller.* A tool used to saturate and compact a wet laminate.

3.1.8 *Gel time.* The time from the addition of initiator to a resin to the state of resin gelation.

3.1.9 *Filled resin system.* A resin, which includes the addition of inert organic or inorganic materials to modify the resin properties, extend the volume and to lower the cost. Fillers include, but are not limited to; mineral particulates; microspheres; or organic particulates. This test is not intended to be used to determine the vapor suppressant effectiveness of a filler.

3.1.10 *Material safety data sheet.* Data supplied by the manufacturer of a chemical product, listing hazardous chemical components, safety precautions, and required personal protection equipment for a specific product.

3.1.11 *Tare(ed).* Reset a balance to zero after a container or object is placed on the balance; that is to subtract the weight of a container or object from the balance reading so as to weigh only the material placed in the container or on the object.

3.1.12 *Percent glass.* The specified glass fiber weight content in a laminate. It is usually determined by engineering requirements for the laminate.

3.2 Acronyms:

3.2.1 *VS* —vapor suppressed or vapor suppressant.

3.2.2 *NVS* —non-vapor suppressed.

3.2.3 *VSE* —vapor suppressant effectiveness.

3.2.4 *VSE Factor* —vapor suppressant effectiveness, factor used in the equations in Table 1 to this subpart.

3.2.5 *CSM* —chopped strand mat.

3.2.6 *MSDS* —material safety data sheet.

## *4. Interferences*

There are no identified interferences which affect the results of this test.

## *5. Safety*

Standard laboratory safety procedures should be used when conducting this test. Refer to specific MSDS for handling precautions.

## *6. Equipment and Supplies*

Note: Mention of trade names or specific products or suppliers does not constitute an endorsement by the Environmental Protection Agency.

6.1 Required Equipment.

6.1.1 Balance enclosure.[1]

6.1.2 Two (2) laboratory balances—accurate to ±0.01g.[2]

6.1.3 Stop watch or balance data recording output to data logger with accuracy ±1 second.[3]

6.1.4 Thermometer—accurate to ±2.0 °F(±1.0 °C).[4]

6.1.5 A lipped pan large enough to hold the cut glass without coming into contact with the vertical sides, *e.g.* a pizza pan.[5]

6.1.6 Mylar film sufficient to cover the bottom of the pan.[6]

6.1.7 Tape to keep the Mylar from shifting in the bottom of the pan.[7]

6.1.8 Plastic tri-corner beakers of equivalent—250 ml to 400 ml capacity.[8]

6.1.9 Eye dropper or pipette.[9]

6.1.10 Disposable resin application roller,3/16&inch;–3/4&inch; diameter × 3&inch;–6&inch; roller length.[10]

6.1.11 Hygrometer or psychrometer[11] accurate to ±5 percent

6.1.12 Insulating board, (Teflon, cardboard, foam board etc.) to prevent the balance from becoming a heat sink.[12]

6.2 Optional Equipment.

6.2.1 Laboratory balance—accurate to ±.01g with digital output, such as an RS–232 bi-directional interface[13] for use with automatic data recording devices.

6.2.2 Computer with recording software configured to link to balance digital output. Must be programmed to record data at the minimum intervals required for manual data acquisition.

6.3 Supplies.

6.3.1 Chopped strand mat—1.5 oz/ft.$^{2}$ [14]

*7. Reagents and Standards*

7.1 *Initiator.* The initiator type, brand, and concentration will be specified by resin manufacturer, or as required by production operation.

7.2 Polyester or vinyl ester resin.

7.3 Vapor suppressant additive.

*8. Sample Collection, Preservation, and Storage*

This test method involves the immediate recording of data during the roll out and curing phases of the lamination process during each test run. Samples are neither collected, preserved, nor stored.

*9. Quality Control*

Careful attention to the prescribed test procedure, routing equipment calibration, and replicate testing are the quality control activities for this test method. Refer to the procedures in section 11. A minimum of six test runs of a resin system without a suppressant and six test runs of the same resin with a suppressant shall be performed for each resin and suppressant test combination.

*10. Calibration and Standardization*

10.1 The laboratory balances, stopwatch, hygrometer and thermometer shall be maintained in a state of calibration prior to testing and thereafter on a scheduled basis as determined by the testing laboratory. This shall be accomplished by using certified calibration standards.

10.2 Calibration records shall be maintained for a period of 3 years.

*11. Test Procedure*

11.1 Test Set-up.

11.1.1 The laboratory balance is located in an enclosure to prevent fluctuations in balance readings due to localized air movement. The front of enclosure is open to permit work activity, but positioned so that local airflow will not effect balance readings. The ambient temperature is determined by suspending the thermometer at a point inside the enclosure.

11.1.2 The bottom of the aluminum pan is covered with the Mylar film. The film is held in position with tape or by friction between the pan and the film.

11.1.3 The resin and pan are brought to room temperature. This test temperature must be between 70 °F and 80 °F. The testing temperature cannot vary more than ±2 °F during the measurement of test runs. Temperature shall be recorded at the same time weight is recorded on suppressed and non-suppressed test data sheets, shown in Table 17.1.

11.1.4 The relative humidity may not change more than ±15 percent during the test runs. This is determined by recording the relative humidity in the vicinity of the test chamber at the beginning and end of an individual test run. This data is recorded on the test data sheets shown in Table 17.1.

11.1.5 Two plies of nominal 1.5 oz/ft$^2$ chopped strand mat (CSM) are cut into a square or rectangle with the minimum surface area of 60 square inches ( *i.e.* a square with a side dimension of 7.75 inches).

11.1.6 The appropriate resin application roller is readily available.

11.2 Resin Gel Time/Initiator Percentage

11.2.1 Previous testing has indicated that resin gel time influences the emissions from composite production. The testing indicated that longer the gel times led to higher emissions. There are a number of factors that influence gel time including initiator type, initiator brand, initiator level, temperature and resin additives. Under actual usage conditions a molder will adjust the initiator to meet a gel time requirement. In this test procedure, the vapor suppressed and non-vapor suppressed resin systems will be adjusted to the same gel time by selecting the appropriate initiator level for each.

11.2.2 All test runs within a test will be processed in a manner that produces the same resin gel time ±2 minutes. To facilitate the resin mixing procedure, master batches of resin and resin plus vapor suppressant of resin are prepared. These resin master batches will have all of the required ingredients except initiator; this includes filler for filled systems. The gel times for the tests are conducted using the master batch and adjustments to meet gel time requirements shall be made to the master batch before emission testing is conducted. Test temperatures must be maintained within the required range, during gel time testing. Further gel time testing is not required after the non-vapor suppressed and vapor suppressed master batches are established with gel times within ±2 minutes. A sufficient quantity of each resin should be prepared to allow for additional test specimens in the event one or more test fails to meet the data acceptance criteria discussed in Section 11.5 and shown in Table 17.2.

11.2.3 The specific brand of initiator and the nominal percentage level recommended by the resin manufacturer will be indicated on the resin certificate of analysis[15] ; or, if a unique gel time is required in a production laminate, initiator brand and percentage will be determined by that specific requirement.

11.2.4 Examples:

11.2.4.1 The resin for a test run is specified as having a 15-minute cup gel time at 77 °F using Brand X initiator at 1.5 percent by weight. The non-suppressed control resin has a 15-minute gel time. The suppressed resin has a gel time of 17-minutes. An initiator level of 1.5 percent would be selected for the both the non-suppressed and the suppressed test samples.

11.2.4.2 Based on a specific production requirement, a resin is processed in production using 2.25 percent of Brand Y initiator, which produces a 20-minute gel time. This initiator at level of 2.25 percent produces a 20 minute gel time for the non-suppressed control resin, but yields a 25-minute gel time for the suppressed resin sample. The suppressed resin is retested at 2.50 percent initiator and produces a 21-minute gel time. The initiator levels of 2.25 percent and 2.50 percent respectively would yield gel times within ±2 minutes.

11.3 Test Run Procedure for Unfilled Resin (see the data sheet shown in Table 17.1).

11.3.1 The insulating board is placed on the balance.

11.3.2 The aluminum pan with attached Mylar film is placed on the balance, and the balance is tared (weight reading set to zero with the plate on the balance.)

11.3.3 Place two plies of 1.5 oz. CSM on the balance and record the weight (glass weight).

11.3.4 The resin beaker and stirring rod are put on the second balance and tared.

11.3.5 The required resin weight and initiator weight are calculated (refer to calculation formulas in 12.2).

11.3.6 The disposable resin application roller is placed on the edge of the plate.

11.3.7 The balance is tared, with the aluminum pan, Mylar film, glass mat, and resin application roller on the balance pan.

11.3.8 Resin is weighed into a beaker, as calculated, using the second balance. The mixing stick should be tared with the beaker weight.

11.3.9 Initiator is weighed into the resin, as calculated, using an eyedropper or a pipette, and the combination is mixed.

11.3.10 Initiated resin is poured on chopped strand mat in a pe-determined pattern (see Figure 11.6).

11.3.11 A stopwatch is started from zero.

11.3.12 The initial laminate weight is recorded.

11.3.13 The plate is removed from balance to enable roll-out of the laminate.

11.3.14 The wet laminate is rolled with the resin application roller to completely distribute the resin, saturate the chopped strand mat, and eliminate air voids. Roll-out time should be in the range of 2 to 3[16] minutes and vary less than ±10 percent of the average time required for the complete set of six suppressed and six non-suppressed runs.

11.3.15 Record the rollout end time (time from start to completion of rollout).

11.3.16 Place the resin application roller on the edge of the plate when rollout is completed.

11.3.17 Place the plate back on the balance pan. Immediately record the weight.

11.3.18 For the first test in a series of six tests, weight is recorded every 5-minute interval (suppressed and non-suppressed). The end of the test occurs when three consecutive equal weights are recorded or a weight gain is observed (the last weight before the increased weight is the end of test weight). For the remaining five tests in the series, after the initial weights are taken, the next weight is recorded 30 minutes before the end of the test, as suggested by the results from the first test. It is likely that the time to reach the end point of a suppressed resin test will be shorter than the time required to complete a non-suppressed test. Therefore, the time to start taking data manually may be different for suppressed and non-suppressed resins.

11.4 Test Run Procedures for Filled Resin Systems[17] Note that the procedure for filled systems differs from the procedure for unfilled systems. With filled systems, resin is applied to one ply of the CSM and the second ply is placed on top of the resin.

11.4.1 The insulating board is placed on the balance.

11.4.2 The aluminum pan with attached Mylar film is placed on the balance, and the balance is tared (weight reading set to zero with the plate on the balance.)

11.4.3 Place two plies of 1.5 oz. CSM on the balance and record the weight (glass weight).

11.4.4 Remove the top ply of fiberglass and record its weight (weight of 1st layer of glass).

11.4.5 The required resin weight and initiator weight are calculated (refer to calculation formulas in 12.2). Calculate the weight of filled resin and initiator based on the 2 layers of fiberglass.

11.4.6 The resin beaker and stirring rod are put on the second balance and tared.

11.4.7 A disposable resin application roller is placed on the edge of the plate.

11.4.8 The balance is tared, with the aluminum pan, Mylar film, glass mat, and resin application roller on the balance pan.

11.4.9 Resin is weighed into the beaker, as calculated, using the second balance. The mixing stick should be tared with the beaker weight.

11.4.10 Initiator is weighed into the resin, as calculated, using an eyedropper or a pipette, and the combination is mixed.

11.4.11 Initiated resin is poured on the single ply of CSM in a pre-determined pattern. Refer to Figure 11.6.

11.4.12 A stopwatch is started from zero.

11.4.13 Record the weight of the resin ans single ply of CSM ($L_1$). The initial laminate weight equals $L_1$plus the weight of second glass layer.

11.4.14 Replace the second layer of fiberglass.

11.4.15 Remove the plate from the balance to allow roll-out of the laminate.

11.4.16 Roll the wet laminate with the resin application roller to completely distribute the resin, saturate the chopped strand mat, and eliminate air voids. Roll-out time should be in the range of 2 to 3[16] minutes and vary less than ±10 percent of the average time required for the complete set of six suppressed and six non-suppressed runs.

11.4.17 Record the roll-out end time (time from start to completion of rollout).

11.4.18 Place the resin application roller on the edge of the plate when rollout is completed.

11.4.19 Place the plate back on the balance pan. The initial weight is recorded immediately.

11.4.20 For the first test run in a series of six, weight is recorded at every 5-minute interval (suppressed and non-suppressed). The end of the test occurs when three consecutive equal weights are recorded or a weight gain is observed (the last weight before the increased weight is the end of test weight). For the remaining five tests in the series, after the initial weights are taken, the next weight is recorded 30 minutes before the end of the test, as suggested by the results from the first test. It is likely that the time to reach the end point of a suppressed resin test will be shorter than the time required to complete a non-suppressed test. Therefore, the time to start taking data manually may be different for suppressed and non-suppressed resins.

11.5 Data Acceptance Criteria:

11.5.1 A test set is designed as twelve individual test runs using the same resin, initiator, and gel time, six of the test runs use the resin non-vapor suppressed and the other six use it vapor suppressed.

11.5.2 If a test run falls outside any of the time, temperature, weight or humidity variation requirements, it must be discarded and run again.

11.5.3 The laminate roll out time for each individual test run must vary less than ±10 percent of the average time required for the complete set of six suppressed and six non-suppressed runs.

11.5.4 Test temperature for each test run must be maintained within ±2 °F and the average must be between 70° and 80 °F. Refer to 11.1.3.

11.5.5 The difference in the amount of resin for each run must be within ±10 percent of the average weight for the complete set of six suppressed and six non-suppressed runs.

11.5.6 The relative humidity from each test run must be within ±15 percent of the average humidity for the complete set of six suppressed and six non-suppressed tests. Refer to 11.1.4

11.5.7 The glass content for each test set must be within ±10 percent of the average resin-to-/glass ratio for the complete set of six suppressed and six non-suppressed runs. Refer to 12.2).

11.5.8 The filler content for each test of a test set must be within ±5 percent of the average filler content for the complete set of six suppressed and six non-suppressed runs. Refer to 12.2.

11.6 Resin Application Pour Pattern:

11.6.1 To facilitate the distribution of resin across the chopped strand mat, and to provide consistency from test to test, a uniform pour pattern should be used. A typical pour pattern is shown below:

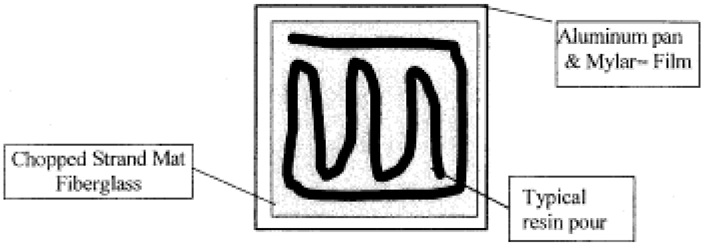


Figure 11.6 Resin Distribution Diagram

View or download PDF

11.6.2 The resin is to be evenly distributed across the entire surface of the chopped strand mat using the resin application roller to achieve a wet look across the surface of the laminate. Pushing excess resin off the reinforcement and onto the Mylar sheet should be avoided. No resin is to be pushed more than1/2inch beyond the edge of the glass mat. If excess resin is pushed further from the glass mat, it will void the test run. As part of this process, typical visible air voids are to be eliminated by the rollout process. If the pour pattern is different from the above, it must be recorded and attached to test data sheet 17.1.

## *12. Data Analysis and Calculations*

### 12.1 Data Analysis:

This test method requires a simple mass balance calculation, no special data analysis is necessary.

### 12.2 Calculations:

12.2.1 The target glass content (percent) for unfilled resin systems is determined from the specific production parameters being evaluated. In absence of any specific production requirements the target may be set at the tester's discretion.

12.2.2 Glass content determination (expressed as a per cent):

% Glass = Glass wt(g)/(Glass wt(g) + Resin weight (g))

12.2.3 Weight of resin required:

Resin weight required = (Glass wt (g)/% glass)—Glass wt (g)

12.2.4 Filled resin formulation determination for filled resin systems ( *e.g.* >30 percent filler by weight for a particulate filler, or >1 percent by weight for a lightweight filler, such as hollow microspheres):

% Resin content = resin

weight(g)/(resin weight(g) + glass

weight(g) + filler weight(g))

% Glass content = glass

weight(g)/(resin weight(g) + glass

weight(g) + filler weight(g))

Filler content = filler

weight(g)/(resin weight(g) + glass

weight(g) + filler weight(g))

12.2.5 Initiator weight determination:

Initiator weight (g) = Resin weight(g) × Initiator %

12.2.6 Emission weight loss determination:

Emissions weight loss (g) = Initial resin weight (g)−Final resin weight (g)

12.2.7 % Emission weight loss:

% Emission Weight Loss = (Emission weight loss (g) Initial resin weight (g) × 100

12.2.8 Average % Emission Weight Loss (assuming six test runs):

$$\text{Average \% Emission Weight Loss} = \sum_{i}^{N=6} \left(\text{\% Emission Weight Loss}_i\right)/6$$

12.2.9 VSE Factor calculation:

VSE Factor = 1 −(Average % VS Emission Weight Loss/Average NVS Emission Weight Loss)

**Table 12.1—Example Calculation**

| Test # | % VS weight loss | % NVS weight loss |
|---|---|---|

| | | |
|---|---:|---:|
| 1 | 6.87 | 10.86 |
| 2 | 6.76 | 11.23 |
| 3 | 5.80 | 12.02 |
| 4 | 5.34 | 11.70 |
| 5 | 6.11 | □1.91 |
| 6 | 6.61 | 10.63 |
| Average Weight Loss | 6.25 | 11.39 |
| VSE Factor | | 0.4 |

VSE Factor = 0.45

VSE Factor is used as input into the appropriate equation in Table 1 to this subpart.

Example from Table 1 to this subpart:

Manual Resin Application, 35 percent HAP resin, VSE Factor of 0.45

HAP Emissions with vapor suppresants = ((0.286 × %HAP)−0.0529) × 2000 × (1–(0.5 × VSE factor))

HAP Emissions with vapor suppresants = ((0.286 × .35)−0.0529) × 2000 × (1−(0.5 × .45))

HAP Emissions with vapor suppresants = 73 pounds of HAP emissions per ton of resin.

*13. Method Performance*

13.1 Bias:

The bias of this test method has not been determined.

13.2 Precision Testing

13.2.1 Subsequent to the initial development of this test protocol by the Composites Fabricators Association, a series of tests were conducted in three different laboratory facilities. The purpose of this round robin testing was to verify the precision of the test method in various laboratories. Each laboratory received a sample of an orthophthalic polyester resin from the same production batch, containing 48 per cent styrene by weight. Each testing site was also provided with the same vapor suppressant additive. The suppressant manufacturer specified the percentage level of suppressant additive. The resin manufacturer specified the type and level of initiator required to produce a 20 minute gel time. The target glass content was 30 percent by weight.

13.2.2 Each laboratory independently conducted the VSE test according to this method. A summary of the results is included in Table 13.1.

**Table 13.1—Round Robin Testing Results**

| | **Test Lab 1** | | **Test Lab 2** | | **Test Lab 3** | |
|---|---|---|---|---|---|---|
| | **NVS** | **VS** | **NVS** | **S** | **NVS** | **VS** |

| | | | | | | |
|---|---|---|---|---|---|---|
| Average percent WT Loss | 4.24 | 1.15 | 4.69 | 1.84 | 5.73 | 1.61 |
| Standard Deviation | 0.095 | 0.060 | 0.002 | 0.002 | 0.020 | 0.003 |
| VSE Factor | | 0.730 | | 0.607 | | 0.720 |

13.3 Comparison to EPA Reference Methods This test has no corresponding EPA reference method.

### *14. Pollution Prevention*

The sample size used in this method produces a negligible emission of HAP, and has an insignificant impact upon the atmosphere.

### *15. Waste Management*

The spent and waste materials generated during this test are disposed according to required facility procedures, and waste management recommendations on the corresponding material safety data sheets.

### *16. References and footnotes*

16.1 Footnotes:

[1] Balance Enclosure—The purpose of the balance enclosure is to prevent localized airflow from adversely affecting the laboratory balance. The enclosure may be a simple three-sided box with a top and an open face. The configuration of the enclosure is secondary to the purpose of providing a stable and steady balance reading, free from the effects of airflow, for accurate measurements. The enclosure can be fabricated locally. A typical enclosure is shown in Figure 17.1.

[2] Laboratory Balance—Ohaus Precision Standard Series P/N TS400D or equivalent—Paul N. Gardner Co. 316 NE 1st St. Pompano Beach, FL 33060 or other suppliers.

[3] Stop Watch—Local supply.

[4] Thermometer—Mercury thermometer—ASTM No. 21C or equivalent; Digital thermometer—P/N TH–33033 or equivalent—Paul N. Gardner Co. 316 NE 1st St. Pompano Beach, FL 33060 or other suppliers.

[5] Aluminum Pan—Local supply.

[6] Mylar—Local supply.

[7] Double Sided Tape—3M Double Stick Tape or equivalent, local supply.

[8] Laboratory Beakers—250 to 400ml capacity—Local laboratory supply.

[9] Eye Dropper or Pipette—Local laboratory supply.

[10] Disposable Resin Application Roller Source—Wire Handle Roller P/N 205–050–300 or Plastic Handle Roller P/N 215–050–300 or equivalent; ES Manufacturing Inc., 2500 26st Ave. North, St. Petersburg, FL 33713, *www.esmfg.com,* or other source. Refer to Figure 17.3.

[11] Hygrometer or Psychrometer—Model# THWD–1, or equivalent—Part # 975765 by Amprobe Instrument, 630 Merrick Road, P.O. Box 329, Lynbrook, NY 11563, 516–593–5600

[12] Insulating Board (Teflon, cardboard, foam board etc.)—Local supply.

[13] Laboratory Balance With Digital Output—Ohaus Precision Standard Series P/N TS120S or equivalent—Paul N. Gardner Co. 316 NE 1st St. Pompano Beach, FL 33060 or other suppliers.

[14] Chopped Strand Mat—1.5 oz/ft$^2$ Sources: Owens Corning Fiberglas—Fiberglas M–723; PPG Industries—ABM HTX; Vetrotex America—M–127 or equivalent.

[15] Certificate of Analysis: Resin gel time, as recorded on the resin certificate of analysis, is measured using a laboratory standard gel time procedure. This procedure typically uses a 100 gram cup sample at 77 °F (25 °C), a specific type of initiator and a specified percentage.

[16] Roll-out times may vary with resin viscosity or resin additive. The important aspect of this step is to produce the same roll-out time for both the suppressed and non-suppressed samples.

[17] While this test can be used with filled resin systems, the test is not designed to determine the effect of the filler on emissions, but rather to measure the effect of the suppressant additive in the resin system. When evaluating a filled system both the non-vapor suppressed and vapor suppressed samples should be formulated with the same type and level of filler.

## 16.2 References

1. Phase 1—Baseline Study Hand Lay-up, CFA, 1996

2. CFA Vapor Suppressant Effectiveness Test Development, 4/3/98, correspondence with Dr. Madeleine Strum, EPA, OAQPS

3. CFA Vapor Suppressant Effectiveness Screening Tests, 4/4/98

4. Styrene Suppressant Systems Study, Reichhold Chemical, 11/30/98

5. Evaluation of the CFA's New Proposed Vapor Suppressant Effectiveness Test, Technical Service Request #: ED–01–98, BYK Chemie, 6/3/98

6. Second Evaluation of the CFA's New Proposed Vapor Suppressant Effectiveness Test, Technical Service Request #: ED–02–98, BYK Chemie, 1/26/99

## *17. Data Sheets and Figures*

17.1 This data sheet, or a similar data sheet, is used to record the test data for filled, unfilled, suppressed and non-suppressed tests. If additional time is required, the data sheet may be extended.

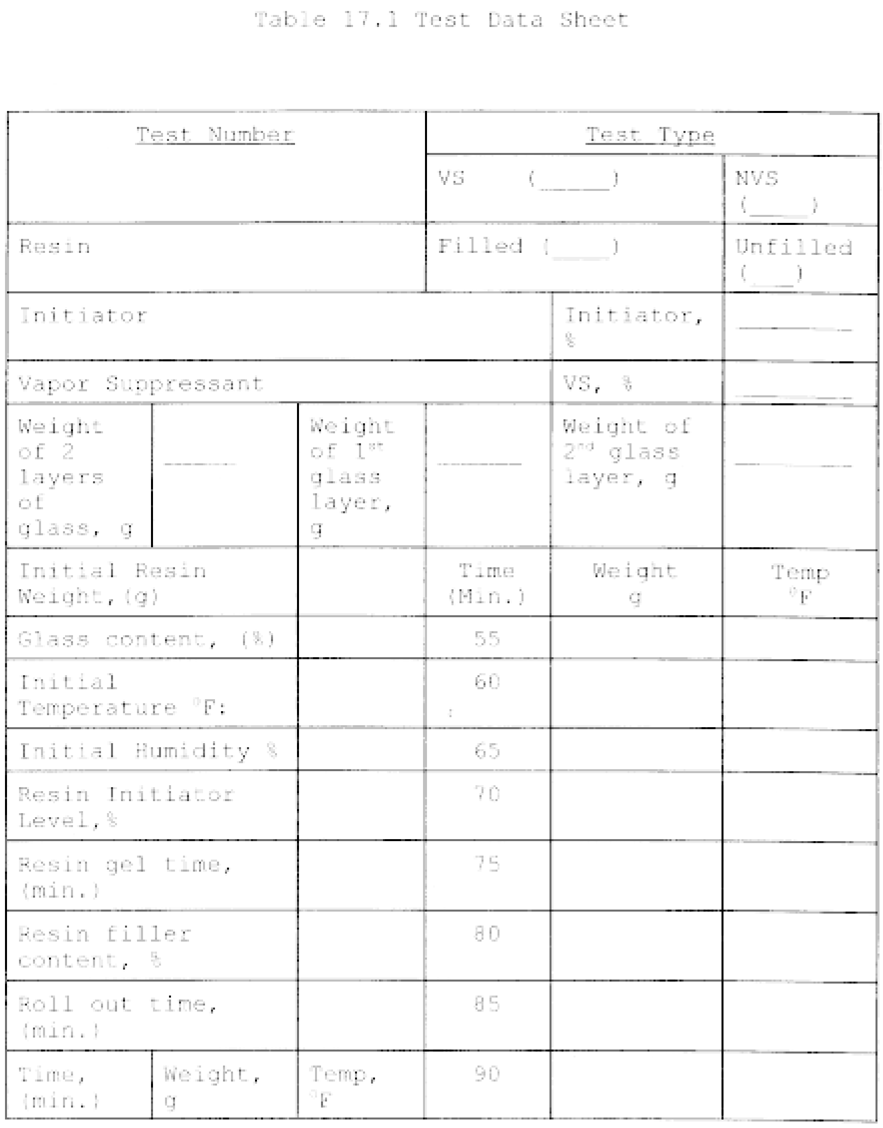
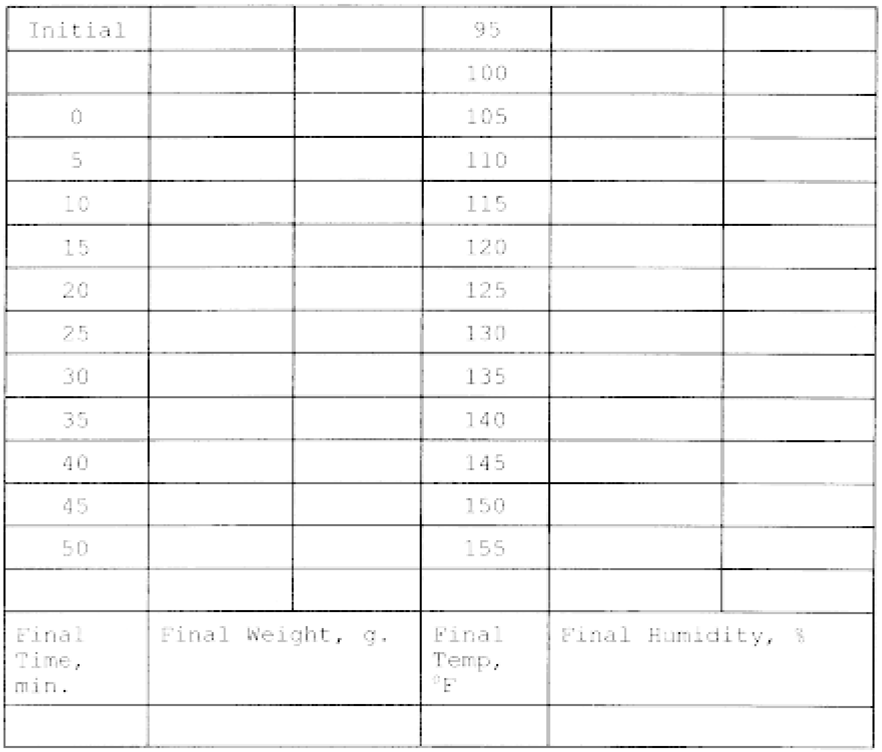


Table 17.1 Test Data Sheet

| | | | | | |
|---|---|---|---|---|---|
| Test Number | | | Test Type | | |
| | | | VS (_____) | | NVS (____) |
| Resin | | | Filled (____) | | Unfilled (___) |
| Initiator | | | | Initiator, % | ________ |
| Vapor Suppressant | | | | VS, % | ________ |
| Weight of 2 layers of glass, g | ______ | Weight of 1st glass layer, g | ______ | Weight of 2nd glass layer, g | ________ |
| Initial Resin Weight,(g) | | | Time (Min.) | Weight g | Temp °F |
| Glass content, (%) | | | 55 | | |
| Initial Temperature °F: | | | 60 | | |
| Initial Humidity % | | | 65 | | |
| Resin Initiator Level,% | | | 70 | | |
| Resin gel time, (min.) | | | 75 | | |
| Resin filler content, % | | | 80 | | |
| Roll out time, (min.) | | | 85 | | |
| Time, (min.) | Weight, g | Temp, °F | 90 | | |



| | | | | | |
|---|---|---|---|---|---|
| Initial | | | 95 | | |
| | | | 100 | | |
| 0 | | | 105 | | |
| 5 | | | 110 | | |
| 10 | | | 115 | | |
| 15 | | | 120 | | |
| 20 | | | 125 | | |
| 25 | | | 130 | | |
| 30 | | | 135 | | |
| 35 | | | 140 | | |
| 40 | | | 145 | | |
| 45 | | | 150 | | |
| 50 | | | 155 | | |
| | | | | | |
| Final Time, min. | Final Weight, g. | | Final Temp, °F | Final Humidity, % | |
| | | | | | |

17.2 Data Acceptance Criteria Worksheet:

The following worksheet is used to determine the quality of collected data ( *i.e.* insure the data collected all meets acceptance criteria)

**Table 17.2—Data Acceptance Criteria Worksheet**

| Test No. | Temperature | | | Laminate roll out time, min | Relative humidity, % | | Resin weight, (g) | Glass content, % | Resin distribution | Meets criteria Y/N |
|---|---|---|---|---|---|---|---|---|---|---|
| | Min | Max | Delta | | Initial | Final | | | | |
| 1 | | | | | | | | | | |
| 2 | | | | | | | | | | |
| 3 | | | | | | | | | | |
| 4 | | | | | | | | | | |
| 5 | | | | | | | | | | |
| 6 | | | | | | | | | | |
| 7 | | | | | | | | | | |
| 8 | | | | | | | | | | |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| 9 | | | | | | | | | | |
| 10 | | | | | | | | | | |
| 11 | | | | | | | | | | |
| 12 | | | | | | | | | | |
| Average | | | | | | | | | | |
| Criteria | ±2 °F | ±10% of Average | ±15 of Average | ±15 of Average | ±10% of Avg. | ±10% of Avg. | < 1/2 inch off mat | All Y | | |

17.3 VSE Factor Calculation

**Table 17.3—Calculations Worksheet**

| **Vapor suppressed** | | **Non-vapor suppressed** | |
|---|---|---|---|
| **Test #** | **% Weight loss** | **Test #** | **% Weight loss** |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| | | | |
| Average Weight Loss | | | |
| VSE Factor | | | |

VSE Factor = 1—(% Average Weight Loss$_{VS}$/ % Average Weight Loss$_{NVS}$)

17.4 Figures

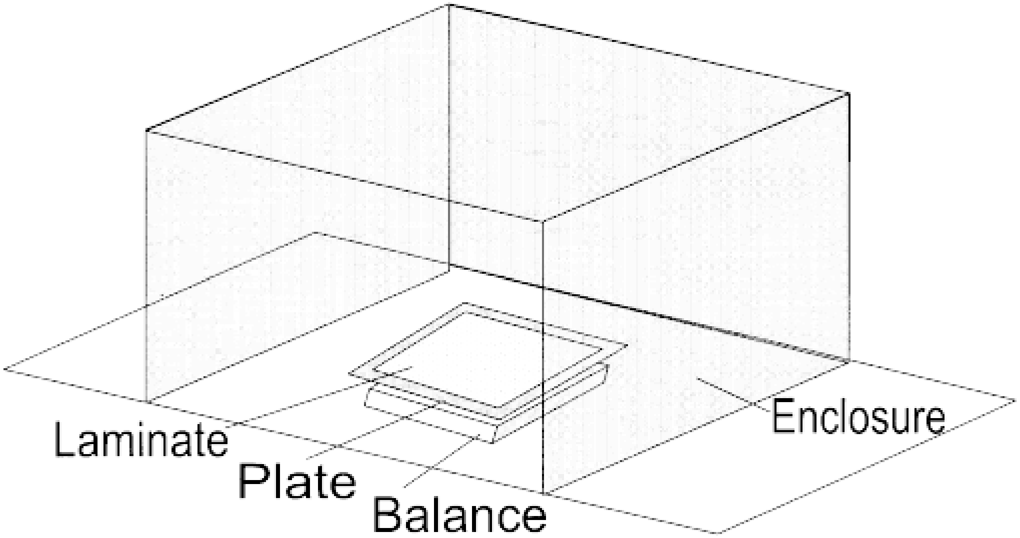


Figure 17.1. Typical Balance Enclosure

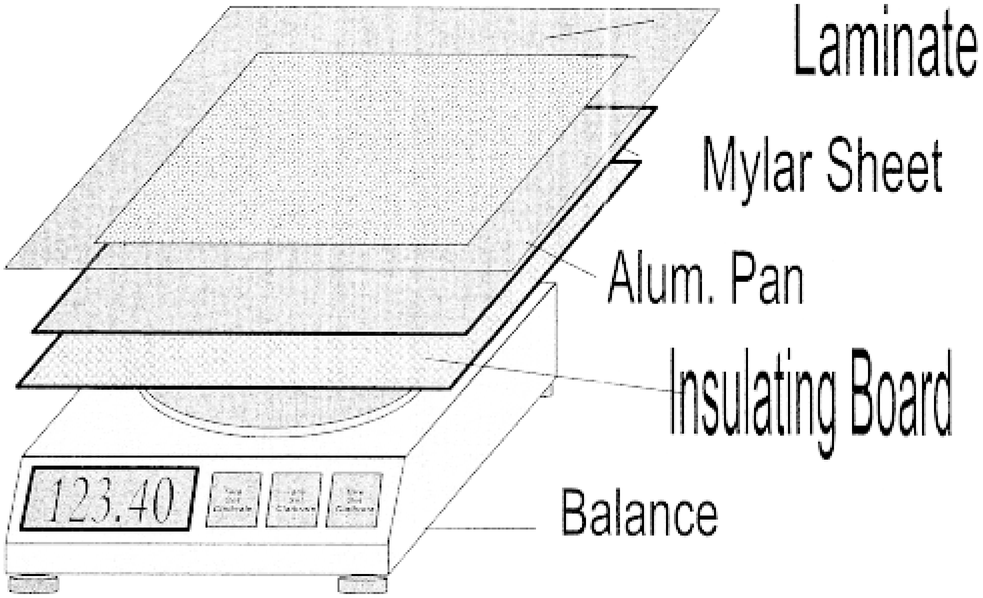
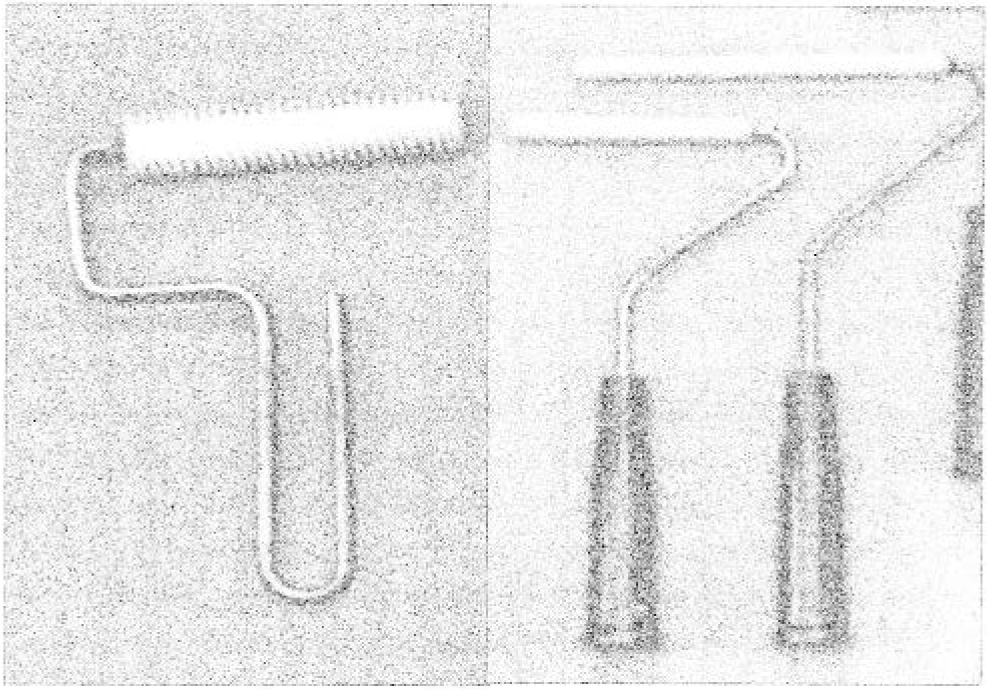


Figure 17.2. Scale, Plate, Insulating Board, Mylar, Laminate Order



FRP Rollers

Figure 17.3. Typical FRP Rollers

# Indiana Department of Environmental Management
# Office of Air Quality

## Technical Support Document (TSD) for a Part 70 Minor Source and Significant Permit Modification

### Source Description and Location

| | |
|---|---|
| Source Name: | Goldshield Fiberglass, Inc. |
| Source Location: | 1903 Patterson St., Decatur, IN,<br>2004 Patterson St., Decatur, IN 46733 and<br>2709 Patterson St., Decatur, IN 46733 |
| County: | Adams |
| SIC Code: | 3089 (Plastics Products, Not Elsewhere Classified) |
| Operation Permit Renewal No.: | T001-32298-00043 |
| Operation Permit Issuance Date: | March 8, 2013 |
| Minor Source Modification No.: | T001-33316-00043 |
| Significant Permit Modification No.: | T001-33347-00043 |
| Permit Reviewer: | Renee Traivaranon |

### Source Definition

This custom molded fiberglass reinforced products company consists of three (3) plants:

(a) Plant 43-2 is located at 2004 Patterson Street, Decatur, Indiana;

(b) Plant 43-1 is located at 2709 Patterson Street, Decatur, Indiana; and

(c) Plant 43-3 is located at 1903 Patterson Street, Decatur, Indiana.

These plants are located on one or more contiguous properties, have the same two-digit SIC code, and are under common ownership. Therefore, they are considered one (1) major source, as defined by 326 IAC 2-7-1(22).

The above source definition has been carried over from the existing permit renewal No. T 001-32298-00043, issued on March 8, 2013.

### Existing Approvals

The source was issued Part 70 Operating Permit Renewal No. T 001 - 32298 - 00043, issued on March 8, 2013, and there have been no other approvals issued to this source after this permit renewal.

### County Attainment Status

The source is located in Adams County.

| Pollutant | Designation |
|---|---|
| $SO_2$ | Better than national standards. |
| CO | Unclassifiable or attainment effective November 15, 1990. |
| $O_3$ | Attainment effective February 12, 2007, for the Fort Wayne area, including Allen County, for the 8-hour ozone standard.[1] |
| $PM_{10}$ | Unclassifiable effective November 15, 1990. |
| $NO_2$ | Cannot be classified or better than national standards. |
| Pb | Not designated. |

[1] Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.
Unclassifiable or attainment effective April 5, 2005, for $PM_{2.5}$.

(a) Ozone Standards
Volatile organic compounds (VOC) and Nitrogen Oxides ($NO_x$) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and $NO_x$ emissions are considered when evaluating the rule applicability relating to ozone. Adams County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and $NO_x$ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$
Adams County has been classified as attainment for $PM_{2.5}$. On May 8, 2008, U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for $PM_{2.5}$ emissions. These rules became effective on July 15, 2008. On May 4, 2011, the air pollution control board issued an emergency rule establishing the direct $PM_{2.5}$ significant level at ten (10) tons per year. This rule became effective June 28, 2011. Therefore, direct $PM_{2.5}$ and $SO_2$ 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) Other Criteria Pollutants
Adams County has been classified as attainment or unclassifiable in Indiana for other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

## Fugitive Emissions

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

## Source Status

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

The following table is from TSD of permit renewal No. T 001-32298-00043, issued on March 8, 2013.

| Process/ Emission Unit | Potential To Emit of the Entire Source Prior to the Modification (tons/year) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | PM | $PM_{10}$* | $PM_{2.5}$** | $SO_2$ | $NO_x$ | VOC | CO | GHGs*** | Total HAPs**** | Worst Single HAP**** |
| *Building 43-1* | | | | | | | | | | |
| Resin and Gelcoat Operations | 549.04 | 549.04 | 549.04 | - | - | 724.0(a) | - | - | 289.71 | 289.71 (Styrene) |
| Spray Booth (SB1) | 6.90 | 6.90 | 6.90 | - | - | | - | - | 2.39 | 1.10 (Xylene) |
| Paint Booth (P1) | 6.90 | 6.90 | 6.90 | - | - | 9.33 | - | - | 2.39 | 1.10 (Xylene) |
| Resin transfer (RTM) | - | - | - | - | - | 22.62 | - | - | negl. | negl. |
| *Building 43-2* | | | | | | | | | | |
| Resin and Gelcoat Operations | 986.25 | 986.25 | 986.25 | - | - | (a) | - | - | 330.81 | 330.80 (Styrene) |
| Paint Booth (PB-1) | 88.57 | 88.57 | 88.57 | - | - | (a) | - | - | 126.74 | 55.83 (Xylene) |
| Paint System (PS) | 177.14 | 177.14 | 177.14 | - | - | 369.72 | - | - | 253.49 | 111.66 (Xylene) |
| Dust Booths (D-1, D-2, D-3) | 20.56(b) | 20.56(b) | 20.56(b) | - | - | - | - | - | - | - |
| Filament winding process (FWP) | 0.00 | 0.00 | 0.00 | - | - | 26.21 | - | - | 26.21 | 24.59 (Styrene) |
| Foam Spraying Process (F-1) | 0.00 | 0.00 | 0.00 | - | - | 1.35 | - | - | 1.35 | 1.35 (MDI) |
| Combustion (heaters) | 0.54 | 2.15 | 2.15 | 0.17 | 28.29 | 1.56 | 23.76 | 33,952.7 | 0.53 | 0.5 (Hexane) |
| **Total PTE of Entire Source** | **1835.9** | **1837.5** | **1837.5** | **0.17** | **28.29** | **1,326.2** | **23.76** | **33,952.7** | **>25** | **>10** |
| Title V Major Source Thresholds | NA | 100 | 100 | 100 | 100 | 100 | 100 | 100,000 $CO_2e$ | 25 | 10 |
| PSD Major Source Thresholds | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 100,000 $CO_2e$ | NA | NA |

negl. = negligible

*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

**$PM_{2.5}$ listed is direct $PM_{2.5}$.

*** Pursuant to 326 IAC 2-7-1(39), starting July 1, 2011, greenhouse gas (GHG) emissions are subject to regulation at a source with a potential to emit 100,000 tons per year or more of CO2 equivalent (CO2e) emissions. Therefore, CO2e emissions have been calculated for this source. Based on the calculations the unlimited potential to emit greenhouse gases from the entire source is less than 100,000 tons of CO2e per year.

****HAPS are controlled by NESHAPs not listed here.

(a) Pursuant to 326 IAC 8-1-6, and Permit No.: 001-25023-00043, the VOC emissions are limited to 724.0 tons per twelve (12) consecutive month period.

(b) Potential to Emit emissions are after control for four dust collectors.

(a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

(b) This existing source is a major source of HAPs, as defined in 40 CFR 63.2, because HAP emissions are greater than ten (10) tons per year for a single HAP and greater than twenty-five (25) tons per year for a combination of HAPs. Therefore, this source is a major source under Section 112 of the Clean Air Act (CAA).

## Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by Goldshield Fiberglass, Inc. on June 17, 2013, requested to install in its existing gel coat spray booth, one high volume, low pressure (HVLP) spray gun for Urethane Primer for plastic and this operation is mutually exclusive from the existing fiberglass gel/lamination coating of the spray booth and can not operate simultaneously.

The following is a list of the proposed emission unit and pollution control devices:

One (1) spray plastic operation, approved for construction in 2013, identified as PC2-UP, using a high volume, low pressure (HVLP) spray gun, with a maximum capacity of 100 plastic parts or 0.62 gallons of Urethane Primer per hour.

## Enforcement Issues

There are no pending enforcement actions related to this review.

## Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

## Permit Level Determination – Part 70

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

| **Increase in PTE Before Controls of the Modification** | |
|---|---|
| **Pollutant** | **Potential To Emit** (ton/yr) |
| PM | 5.20 |
| $PM_{10}$ | 5.20 |
| $PM_{2.5}$ | 5.20 |
| $SO_2$ | - |
| VOC | 8.69 |
| CO | - |
| $NO_X$ | - |
| Single HAPs | <10 |
| Total HAPs | <25 |

Appendix A of this TSD reflects the unrestricted potential emissions of the modification.

(a) Minor Source Modification – Approval to Construct

Pursuant to 326 IAC 2-7-10.5(e)(3), this proposed modification is permitted as a minor source modification since this modification has a potential to emit less than twenty-five (25) tons per year and greater than five (5) tons per year of either PM, PM10, and PM2.5.

(b) Significant Permit Modification – Approval to Operate

The modification will be incorporated into the Part 70 Operating Permit through a significant permit modification, pursuant to 326 IAC 2-7-12(d)(1), because this modification does not qualify as a Minor Permit Modification or administrative amendment and it requires significant changes in existing monitoring in Part 70 permit terms and conditions.

## Permit Level Determination – PSD

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 source modification and permit modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

| | **Potential to Emit (tons/yr)** | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| **Process / Emission Unit** | **PM** | **PM$_{10}$** | **PM$_{2.5}$*** | **SO$_2$** | **VOC** | **CO** | **NO$_X$** | **GHGs** |
| Plastic Coating (PC2-UP) | 5.20 | 5.20 | 5.20 | - | 8.69 | - | - | - |
| **Total for Modification** | **5.20** | **5.20** | **5.20** | **-** | **8.69** | **-** | **-** | **-** |
| PSD Major Source Thresholds | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 100,000 CO$_2$e |
| Significant Level | 25 | 15 | 10 | 40 | 40 | 100 | 40 | 75,000 CO$_2$e |

*PM$_{2.5}$ listed is direct PM$_{2.5}$.

This modification to an existing major stationary source is not major modification because the emissions increase is less than the PSD major source thresholds. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

## PTE of the Entire Source After Modification

The table below summarizes the potential to emit of the entire source *(reflecting adjustment of existing limits)*, with updated emissions shown as **bold** values.

| | **Potential To Emit of the Entire Source After the Modification (tons/year)** | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| Process/ Emission Unit | PM | PM$_{10}$* | PM$_{2.5}$** | SO$_2$ | NO$_x$ | VOC | CO | GHGs*** | Total HAPs**** | Worst Single HAP**** |
| *Building 43-1* | | | | | | | | | | |
| Resin and Gelcoat Operations **(PC1, PC2, LB1)** | 549.04 | 549.04 | 549.04 | - | - | 724.0$^{(a)}$ | - | - | 289.71 | 289.71 (Styrene) |
| Spray Booth (SB1) | 6.90 | 6.90 | 6.90 | - | - | | - | - | 2.39 | 1.10 (Xylene) |
| Paint Booth (P1) | 6.90 | 6.90 | 6.90 | - | - | 9.33 | - | - | 2.39 | 1.10 (Xylene) |
| Resin transfer (RTM) | - | - | - | - | - | 22.62 | - | - | negl. | negl. |

| Process/ Emission Unit | Potential To Emit of the Entire Source After the Modification (tons/year) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | PM | $PM_{10}$* | $PM_{2.5}$** | $SO_2$ | $NO_x$ | VOC | CO | GHGs*** | Total HAPs**** | Worst Single HAP**** |
| **Plastic Coating PC2-UP**[(c)] | **5.20** | **5.20** | **5.20** | **-** | **-** | **8.69** | **-** | **-** | **negl** | **negl** |
| *Building 43-2* | | | | | | | | | | |
| Resin and Gelcoat Operations | 986.25 | 986.25 | 986.25 | - | - | (a) | - | - | 330.81 | 330.80 (Styrene) |
| Paint Booth (PB-1) | 88.57 | 88.57 | 88.57 | - | - | (a) | - | - | 126.74 | 55.83 (Xylene) |
| Paint System (PS) | 177.14 | 177.14 | 177.14 | - | - | 369.72 | - | - | 253.49 | 111.66 (Xylene) |
| Dust Booths (D-1, D-2, D-3) | 20.56(b) | 20.56(b) | 20.56(b) | - | - | - | - | - | - | - |
| Filament winding process (FWP) | 0.00 | 0.00 | 0.00 | - | - | 26.21 | - | - | 26.21 | 24.59 (Styrene) |
| Foam Spraying Process (F-1) | 0.00 | 0.00 | 0.00 | - | - | 1.35 | - | - | 1.35 | 1.35 (MDI) |
| Combustion (heaters) | 0.54 | 2.15 | 2.15 | 0.17 | 28.29 | 1.56 | 23.76 | 33,952.7 | 0.53 | 0.5 (Hexane) |
| **Total PTE of Entire Source** | **1835.9** | **1837.5** | **1837.5** | **0.17** | **28.29** | **1,326.2** | **23.76** | **33,952.7** | **>25** | **>10** |
| Title V Major Source Thresholds | NA | 100 | 100 | 100 | 100 | 100 | 100 | 100,000 $CO_2e$ | 25 | 10 |
| PSD Major Source Thresholds | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 100,000 $CO_2e$ | NA | NA |

negl. = negligible

*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

**$PM_{2.5}$ listed is direct $PM_{2.5}$.

*** Pursuant to 326 IAC 2-7-1(39), starting July 1, 2011, greenhouse gas (GHG) emissions are subject to regulation at a source with a potential to emit 100,000 tons per year or more of CO2 equivalent (CO2e) emissions. Therefore, CO2e emissions have been calculated for this source. Based on the calculations the unlimited potential to emit greenhouse gases from the entire source is less than 100,000 tons of CO2e per year.

****HAPS are controlled by NESHAPs not listed here.

(a) Pursuant to 326 IAC 8-1-6, and Permit No.: 001-25023-00043, the VOC emissions are limited to 724.0 tons per twelve (12) consecutive month period.

(b) Potential to Emit emissions are after control for four dust collectors.

**(c) This unit (PC2-UP) will not change the total PTE of entire source since this unit is an alternative operation to the gel coat booth (PC2) and emits less VOC than PC2, and they can not be operated simultaneously. The PC2 emissions are part of 724 tons/year of Resin and Gelcoat operations above. (See additional calculations of only PC2 VOC emissions in Appendix A.)**

The table below summarizes the potential to emit of the entire source after issuance of this modification, reflecting all limits, of the emission units. (Note: the table below was generated from the above table, with bold text un-bolded.)

| Process/ Emission Unit | Potential To Emit of the Entire Source to Accommodate the Modification (tons/year) | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | PM | $PM_{10}$* | $PM_{2.5}$** | $SO_2$ | $NO_x$ | VOC | CO | GHGs*** | Total HAPs**** | Worst Single HAP**** |
| *Building 43-1* | | | | | | | | | | |
| Resin and Gelcoat Operations**:** (PC1, PC2, LB1) | 549.04 | 549.04 | 549.04 | - | - | 724.0(a) | - | - | 289.71 | 289.71 (Styrene) |
| Spray Booth (SB1) | 6.90 | 6.90 | 6.90 | - | - | | - | - | 2.39 | 1.10 (Xylene) |
| Paint Booth (P1) | 6.90 | 6.90 | 6.90 | - | - | 9.33 | - | - | 2.39 | 1.10 (Xylene) |
| Resin transfer (RTM) | - | - | - | - | - | 22.62 | - | - | negl. | negl. |
| Plastic Coating PC2-UP(c) | 5.20 | 5.20 | 5.20 | - | - | 8.69 | - | - | negl | negl |
| *Building 43-2* | | | | | | | | | | |
| Resin and Gelcoat Operations | 986.25 | 986.25 | 986.25 | - | - | (a) | - | - | 330.81 | 330.80 (Styrene) |
| Paint Booth (PB-1) | 88.57 | 88.57 | 88.57 | - | - | (a) | - | - | 126.74 | 55.83 (Xylene) |
| Paint System (PS) | 177.14 | 177.14 | 177.14 | - | - | 369.72 | - | - | 253.49 | 111.66 (Xylene) |
| Dust Booths (D-1, D-2, D-3) | 20.56(b) | 20.56(b) | 20.56(b) | - | - | - | - | - | - | - |
| Filament winding process (FWP) | 0.00 | 0.00 | 0.00 | - | - | 26.21 | - | - | 26.21 | 24.59 (Styrene) |
| Foam Spraying Process (F-1) | 0.00 | 0.00 | 0.00 | - | - | 1.35 | - | - | 1.35 | 1.35 (MDI) |
| Combustion (heaters) | 0.54 | 2.15 | 2.15 | 0.17 | 28.29 | 1.56 | 23.76 | 33,952.7 | 0.53 | 0.5 (Hexane) |
| **Total PTE of Entire Source** | **1835.9** | **1837.5** | **1837.5** | **0.17** | **28.29** | **1,326.2** | **23.76** | **33,952.7** | **>25** | **>10** |
| Title V Major Source Thresholds | NA | 100 | 100 | 100 | 100 | 100 | 100 | 100,000 $CO_2e$ | 25 | 10 |
| PSD Major Source Thresholds | 250 | 250 | 250 | 250 | 250 | 250 | 250 | 100,000 $CO_2e$ | NA | NA |

negl. = negligible

*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

**$PM_{2.5}$ listed is direct $PM_{2.5}$.

*** Pursuant to 326 IAC 2-7-1(39), starting July 1, 2011, greenhouse gas (GHG) emissions are subject to regulation at a source with a potential to emit 100,000 tons per year or more of CO2 equivalent (CO2e) emissions. Therefore, CO2e emissions have been calculated for this source. Based on the calculations the unlimited potential to emit greenhouse gases from the entire source is less than 100,000 tons of CO2e per year.

****HAPS are controlled by NESHAPs not listed here.

(a) Pursuant to 326 IAC 8-1-6, and Permit No.: 001-25023-00043, the VOC emissions are limited to 724.0 tons per twelve (12) consecutive month period.

(b) Potential to Emit emissions are after control for four dust collectors.

(c) This unit (PC2-UP) will not change the total PTE of entire source since this unit is an alternative operation to the gel coat booth (PC2) and emits less VOC than PC2, and they can not be operated simultaneously. The PC2 emissions are part of 724 tons/year of Resin and Gelcoat operations above. (See additional calculations of the only PC2 VOC emissions in Appendix A.)

## Federal Rule Applicability Determination

The following federal rules are applicable due to this modification:

**NSPS:**

(a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed.

**NESHAP:**

(b) The PC2-UP coating of plastic portion of the spray booth is subject to the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products (40 CFR 63 Subpart PPPP, which is incorporated by reference as 326 IAC 20-81.

Nonapplicable portions of the NESHAP will not be included in the permit. The spray booth (PC2-UP) is subject to the following portions of Subpart PPPP:

(1) 40 CFR 63.3880
(2) 40 CFR 63.3881 (a)-(c)(e)(1)-(2)
(3) 40 CFR 63.3882 (a)(b)(e)
(4) 40 CFR 63.3883 (b)(d)
(5) 40 CFR 63.3890 (b)(c)
(6) 40 CFR 63.3891 (a)(b)
(7) 40 CFR 63.3892 (a)
(8) 40 CFR 63.3893 (a)
(9) 40 CFR 63.3900 (a)(1)(b)
(10) 40 CFR 63.3901 (e)(2)
(11) 40 CFR 63.3910 (a)-(c)(8)(ii)(c)(10)
(12) 40 CFR 63.3920 (a)(1)-(6)
(13) 40 CFR 63.3930 (a)-(c)(3)(d)-(g)(j)
(14) 40 CFR 63.3931
(15) 40 CFR 63.3940
(16) 40 CFR 63.3941
(17) 40 CFR 63.3942
(18) 40 CFR 63.3950
(19) 40 CFR 63.3951
(20) 40 CFR 63.3952
(21) 40 CFR 63.3980
(22) 40 CFR 63.3981
(23) Table 2
(24) Table 3
(25) Table 4

The provisions of 40 CFR 63 Subpart A - General Provisions, which are incorporated as 326 IAC 20-1, apply to the above mentioned facilities, except when otherwise specified in 40 CFR 63, Subpart MMMM.

(c) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) applicable to this proposed modification.

**CAM**

(d) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:

(1) has a potential to emit before controls equal to or greater than the Part 70 major source threshold for the pollutant involved;

(2) is subject to an emission limitation or standard for that pollutant; and

(3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

**CAM Applicability Analysis**

| **Emission Unit** | **Control Device Used** | **Emission Limitation** (Y/N) | **Uncontrolled PTE** (ton/yr) | **Controlled PTE** (ton/yr) | **Part 70 Major Source Threshold** (tons/yr) | **CAM Applicable** (Y/N) | **Large Unit** (Y/N) |
|---|---|---|---|---|---|---|---|
| Spray booth PC2-UP (VOC) | None | - | - | - | 100 | N | - |
| Spray booth PC2-UP (PM/PM10/PM2.5) | Dry Filters | N | <100 | <100 | 100 | N | N |
| Spray booth PC2-UP (HAPs) | None | - | - | - | 10 and 25 | N | - |

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to the modified unit as part of this modification.

## State Rule Applicability Determination

The following state rules are applicable to the source due to the modification:

**326 IAC 2-2**
PSD applicability is discussed under the Permit Level Determination – PSD section.

**326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))**
The operation of the spray booth (PC2-UP) will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

**326 IAC 2-6 (Emission Reporting)**
This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit pursuant to 326 IAC 2-7 (Part 70). The potential to emit of VOC is greater than 250 tons per year, and the potential to emit of CO, NOx, and $SO_2$ is less than 2,500 tons per year. Therefore, pursuant to 326 IAC 2-6-3(a)(1), annual reporting is required. An emission statement shall be submitted by July 1, of each year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

**326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)**
Pursuant to 326 IAC 6-3-2(d)(1), particulate emissions from spray booth (PC2-UP) shall be controlled by dry filters, waterwash, or an equivalent control device and the control device must be operated in accordance with manufacturer's specifications.

**326 IAC 8-2-9 (Miscellaneous Metal Coating)**
The spray booth (PC2-UP) will not be coating metal parts, therefore, 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) will not apply.

**326 IAC 8-1-6 (New facilities; General reduction requirements)**
The spray booth (PC2-UP) will be constructed after January 1, 1980 and the VOC PTE when

coating plastic is less than twenty-five (25) tons of VOC per year. Therefore, 326 IAC 8-1-6 does not apply.

## 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.

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

| Emission Unit/Control | Operating Parameters | Frequency |
|---|---|---|
| PC2-UP/Dry Filters | Observations | Daily, weekly and monthly observations |

(b) Testing is not required for this modification.

## Proposed Changes

The changes listed below have been made to Part 70 Operating permit renewal No. T 001-32298-00043.

(1) The spray booth PC2 has been revised to add an alternative operation of the PC2-UP in Section A.3, Emission Units and Pollution Control Equipment Summary, and Section D.1, Emissions Unit Description.

(2) The PC2-UP has been added to particulate emissions limitations and compliance determination requirements in Conditions, D.1.2 and D.1.7.

(3) Compliance monitoring is required for PC2-UP and it has been added as Condition D.1.9.

(4) The PC2-UP is subject to 40 CFR 63, Subpart PPPP, therefore, it has been added to Section E.2.

(5) The description of existing spray booth PC2 has been revised in Sections E.3 and E.4.

(6) IDEM has made additional changed to the permit as follows:

  (a) The expiration date of the permit has been corrected from 2015 to 2018.

  (b) The description of the SIC Code has been added.

The permit has been revised as follows with deleted language appears as ~~strikethroughs~~ and new language appears in **bold**:

A.1 General Information [326 IAC 2-7-4(c)][326 IAC 2-7-5(14)][326 IAC 2-7-1(22)]

....
SIC Code: 3089 **(Plastics Products, Not Elsewhere Classified)**
...

A.3 Emission Units and Pollution Control Equipment Summary
[326 IAC 2-7-4(c)(3)][326 IAC 2-7-5(14)]

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

Building 43-1

(b) One (1) spray booth, ~~identified as PC2, constructed in 1982, using gel coat, lamination, and spray equipment and equipped~~ with dry filters as overspray control, exhausting to Stacks B-1-1 through B-1-3~~, capacity: 375 square feet of fiberglass parts per hour.,~~ **consisting of the following operations which are mutually exclusive:**

**(1) identified as PC2, constructed in 1982, using gel coat, lamination, and spray equipment, with a maximum capacity of 375 square feet of fiberglass parts per hour.**

Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

**(2) identified as PC2-UP, approved for construction in 2013, using a high volume, low pressure (HVLP) spray gun, with a maximum capacity of 100 plastic parts or 0.62 gallons of Urethane Primer per hour.**

**Under NESHAP 40 CFR 63 Subparts PPPP this source is considered an existing affected source.**

[Note: The application of the Urethane Primer is exclusive from the gel coat operation, and both operations can not be operated at the same time.]

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Building 43-1

...

(b) One (1) spray booth, ~~identified as PC2, constructed in 1982, using gel coat, lamination, and spray equipment and equipped~~ with dry filters as overspray control, exhausting to Stacks B-1-1 through B-1-3~~, capacity: 375 square feet of fiberglass parts per hour.,~~ **consisting of the following operations which are mutually exclusive:**

**(1) identified as PC2, constructed in 1982, using gel coat, lamination, and spray equipment, with a maximum capacity of 375 square feet of fiberglass parts per hour.**

Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

**(2) identified as PC2-UP, approved for construction in 2013, using a high volume, low pressure (HVLP) spray gun, with a maximum capacity of 100 plastic parts or 0.62 gallons of Urethane Primer per hour.**

**Under NESHAP 40 CFR 63 Subparts PPPP this source is considered an existing affected source.**

.....

(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 (VOC) [326 IAC 2-2] [326 IAC 8-1-6]

...

....

D.1.2 Particulate Matter (PM) [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2(d), the particulate emission rate the two (2) lamination and gel coat booths at Plant 43-1 (PC1 and PC2), **one plastic coating (PC2-UP),** one (1) spray booth at Plant 43-1 (GB2), one (1) spray booth (LB1) at Plant 43-1, two (2) spray booths (SB1 and P1) at Plant 43-1, three (3) spray booths (GB1, GB2 and GB3) at Plant 43-2, four (4) spray booths (CB1, CB2, CB3 and CB4) at Plant 43-2, one (1) paint system (PS) at Plant 43-2, consisting of two (2) prime booths, and one (1) paint booth (PB1) at Plant 43-2 shall be controlled by a dry particulate filter or waterwash, the Permittee shall operate the control device in accordance with the manufacturer's specifications.

Compliance Determination Requirements

...

### D.1.7 Particulate Matter (PM)

**(a)** Pursuant to CP 001-4127-00037, issued on October 17, 1995, the recirculation-type dust blow-off booth shall be operated at all times so that no PM escapes from the two (2) prime spray booths into the sanding room or into the ambient air. This shall be achieved by the use of replacement filters in the exhaust plenums, air recirculation and maintenance of negative pressure inside the dust blow off booth.

**(b)** **In order to comply with Condition D.1.2, the dry filters for particulate control shall be in operation and control emissions from the plastic coating PC2-UP, at all times when the plastic coating booth, PC2-UP is in operation.**

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

…

### **D.1.9 Monitoring**

**(a)** **Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, weekly observations shall be made of the overspray from the PC2-UP, while the plastic coating (PC2-UP) is in operation. If a condition exists which should result in a response steps, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.**

**(b)** **Monthly inspections shall be performed of the coating emissions from the stacks and the presence of overspray on the rooftops and the nearby ground. When there is a noticeable change in overspray emission, or evidence when evidence of overspray emission is observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.**

### D.1.~~9~~**10** Record Keeping Requirements

…

(b) To document the compliance status with Conditions D.1.7, ~~and~~ D.1.8 **and D.1.9**, the Permittee shall maintain a log of weekly overspray observations, daily checks of water curtains and flow sheets, daily and monthly inspections.

(c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

### D.1.~~10~~**1** Reporting Requirements

…

## SECTION E.2 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) REQUIREMENTS [326 IAC 2-7-5(1)] [326 IAC 20-81-1] [40 CFR 63, Subpart PPPP]

**Emissions Unit Description:**

Plant 43-1

.....

**(b) One (1) spray booth, with dry filters as overspray control, exhausting to Stacks B-1-1 through B-1-3, consisting of the following operations which are mutually exclusive:**

**(2) identified as PC2-UP, approved for construction in 2013, using a high volume, low pressure (HVLP) spray gun, with a maximum capacity of 100 plastic parts or 0.62 gallons of Urethane Primer per hour.**

**Under NESHAP 40 CFR 63 Subparts PPPP this source is considered an existing affected source.**

.....

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

## SECTION E.3 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) REQUIREMENTS [326 IAC 2-7-5(1)] [326 IAC 20-48] [40 CFR 63, Subpart VVVV]

**Emissions Unit Description:**

Plant 43-1

(a) One (1) spray booth, identified as PC1, constructed in 1994, using gel coat, lamination, and spray equipment and equipped with dry filters as overspray control, exhausting to Stacks B-1-1 through B-1-3, capacity: 375 square feet of resin per hour. Under NESHAP 40 CFR 63 Subpart VVVV this source is considered an existing affected source.

(b) One (1) spray booth, ~~identified as PC2, constructed in 1982, using gel coat, lamination, and spray equipment and equipped~~ with dry filters as overspray control, exhausting to Stacks B-1-1 through B-1-3~~, capacity: 375 square feet of fiberglass parts per hour.,~~ **consisting of the following operations which are mutually exclusive:**

**(1) identified as PC2, constructed in 1982, using gel coat, lamination, and spray equipment, with a maximum capacity of 375 square feet of fiberglass parts per hour.**

Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

…

....

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

SECTION E.4 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP) REQUIREMENTS [326 IAC 2-7-5(1)] [326 IAC 20-25] [40 CFR 63, Subpart WWWW]

Emissions Unit Description:

Plant 43-1

...

(b) One (1) spray booth, ~~identified as PC2, constructed in 1982, using gel coat, lamination, and spray equipment and equipped~~ with dry filters as overspray control, exhausting to Stacks B-1-1 through B-1-3~~, capacity: 375 square feet of fiberglass parts per hour., ~~**consisting of the following operations which are mutually exclusive:**

**(1) identified as PC2, constructed in 1982, using gel coat, lamination, and spray equipment, with a maximum capacity of 375 square feet of fiberglass parts per hour.**

Under NESHAP 40 CFR 63 Subparts VVVV and WWWW this source is considered an existing affected source.

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

## Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. T001-33316-00043 and Significant Permit Modification No. T001-33347-00043. The staff recommend to the Commissioner that this Part 70 Minor Source and Significant Permit Modification be approved.

## IDEM Contact

(a) Questions regarding this proposed permit can be directed to Ms. Renee Traivaranon at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-5615 or toll free at 1-800-451-6027 extension 4-5615.

(b) A copy of the findings is available on the Internet at: http://www.in.gov/ai/appfiles/idem-caats/

(c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.idem.in.gov

## Appendix A: Emissions Calculations
## Summary of Emissions

**Company Name:** Goldshield Fiberglass, Inc.
**Address, City, IN, Zip:** 1903 Patteron Street, 2004 Patterson Street, and
2709 Patterson Street, Decatur, Indiana 46733
**Minor Source Modification No.:** T001-33316-00043
**Significant Permit Modification No.:** T001-33347-00043
**Reviewer:** Renee Traivaranon
**Date:** June 26, 2013

**Potential to Emit Before Controls (tpy)**

| Process | PM | $PM_{10}$ | $PM_{2.5}$ | $SO_2$ | VOC | $NO_x$ | CO |
|---|---|---|---|---|---|---|---|
| *Building 43-1* | | | | | | | |
| Resin and Gelcoat Operations | 549.04 | 549.04 | 549.04 | - | 370.40 | - | - |
| Spray Booth (SB1) | 6.90 | 6.90 | 6.90 | - | 9.33 | - | - |
| Paint Booth (P1) | 6.90 | 6.90 | 6.90 | - | 9.33 | - | - |
| Resin transfer (RTM) | - | - | - | - | 22.62 | - | - |
| Spray Booth (PC2-UP) | 5.20 | 5.20 | 5.20 | - | 8.69 | - | - |
| *Building 43-2* | | | | | | | |
| Resin and Gelcoat Operations | 986.25 | 986.25 | 986.25 | - | 330.80 | - | - |
| Paint System (PS) | 177.14 | 177.14 | 177.14 | - | 369.72 | - | - |
| Paint Booth (PB-1) | 88.57 | 88.57 | 88.57 | - | 184.86 | - | - |
| Dust Booths (D-1, D-2, D-3) | 1027.92 | 1027.92 | 1027.92 | - | - | - | - |
| *Filament winding process (FWP) | 0.00 | 0.00 | 0.00 | - | 26.21 | - | - |
| Foam Spraying Process (F-1) | 0.00 | 0.00 | 0.00 | - | 1.35 | - | - |
| Combustion (space Heaters) | 0.54 | 2.15 | 2.15 | 0.17 | 1.56 | 28.29 | 23.76 |
| **Total Potential to Emit** | 2848.46 | 2850.07 | 2850.07 | 0.17 | 1334.87 | 28.29 | 23.76 |

**Controlled Potential to Emit (tpy)**

| Process | PM | $PM_{10}$ | $PM_{2.5}$ | $SO_2$ | VOC | $NO_x$ | CO |
|---|---|---|---|---|---|---|---|
| *Building 43-1* | | | | | | | |
| Resin and Gelcoat Operations | 549.04 | 549.04 | 549.04 | - | 370.40 | - | - |
| Spray Booth (SB1) | 6.90 | 6.90 | 6.90 | - | 9.33 | - | - |
| Paint Booth (P1) | 6.90 | 6.90 | 6.90 | - | 9.33 | - | - |
| Resin transfer (RTM) | - | - | - | - | 22.62 | - | - |
| Spray Booth (PC2-UP) | 0.05 | 0.05 | 0.05 | - | 8.69 | - | - |
| *Building 43-2* | | | | | | | |
| Resin and Gelcoat Operations | 986.25 | 986.25 | 986.25 | - | 330.80 | - | - |
| Paint System (PS) | 177.14 | 177.14 | 177.14 | - | 369.72 | - | - |
| Paint Booth (PB-1) | 88.57 | 88.57 | 88.57 | - | 184.86 | - | - |
| Dust Booths (D-1, D-2, D-3) | 20.56 | 20.56 | 20.56 | - | - | - | - |
| *Filament winding process (FWP) | 0.00 | 0.00 | 0.00 | - | 26.21 | - | - |
| Foam Spraying Process (F-1) | 0.00 | 0.00 | 0.00 | - | 1.35 | - | - |
| Combustion (space Heaters) | 0.54 | 2.15 | 2.15 | 0.17 | 1.56 | 28.29 | 23.76 |
| **Total Controlled Emissions** | 1835.95 | 1837.56 | 1837.56 | 0.17 | 1334.87 | 28.29 | 23.76 |

| **Potential to Emit of HAPs (tpy)** | |
|---|---|
| Ethylbenzene | 42.31 |
| Xylene | 169.80 |
| Cumene | 206.86 |
| Toluene | 168.95 |
| MIBK | 17.31 |
| Naphthalene | 2.48 |
| Formaldehyde | 3.38 |
| Styrene | 669.34 |
| Methyl Methacrylate | 196.87 |
| MDI | 1.35 |
| Glycol Ether | 0.07 |
| **Total HAPs>** | 1478.64 |

* Emissions are updated based on the table used in "Unified Emission Factors" for Opening Molding of Composites, dated July 23, 2001

## Appendix A: Emissions Calculations
### Limited Emissions

**Company Name:** **Gold Shield Fiberglass, Inc.**
**Address, City, IN, Zip:** **1903 Patteron Street, 2004 Patterson Street, and**
**2709 Patterson Street, Decatur, Indiana 46733**
**Minor Source Modification No.:** **T001-33316-00043**
**Significant Permit Modification No.:** **T001-33347-00043**
**Reviewer:** **Renee Traivaranon**
**Date:** **June 26, 2013**

| Limited PTE (tpy) | | | | | | | |
|---|---|---|---|---|---|---|---|
| **Process** | **PM** | **PM$_{10}$** | **PM$_{2.5}$** | **SO$_2$** | **VOC** | **NO$_x$** | **CO** |
| *Building 43-1* | | | | | | | |
| Resin and Gelcoat Operations | 549.04 | 549.04 | 549.04 | - | 724.0[a] | - | - |
| Spray Booth (SB1) | 6.90 | 6.90 | 6.90 | - | | - | - |
| Paint Booth (P1) | 6.90 | 6.90 | 6.90 | - | 9.33 | - | - |
| Resin transfer (RTM) | - | - | - | - | 22.62 | - | - |
| Spray Booth (PC2-UP) | 5.20 | 5.20 | 5.20 | - | 8.69 | - | - |
| *Building 43-2* | | | | | | | |
| Resin and Gelcoat Operations | 986.25 | 986.25 | 986.25 | - | (a) | - | - |
| Paint Booth (PB-1) | 88.57 | 88.57 | 88.57 | - | (a) | - | - |
| Paint System (PS) | 177.14 | 177.14 | 177.14 | - | 369.72 | - | - |
| Dust Booths (D-1, D-2, D-3) | 20.56 | 20.56 | 20.56 | - | - | - | - |
| *Filament winding process (FWP) | 0.00 | 0.00 | 0.00 | - | 26.21 | - | - |
| Foam Spraying Process (F-1) | 0.00 | 0.00 | 0.00 | - | 1.35 | - | - |
| Combustion (space Heaters) | 0.54 | 2.15 | 2.15 | 0.17 | 1.56 | 28.29 | 23.76 |
| Total Controlled Emissions | 1841.10 | 1842.71 | 1842.71 | 0.17 | 1326.20 | 28.29 | 23.76 |

(a) Pursuant to 326 IAC 8-1-6, and Permit No.: 001-25023-00043, the VOC emissions are limited to 724.0 tons/yr.

| *Potential to Emit of HAPs (tpy) | |
|---|---|
| Ethylbenzene | 42.31 |
| Xylene | 169.80 |
| Cumene | 206.86 |
| Toluene | 168.95 |
| MIBK | 17.31 |
| Naphthalene | 2.48 |
| Formaldehyde | 3.38 |
| Styrene | 669.34 |
| Methyl Methacrylate | 196.87 |
| MDI | 1.35 |
| Glycol Ether | 0.07 |
| **Total HAPs>** | 1478.64 |

*HAP emissions are restricted by NESHAP (Subparts VVVV, WWWW, MMMM and PPPP).

## Appendix A: Emissions Calculations
## Form DD: Reinforced Plastics and Composites
## Resin and Gelcoat Operations

**Company Name:** **Goldshield Fiberglass, Inc.**
**Address, City, IN, Zip:** **1903 Patteron Street, 2004 Patterson Street, and**
**2709 Patterson Street, Decatur, Indiana 46733**
**Minor Source Modification No.:** **T001-33316-00043**
**Significant Permit Modification No.:** **T001-33347-00043**
**Reviewer:** **Renee Traivaranon**
**Date:** **June 26, 2013**

| | | Density (lb/gal) | Wt. % Monomer Styrene | Wt. % Monomer MMA | Styrene UEF (lbs/ton) | MMA UEF (lbs/ton) | Gallons per unit | Units per hour | Styrene Emissions (tons/yr) | MMA Emissions (tons/yr) | *VOC Emissions (tons/year) | VOC Emissions (lbs/hr) | Transfer Efficiency | PM Emissions (tons/yr) | Control Efficiency | Controlled PM Emissions (tons/yr) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Building 43-1 | **Resin** | | | | | | | | | | | | | | | |
| | 040-8080B1: CCP Sytpol Unsaturated Tooling Resin | 8.75 | 48.41% | 3.30% | 121.00 | 60.00 | 0.075 | 850 | 147.81 | 73.30 | 221.11 | 50.48 | 70% | 353.95 | 99% | 3.54 |
| | Cook Composites 945GA104 HG Retention Green Tooling | 9.03 | 42.70% | 4.98% | 102.00 | 75.00 | 0.075 | 850 | 128.59 | 94.55 | 223.14 | 50.95 | 70% | 395.76 | 99% | 3.96 |
| | **Gelcoat** | | | | | | | | | | | | | | 99% | |
| | 947-AJ-353: CCP Polycor Gray Gel Coat | 11.27 | 35.91% | 0.00% | 356.00 | 0.00 | 0.019 | 850 | 141.90 | 0.00 | 141.90 | 32.40 | 70% | 153.28 | 99% | 1.53 |
| | 951-WH-447: CCP Armorcoat Hino White Gelcoat | 10.16 | 29.19% | 9.98% | 259.79 | 150.00 | 0.019 | 850 | 93.35 | 53.90 | 147.26 | 33.62 | 70% | 131.15 | 99% | 1.31 |
| | Total Building 43-1 | | | | | | | | **289.72** | **148.45** | **370.40** | **84.57** | | **549.04** | | **5.49** |
| Building 43-2 | **Resin** | | | | | | | | | | | | | | | |
| | Interplastic COR61-AA-203 Laminating Resin | 10.82 | 31.00% | 0.00% | 66.34 | 0.00 | 0.058 | 1250 | 113.97 | 0.00 | 113.97 | 26.02 | 70% | 711.23 | 99% | 7.11 |
| | **Gelcoat** | | | | | | | | | | | | | | | |
| | 99-RBK-165: CCP Polycor HAP37 Black Gelcoat | 10.0048 | 36.71% | 0.00% | 377.00 | 0.00 | 0.021 | 1250 | 216.83 | 0.00 | 216.83 | 49.51 | 70% | 218.41 | 99% | 2.18 |
| | Interplastic W-1231-LNHM 782435 Oxford White Low Hap GC | 11.23 | 24.00% | 5.00% | 213.60 | 75.00 | 0.021 | 1250 | 137.90 | 48.42 | 186.32 | 42.54 | 70% | 275.02 | 99% | 2.75 |
| | Total Building 43-2 | | | | | | | | **330.80** | **48.42** | **330.80** | **75.53** | | **986.25** | | **9.86** |
| | | | | | | | | **Total:** | **620.52** | **196.87** | **701.20** | **160.09** | | **1535.29** | | **15.35** |

* VOC emissions are based on the worst case coating application

**METHODOLOGY**

Monomer Emission Factors based on UEF Emission Factors for Open Molding.

Pollutant Emissions (tons/yr) = Pollutant EF (lbs pollutant/ton material) * gallons material /units * units /hr * density (lbs material /gal material) * 1 ton material/2000 lbs material * 1 ton pollutant / 2000 lbs pollutant * 8760 hrs/yr

PM Emissions (tons/yr) = Density (lbs/gal) * gal/unit * units/hr * (1 - (wt. % Styrene + wt. % MMA))* (1-transfer efficiency) * 8760 hrs/yr * 1 ton / 2000 lbs

Note: The above calculations are from permit renewal No. T 001-32298-00043, issued on March 8, 2013.

## Appendix A: Emissions Calculations
## Form DD: Reinforced Plastics and Composites
## Resin Transfer Molding Operation
## Unit ID : RTM

**Company Name:** **Goldshield Fiberglass, Inc.**
**Address, City, IN, Zip:** **1903 Patteron Street, 2004 Patterson Street, and**
**2709 Patterson Street, Decatur, Indiana 46733**
**Minor Source Modification No.:** **T001-33316-00043**
**Significant Permit Modification No.:** **T001-33347-00043**
**Reviewer:** **Renee Traivaranon**
**Date:** **June 26, 2013**

| Material | Density of Resin (lb/gal) | Maximum Amount of Resin Used per Unit (gal/hr) | Weight % Monomer | Emission Factor (weight % of starting monomer emitted) | Pounds VOC per hour | Pounds VOC per day | Tons of VOC per Year |
|---|---|---|---|---|---|---|---|
| COR44-BZ-8138 | 10.82 | 42.42 | 37.50% | 3.00% | 5.16 | 123.93 | 22.62 |

Worst case Emission Factors for Closed Molding are 3% Based on AP-42 4.4-2.

METHODOLOGY:

Assume all of the monomer is styrene.

Potential VOC Pounds per Hour = Density of Resin(lb/gal)*Maximum Amount of Resin Used per hour (gal/hr)*Weight % of Monomer*Emission factor (weight
Potential VOC Pounds per Day = Potential VOC Pounds per Hour * (24 hrs / 1 day)
Potential VOC Tons per Year = Potential VOC Pounds per Hour * (8760 hr/yr) * (1 ton / 2000 lbs)

Note: The above calculations are from permit renewal No. T 001-32298-00043, issued on March 8, 2013.

## Appendix A: Emissions Calculations
### HAP Emissions
### Surface Coating Operation

**Company Name:** **Goldshield Fiberglass, Inc.**
**Address, City, IN, Zip:** **1903 Patteron Street, 2004 Patterson Street, and**
**2709 Patterson Street, Decatur, Indiana 46733**
**Minor Source Modification No.:** **T001-33316-00043**
**Significant Permit Modification No.:** **T001-33347-00043**
**Reviewer:** **Renee Traivaranon**
**Date:** **June 6, 2013**

| Material | Density (Lb/Gal) | Gal of Mat. (gal/hr) | *Pounds Ethylbenzene per gallon of coating | *Pounds Xylene per gallon of coating | *Pounds Cumene per gallon of coating | *Pounds Toluene per gallon of coating | *Pounds MIBK per gallon of coating | *Pounds Naphthalene per gallon of coating | *Pounds of Formaldehyde per gallon of coating | *Pounds of Hexamethyene-1,6-diisocyanate per gallon of coating |
|---|---|---|---|---|---|---|---|---|---|---|
| **43-1 (SB1)** | | | | | | | | | | |
| *SB1* | | | | | | | | | | |
| Black | 12.4 | 0.552 | 0.07 | 0.46 | 0.00 | 0.30 | 0.16 | 0.00 | 0.00 | 0.00 |
| GEMS Gray | 14.3 | 0.552 | 0.08 | 0.37 | 0.00 | 0.14 | 0.17 | 0.00 | 0.00 | 0.00 |
| GEHC Gray | 12.6 | 0.552 | 0.09 | 0.48 | 0.00 | 0.12 | 0.17 | 0.00 | 0.00 | 0.00 |
| Steel Blue | 12.1 | 0.552 | 0.09 | 0.47 | 0.00 | 0.12 | 0.17 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | |
| *P1* | | | | | | | | | | |
| Black | 12.4 | 0.552 | 0.07 | 0.46 | 0.00 | 0.30 | 0.16 | 0.00 | 0.00 | 0.00 |
| GEMS Gray | 14.3 | 0.552 | 0.08 | 0.37 | 0.00 | 0.14 | 0.17 | 0.00 | 0.00 | 0.00 |
| GEHC Gray | 12.6 | 0.552 | 0.09 | 0.48 | 0.00 | 0.12 | 0.17 | 0.00 | 0.00 | 0.00 |
| Steel Blue | 12.1 | 0.552 | 0.09 | 0.47 | 0.00 | 0.12 | 0.17 | 0.00 | 0.00 | 0.00 |
| | | | | | | | | | | |
| **43-2** | | | | | | | | | | |
| *PS* | | | | | | | | | | |
| Dupont Primer | 10.00 | 17.500 | 0.04 | 0.14 | 0.00 | 0.00 | 0.14 | 0.02 | 0.00 | 0.00 |
| Akzo Topcoat | 12.2 | 17.500 | 0.05 | 0.28 | 2.69 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 |
| Akzo Primer | 8.73 | 17.500 | 0.36 | 1.46 | 0.00 | 1.46 | 0.00 | 0.00 | 0.03 | 0.00 |
| | | | | | | | | | | |
| *PB-1 (currently idle)* | | | | | | | | | | |
| Dupont Primer | 10.00 | 8.750 | 0.04 | 0.14 | 0.00 | 0.00 | 0.14 | 0.02 | 0.00 | 0.00 |
| Akzo Topcoat | 12.2 | 8.750 | 0.05 | 0.31 | 0.02 | 0.01 | 0.00 | 0.00 | 0.00 | 0.01 |
| Akzo Primer | 8.73 | 8.750 | 0.36 | 1.46 | 0.00 | 1.46 | 0.00 | 0.00 | 0.03 | 0.00 |

***The table represent the HAP contents "As Applied" coatings**

## Appendix A: Emissions Calculations
### HAP Emissions
### Surface Coating Operation

**Company Name:** **Goldshield Fiberglass, Inc.**
**Address, City, IN, Zip:** **1903 Patteron Street, 2004 Patterson Street, and**
**2709 Patterson Street, Decatur, Indiana 46733**
**Minor Source Modification No.:** **T001-33316-00043**
**Significant Permit Modification No.:** **T001-33347-00043**
**Reviewer:** **Renee Traivaranon**
**Date:** **June 26, 2013**

| Material | PTE Ethylbenzene (tons/yr) | PTE Xylene (tons/yr) | PTE Cumene (tons/yr) | PTE Toluene (tons/yr) | PTE MIBK (tons/yr) | PTE Naphthalene (tons/yr) | PTE Formaldehyde (tons/yr) | PTE Hexamethylene-1,6-diisocyanate (tons/yr) | PTE Total HAPs (tons/yr) |
|---|---|---|---|---|---|---|---|---|---|
| **43-1 (SB1)** | | | | | | | | | |
| *SB1* | | | | | | | | | |
| Black | 0.18 | 1.10 | 0.00 | 0.73 | 0.38 | 0.00 | 0.00 | 0.00 | 2.39 |
| GEMS Gray | 0.20 | 0.90 | 0.00 | 0.33 | 0.40 | 0.00 | 0.00 | 0.00 | 1.83 |
| GEHC Gray | 0.22 | 1.15 | 0.00 | 0.29 | 0.40 | 0.00 | 0.00 | 0.00 | 2.07 |
| Steel Blue | 0.21 | 1.13 | 0.00 | 0.28 | 0.40 | 0.00 | 0.00 | 0.00 | 2.03 |
| | | | | | | | | | 2.39 |
| *P1* | | | | | | | | | |
| Black | 0.18 | 1.10 | 0.00 | 0.73 | 0.38 | 0.00 | 0.00 | 0.00 | 2.39 |
| GEMS Gray | 0.20 | 0.90 | 0.00 | 0.33 | 0.40 | 0.00 | 0.00 | 0.00 | 1.83 |
| GEHC Gray | 0.22 | 1.15 | 0.00 | 0.29 | 0.40 | 0.00 | 0.00 | 0.00 | 2.07 |
| Steel Blue | 0.21 | 1.13 | 0.00 | 0.28 | 0.40 | 0.00 | 0.00 | 0.00 | 2.03 |
| | | | | | | | | | 2.39 |
| **43-2** | | | | | | | | | |
| *PS* | | | | | | | | | |
| Dupont Primer | 2.75 | 11.01 | 0.00 | 0.00 | 11.01 | 1.65 | 0.00 | 0.00 | 26.42 |
| Akzo Topcoat | 3.67 | 21.45 | 206.01 | 0.44 | 0.00 | 0.00 | 0.00 | 0.01 | 231.59 |
| Akzo Primer | 27.91 | 111.66 | 0.00 | 111.66 | 0.00 | 0.00 | 2.25 | 0.00 | 253.49 |
| | | | | | | | | | 253.49 |
| *PB-1 (currently idle)* | | | | | | | | | |
| Dupont Primer | 1.38 | 5.50 | 0.00 | 0.00 | 5.50 | 0.83 | 0.00 | 0.00 | 13.21 |
| Akzo Topcoat | 1.83 | 11.74 | 0.84 | 0.22 | 0.00 | 0.00 | 0.00 | 0.01 | 14.65 |
| Akzo Primer | 13.96 | 55.83 | 0.00 | 55.83 | 0.00 | 0.00 | 1.13 | 0.00 | 126.74 |
| | | | | | | | | | 126.74 |
| **Total** | **42.3** | **169.8** | **206.9** | **168.9** | **17.3** | **2.5** | **3.4** | **0.03** | **385.0** |

**METHODOLOGY**

Pounds of HAP per Gallon Coating = (Density (lb/gal) * Weight % HAP)

Potential HAP Tons per Year = Pounds of HAP per Gallon coating (lb/gal) * Gal of Material (gal/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)

Note: The above calculations are from permit renewal No. T 001-32298-00043, issued on March 8, 2013.

**Appendix A: Emissions Calculations**
**VOC and Particulate Emissions**
**Surface Coating Operation**

**Company Name:** **Goldshield Fiberglass, Inc.**
**Address, City, IN, Zip:** **1903 Patteron Street, 2004 Patterson Street, and**
**2709 Patterson Street, Decatur, Indiana 46733**
**Minor Source Modification No.:** **T001-33316-00043**
**Significant Permit Modification No.:** **T001-33347-00043**
**Reviewer:** **Renee Traivaranon**
**Date:** **June 26, 2013**

| Material | Density (Lb/Gal) | Gal of Mat. (gal/hr) | Pounds VOC per gallon of coating less water | Pounds VOC per gallon of coating | PTE VOC pounds/ hour | PTE VOC pound/ day | PTE VOC tons per year | Pounds solids per gallon of coating | PM PTE (ton/yr) | Transfer Efficiency | Control Efficiency | Controlled PM PTE (tons/yr) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **43-1** | | | | | | | | | | | | |
| *SB1* | | | | | | | | | | | | |
| Black | 12.4 | 0.552 | 3.16 | 3.16 | 1.75 | 41.92 | 7.65 | 9.26 | 5.60 | 75% | 99% | 0.06 |
| GEMS Gray | 14.3 | 0.552 | 2.84 | 2.84 | 1.57 | 37.64 | 6.87 | 11.41 | 6.90 | 75% | 99% | 0.07 |
| GEHC Gray | 12.6 | 0.552 | 3.86 | 3.86 | 2.13 | 51.13 | 9.33 | 8.74 | 5.28 | 75% | 99% | 0.05 |
| Steel Blue | 12.1 | 0.552 | 3.79 | 3.79 | 2.09 | 50.26 | 9.17 | 8.32 | 5.03 | 75% | 99% | 0.05 |
| | | | | | | | | | | | | |
| *P1* | | | | | | | | | | | | |
| Black | 12.4 | 0.552 | 3.16 | 3.16 | 1.75 | 41.92 | 7.65 | 9.26 | 5.60 | 75% | 99% | 0.06 |
| GEMS Gray | 14.3 | 0.552 | 2.84 | 2.84 | 1.57 | 37.64 | 6.87 | 11.41 | 6.90 | 75% | 99% | 0.07 |
| GEHC Gray | 12.6 | 0.55 | 3.86 | 3.86 | 2.13 | 51.13 | 9.33 | 8.74 | 5.28 | 75% | 99% | 0.05 |
| Steel Blue | 12.11 | 0.55 | 3.79 | 3.79 | 2.09 | 50.26 | 9.17 | 8.32 | 5.03 | 75% | 99% | 0.05 |
| | | | | | | | | | | | | |
| **43-2** | | | | | | | | | | | | |
| *PS (2 Prime Booths)* | | | | | | | | | | | | |
| Dupont Primer | 10.00 | 17.500 | 4.82 | 4.82 | 84.41 | 2025.87 | 369.72 | 5.18 | 99.28 | 75% | 98% | 1.99 |
| Akzo Topcoat | 12.2 | 17.500 | 3.00 | 2.41 | 42.17 | 1011.96 | 184.68 | 9.24 | 177.14 | 75% | 98% | 3.54 |
| Akzo Primer | 8.73 | 17.500 | 4.78 | 4.78 | 83.64 | 2007.39 | 366.35 | 3.96 | 75.79 | 75% | 98% | 1.52 |
| | | | | | | | | | | | | |
| *PB-1* | | | | | | | | | | | | |
| Dupont Primer | 10.00 | 8.750 | 4.82 | 4.82 | 42.21 | 1012.94 | 184.86 | 5.17 | 49.55 | 75% | 98% | 0.99 |
| Akzo Topcoat | 12.2 | 8.750 | 3.00 | 2.41 | 21.08 | 505.98 | 92.34 | 9.24 | 88.57 | 75% | 98% | 1.77 |
| Akzo Primer | 8.73 | 8.750 | 4.78 | 4.78 | 41.82 | 1003.69 | 183.17 | 3.96 | 37.90 | 75% | 98% | 76% |
| | | | | | | **Totals** | **573.25** | **41.32** | **279.51** | | | **5.45** |

**METHODOLOGY**

Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr)
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr) * (24 hr/day)
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
Particulate Potential Tons per Year = (gal/hr) * (lbs solids/gal) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

Note: The above calculations are from permit renewal No. T 001-32298-00043, issued on March 8, 2013.

## Appendix A: Emissions Calculations
### Particulate Emissions
### Dust Booths

**Company Name:** **Goldshield Fiberglass, Inc.**
**Address, City, IN, Zip:** **1903 Patteron Street, 2004 Patterson Street, and**
**2709 Patterson Street, Decatur, Indiana 46733**
**Minor Source Modification No.:** **T001-33316-00043**
**Significant Permit Modification No.:** **T001-33347-00043**
**Reviewer:** **Renee Traivaranon**
**Date:** **June 26, 2013**

| Stack ID | PM Concentration (lb/sdscf) | Flow Rate (dscfm) | Control Efficiency (%) | PTE PM before controls (lbs/hr) | PTE PM before controls (tons/yr) | PTE PM after controls (lbs/hr) | PTE PM after controls (tons/yr) |
|---|---|---|---|---|---|---|---|
| D-1-1 | 6.15E-07 | 21200 | 98.00% | 39.11 | 171.32 | 0.78 | 3.43 |
| D-1-2 | 6.15E-07 | 21200 | 98.00% | 39.11 | 171.32 | 0.78 | 3.43 |
| D-2-1 | 6.15E-07 | 21200 | 98.00% | 39.11 | 171.32 | 0.78 | 3.43 |
| D-2-2 | 6.15E-07 | 21200 | 98.00% | 39.11 | 171.32 | 0.78 | 3.43 |
| D-2-3 | 6.15E-07 | 21200 | 98.00% | 39.11 | 171.32 | 0.78 | 3.43 |
| D-2-4 | 6.15E-07 | 21200 | 98.00% | 39.11 | 171.32 | 0.78 | 3.43 |
|  |  |  | **Total:** | **234.68** | **1027.92** | **4.69** | **20.56** |

**METHODOLOGY**
PM Concentration based on stack test conducted on May 21, 1997, witnessed and approved by IDEM.
PTE PM before controls (lb/hr) = PM concentration (lbs/dscf) * Flow rate (dscfm) * 60 min / hr / (1-control efficiency)
PTE PM before controls (tons/yr) = PTE PM before controls (lbs/hr) * 8760 hr/yr * 1 ton /2000 lbs
PTE PM after controls (lb/hr) = PM concentration (lbs/dscf) * Flow rate (dscfm) * 60 min / hr
PTE PM after controls (tons/yr) = PTE PM after controls (lbs/hr) * 8760 hr/yr * 1 ton /2000 lbs

Note: The above calculations are from permit renewal No. T 001-32298-00043, issued on March 8, 2013.

## Appendix A: Emissions Calculations
## Filament Winding process (FWP)

**Company Name:** **Goldshield Fiberglass, Inc.**
**Address, City, IN, Zip:** **1903 Patteron Street, 2004 Patterson Street, and**
**2709 Patterson Street, Decatur, Indiana 46733**
**Minor Source Modification No.:** **T001-33316-00043**
**Significant Permit Modification No.:** **T001-33347-00043**
**Reviewer:** **Renee Traivaranon**
**Date:** **June 26, 2013**

Filament Winding Process (FWP)

| Material | Density (Lb/Gal) | Weight % Styrene Monomer or VOC | Usage (gal/unit) | Maximum Production (unit/hour) | CFA Unified Emission Factor: VOC (lb/ton)* | CFA Unified Emission Factor: Styrene Only (lb/ton)* | Potential VOC (lb/hr) | Potential VOC (lb/day) | Potential VOC (tons/yr) | Potential Styrene (tons/yr) | Potential Total HAP (tons/yr) | Potential Particulate (tons/yr) | **Transfer Efficiency |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Small Mandrel | 10.82 | 32.50% | 2.74 | 2.25 | 120 | 120 | 3.99 | 95.74 | 17.47 | 17.47 | 17.47 | 0.00 | 100% |
| Large Mandrel | 10.82 | 32.50% | 4.11 | 2.25 | 120 | 120 | 5.98 | 143.60 | 26.21 | 26.21 | 26.21 | 0.00 | 100% |
| **Potential Emissions** | | | | | | | **5.98** | **143.60** | **26.21** | **26.21** | **26.21** | **0.00** | |

Revise emissions factors from UEF for open molding composites, dated July 23, 2001.

*Includes styrene and alpha methyl styrene as VOC. VOC emission factor computed as: 0.184 x Weight % VOC x 2,000 (lb/ton). Styrene emission factor computed as: 0.184 x Weight % Styrene x 2,000 (lb/ton).
**Filament Winding Process

METHODOLOGY
Emission factors from Unified Emission Factors for Opening Molding of Composites, July 23, 2001
Mandrel usage is mutually exclusive
Potential VOC (lb/hr) = [Density (lb/gal) * Usage (gal/unit) * Maximum Production (units/hr) ÷ 2,000 lb/ton] * VOC Emission Factor (lb/ton)
Potential VOC (lbs/day) = Potential VOC (lb/hr) * 24 hr/day
Potential VOC (tons/yr) = Potential VOC (lb/hr) * 8,760 hr/yr÷ 2,000 lb/ton
Potential Particulate (tons/yr) = Maximum Production (unit/hour) * Usage (gal/unit) * Density (lbs/gal) * (1 - Weight % VOC) * (1 - Transfer Efficiency) * 8760 hr/yı÷ 2000 lb/ton
Potential Styrene (tons/yr) = [Density (lb/gal) * Usage (gal/unit) * Maximum Production (units/hr) ÷ 2,000 lb/ton] * Styrene Emission Factor (lb/ton) * 8760 hr/y÷ 2000 lb/ton

Note: The above calculations are from permit renewal No. T 001-32298-00043, issued on March 8, 2013.

**Company Name: Goldshield Fiberglass, Inc.**
**Address, City IN Zip: 1903 Patteron Street, 2004 Patterson Street, and**
**2709 Patterson Street, Decatur, Indiana 46733**
**Minor Source Modification No.: T001-33316-00043**
**Significant Permit Modification No.: T001-33347-00043**
**Reviewer: Renee Traivaranon**
**Date: June 26, 2013**

| 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 | PTE VOC-HAP lb/ hr | PTE VOC-HAP lbs/ day | PTE VOC-HAP tons/year | PTE PM (ton/yr) | PTE PM (lb/hr) | lb VOC/gal solids | *Transfer Efficiency |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Foam Spraying F-1 | | | | | | | | | | | | | | | | | |
| Part A Foam | 10.00 | 8.00% | 0.00% | 8.00% | 0.00% | 92.38% | 0.22 | 1.75 | 0.80 | 0.80 | 0.3080 | 7.392 | 1.349 | 0.00 | 0.00 | 0.87 | 100% |

PM Control Efficiency: 0.00%

| | | PTE VOC-HAP lb/ hr | PTE VOC-HAP lbs/ day | PTE VOC-HAP tons/year | PTE PM (ton/yr) | PTE PM (lb/hr) |
|---|---|---|---|---|---|---|
| **Totals:** | **Uncontrolled** | **0.31** | **7.39** | **1.35** | **0.00** | **0.00** |
| | **Controlled** | **0.31** | **7.39** | **1.35** | **0.00** | **0.00** |

Emissions are updated based on the density and the usage during this renewal.
There is no change in the process throughput.

**METHODOLOGY**

*Transfer Efficiency - 100% as Flow Coat Application
Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
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)

Note: The above calculations are from permit renewal No. T 001-32298-00043, issued on March 8, 2013.

## Appendix A: Emissions Calculations
## Natural Gas Combustion Only
## MM BTU/HR <100
## Insignificant Combustion -Airmake up units and space heaters

| | |
|---|---|
| **Company Name:** | **Goldshield Fiberglass, Inc.** |
| **Address, City IN Zip:** | **1903 Patteron Street, 2004 Patterson Street, and**<br>**2709 Patterson Street, Decatur, Indiana 46733** |
| **Minor Source Modification No.:** | **T001-33316-00043** |
| **Significant Permit Modification No.:** | **T001-33347-00043** |
| **Reviewer:** | **Renee Traivaranon** |
| **Date:** | **June 26, 2013** |

| Heat Input Capacity MMBtu/hr | | Potential Throughput MMCF/yr |
|---|---|---|
| 60.4 | Airmakeup units | 529.4544 |
| 4.15 | cure oven | 36.35 |
| **64.59** | **Total** | **566** |

| | Pollutant | | | | | | |
|---|---|---|---|---|---|---|---|
| | PM* | PM10* | PM2.5 | SO2 | NOx | VOC | CO |
| Emission Factor in lb/MMCF | 1.90 | 7.60 | 7.60 | 0.600 | 100<br>**see below | 5.50 | 84.0 |
| Potential Emission in tons/yr (space heaters) | 0.503 | 2.012 | 2.012 | 0.159 | 26.473 | 1.456 | 22.237 |
| Potential Emission in tons/yr (Boiler B4) | 0.035 | 0.138 | 0.138 | 0.011 | 1.818 | 0.100 | 1.527 |
| **Total** | **0.538** | **2.150** | **2.150** | **0.170** | **28.290** | **1.556** | **23.764** |

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

**Methodology:**

All emission factors are based on normal firing.
MMBtu = 1,000,000 Btu
MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu
Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

| | HAPs - Organics | | | | |
|---|---|---|---|---|---|
| | Benzene | Dichlorobenzene | Formaldehyde | Hexane | Toluene |
| Emission Factor in lb/MMcf | 0.00210 | 0.00120 | 0.075 | 1.80 | 0.00340 |
| Potential Emission in tons/yr | **0.000594** | **0.000339** | **0.021218** | **0.509228** | **0.000962** |

| | HAPs - Metals | | | | | |
|---|---|---|---|---|---|---|
| | Lead | Cadmium | Chromium | Manganese | Nickel | |
| Emission Factor in lb/MMcf | 0.0005 | 0.0011 | 0.0014 | 0.0004 | 0.0021 | **Total** |
| Potential Emission in tons/yr | **0.00014** | **0.00031** | **0.00040** | **0.00011** | **0.00059** | **0.534** |

Methodology is the same as page 4.

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

Note: The above calculations are from permit renewal No. T 001-32298-00043, issued on March 8, 2013.

**Appendix A: Emissions Calculations**
**Natural Gas Combustion Only**
**MM BTU/HR <100**
**Source wide combustion CO2e emissions potential**

**Company Name:** **Goldshield Fiberglass, Inc.**
**Address, City IN Zip:** **1903 Patteron Street, 2004 Patterson Street, and**
**2709 Patterson Street, Decatur, Indiana 46733**
**Minor Source Modification No.:** **T001-33316-00043**
**Significant Permit Modification No.:** **T001-33347-00043**
**Reviewer:** **Renee Traivaranon**
**Date:** **June 26, 2013**

| | MMBtu/hr | MMCF/yr |
|---|---|---|
| Airmakeup units | 60.4 | |
| cure oven | 4.15 | |
| Combined Maximum Capacity | 64.59 | 565.81 |

## Greenhouse Gas Emissions

| | Greenhouse Gas | | |
|---|---|---|---|
| | CO2 | CH4 | N2O |
| Emission Factor in lb/MMcf | 120,000.00 | 2.3 | 2.2 |
| Existing furnaces and boilers -PTE in tons/yr | 33,948.50 | 0.65 | 0.62 |

| | |
|---|---|
| Summed Existing Furnaces and boilers Potential Emissions in tons/yr | 33,949.78 |
| | |
| Existing Furnaces and boilers -CO2e in tons/yr | 33,952.73 |

**Methodology**
The N2O Emission Factor for uncontrolled is 2.2 lb/MMcf. The N2O Emission Factor for low Nox burner is 0.64 lb/MMcf.
Emission
Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.
Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton
CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

Note: The above calculations are from permit renewal No. T 001-32298-00043, issued on March 8, 2013.

**Appendix A: Emissions Calculations**
**VOC and Particulate Emissions**
**Surface Coating Operation (PC2-UP) - Alternative Operating Scenario for PC2**

**Company Name:** **Gold Shield Fiberglass, Inc.**
**Address, City, IN, Zip:** **1903 Patteron Street, 2004 Patterson Street, and**
**2709 Patterson Street, Decatur, Indiana 46733**
**Minor Source Modification No.:** **T001-33316-00043**
**Significant Permit Modification No.:** **T001-33347-00043**
**Reviewer:** **Renee Traivaranon**
**Date:** **June 6, 2013**

| Material | Density (Lb/Gal) | Gal of Mat. (gal/hr) | 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 | Pounds solids per gallon of coating | Particulate Potential (ton/yr) | Transfer Efficiency | Control Efficiency | Controlled Particulate Emissions (tons/yr) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **43-1** | | | | | | | | | | | | |
| *PC2* | | | | | | | | | | | | |
| 681P34238 Primer | 11.38 | 0.46875 | 3.50 | 3.50 | 1.64 | 39.38 | 7.19 | 7.88 | 4.04 | 75% | 99% | 0.04 |
| 194S Activator | 8.98 | 0.15625 | 2.20 | 2.20 | 0.34 | 8.25 | 1.51 | 6.78 | 1.16 | 75% | 99% | 0.01 |
| Acetone (Cleanup) | 6.67 | 0.25000 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 75% | 99% | 0.00 |
| | | | | | | **Totals** | **8.69** | | **5.20** | | | **0.05** |

**METHODOLOGY**

Coating Applied Using HVLP Spray Application

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

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

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

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

Particulate Potential Tons per Year = (gal/hr) * (lbs solids/gal) * (1-Transfer efficiency) *(8760 hrs/yr) *(1 ton/2000 lbs)

## Appendix A:  Emissions Calculations
### VOC and Particulate Emissions
### Surface Coating Operation (PC2-UP) - Alternative Operating Scenario for PC2

**Company Name:** **Gold Shield Fiberglass, Inc.**
**Address, City, IN, Zip:** **1903 Patteron Street, 2004 Patterson Street, and**
**2709 Patterson Street, Decatur, Indiana 46733**
**Minor Source Modification No.:** **T001-33316-00043**
**Significant Permit Modification No.:** **T001-33347-00043**
**Reviewer:** **Renee Traivaranon**
**Date:** **July 11, 2013**

| Material | Density (Lb/Gal) | Gal of Mat. (gal/hr) | Pounds Ethylbenzene per gallon of coating | Pounds Glycol Ether per gallon of coating | Pounds Toluene per gallon of coating | Pounds Xylene per gallon of coating | Pounds of Hexamethyene-1,6-diisocyanate per gallon of coating |
|---|---|---|---|---|---|---|---|
| **43-1** | | | | | | | |
| *PC2* | | | | | | | |
| 681P34238 Primer | 11.38 | 0.46875 | 0.03 | 0.34 | 0.11 | 0.11 | 0.00 |
| 194S Activator | 8.98 | 0.15625 | 0.00 | 0.00 | 0.00 | 0.00 | 0.02 |
| Acetone (Cleanup) | 6.67 | 0.25 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |

| Material | PTE Ethylbenzene (tons/yr) | PTE Glycol Ether (tons/yr) | PTE Toluene (tons/yr) | PTE Xylene (tons/yr) | PTE Hexamethylene-1,6-diisocyanate (tons/yr) | PTE Total HAPs (tons/yr) |
|---|---|---|---|---|---|---|
| **43-1** | | | | | | |
| *PC2* | | | | | | |
| 681P34238 Primer | 0.07 | 0.70 | 0.23 | 0.23 | 0.00 | 1.24 |
| 194S Activator | 0.00 | 0.00 | 0.00 | 0.00 | 0.01 | 0.01 |
| Acetone (Cleanup) | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
| **Total** | **0.07** | **0.70** | **0.23** | **0.23** | **0.01** | **1.25** |

**METHODOLOGY**

Pounds of HAP per Gallon Coating = (Density (lb/gal) * Weight % HAP)
Potential HAP Tons per Year = Pounds of HAP per Gallon coating (lb/gal) * Gal of Material (gal/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)

## Appendix A: Emissions Calculations
## PC2 Gel Coat Booth
## Resin and Gelcoat Operations

**Company Name:** **Gold Shield Fiberglass, Inc.**
**Address, City, IN, Zip:** **1903 Patteron Street, 2004 Patterson Street, and**
**2709 Patterson Street, Decatur, Indiana 46733**
**Minor Source Modification No.:** **T001-33316-00043**
**Significant Permit Modification No.:** **T001-33347-00043**
**Reviewer:** **Renee Traivaranon**
**Date:** **July 11, 2013**

**PC2 Reinforced Plastic Composites Operations**

| Unit ID | Material Description | Density (lb/gal) | Wt. % Monomer Styrene | Wt. % Monomer MMA | Styrene UEF (lbs/ton) | MMA UEF (lbs/ton) | Gallons per unit | Units per hour | Styrene Emissions (tons/yr) | MMA Emissions (tons/yr) | VOC Emissions (tons/year) | VOC Emissions (lbs/hr) | Transfer Efficiency | PM Emissions (tons/yr) | Control Efficiency | Controlled PM Emissions (tons/yr) |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| Building 43-1 PC2 | **Resin** | | | | | | | | | | | | | | | |
| | 040-8080B1: CCP Sytpol Unsaturated Tooling Resin | 8.75 | 48.41% | 3.30% | 121.00 | 60.00 | 0.075 | 100 | 17.39 | 8.62 | 26.01 | 5.94 | 70% | 41.64 | 99% | 0.42 |
| | Cook Composites 945GA104 HG Retention Green Tooling | 9.03 | 42.70% | 4.98% | 102.00 | 75.00 | 0.075 | 100 | 15.13 | 11.12 | 26.25 | 5.99 | 70% | 46.56 | 99% | 0.47 |
| | **Gelcoat** | | | | | | | | | | | | | | | |
| | 947-AJ-353: CCP Polycor Gray Gel Coat | 11.27 | 35.91% | 0.00% | 356.00 | 0.00 | 0.019 | 100 | 16.69 | 0.00 | 16.69 | 3.81 | 70% | 18.03 | 99% | 0.18 |
| | 951-WH-447: CCP Armorcoat Hino White Gelcoat | 10.16 | 29.19% | 9.98% | 259.79 | 150.00 | 0.019 | 100 | 10.98 | 6.34 | 17.32 | 3.96 | 70% | 15.43 | 99% | 0.15 |
| **Total PC2** | | | | | | | | **Total:** | **34.08** | **17.47** | **43.58** | **9.95** | | **64.59** | | **0.65** |

**PC2 Reinforced Plastic Composites Operations - Gelcoat Application Only**

| | | | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **Building 43-1 PC2 GELCOAT ONLY** | **Gelcoat** | | | | | | | | | | | | | | | |
| | **947-AJ-353: CCP Polycor Gray Gel Coat** | **11.27** | **35.91%** | **0.00%** | **356.00** | **0.00** | **0.019** | **100** | **16.69** | **0.00** | **16.69** | **3.81** | **70%** | **18.03** | **99%** | **0.18** |
| | **951-WH-447: CCP Armorcoat Hino White Gelcoat** | **10.16** | **29.19%** | **9.98%** | **259.79** | **150.00** | **0.019** | **100** | **10.98** | **6.34** | **17.32** | **3.96** | **70%** | **15.43** | **99%** | **0.15** |
| | | | | | | | | **Total:** | **16.69** | **6.34** | **17.32** | **3.96** | | **18.03** | | **0.18** |

Note: The above calculation is to compare between the PTE emissions of PC2 and PC2-UP. (The emissions are part of existing emissions, therefore they will not be added to this modification.)

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT**

*We Protect Hoosiers and Our Environment.*

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

**Michael R. Pence**
*Governor*

**Thomas W. Easterly**
*Commissioner*

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

TO: Ms. Tara Tinnel
Goldshield Fiberglass, Inc.
2004 Patterson Street
Decatur, IN 46733

DATE: July 11, 2013

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

SUBJECT: Final Decision
Minor Source Modification
001-33316-00043

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

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

A copy of the final decision and supporting materials has also been sent via standard mail to:
Jeff Newport - President
Kevin Parks – D & B Environmental Services, Inc.
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 6/13/2013

# Mail Code 61-53

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|---|---|---|---|---|
| IDEM Staff | GHOTOPP 7/11/2013<br>Goldshield Fiberglass, Inc. 001-33316-00043 Final | | | AFFIX STAMP<br>HERE IF<br>USED AS<br>CERTIFICATE<br>OF MAILING |
| Name and address of Sender | ► | Indiana Department of Environmental Management<br>Office of Air Quality – Permits Branch<br>100 N. Senate<br>Indianapolis, IN 46204 | Type of Mail:<br>**CERTIFICATE OF MAILING ONLY** | |

| Line | Article Number | Name, Address, Street and Post Office Address | Postage | Handing Charges | Act. Value (If Registered) | Insured Value | Due Send if COD | R.R. Fee | S.D. Fee | S.H. Fee | Rest. Del. Fee<br>Remarks |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | | Tara Tinnel Goldshield Fiberglass, Inc. 2004 Patterson St Decatur IN 46733 (Source CAATS) via confirmed delivery | | | | | | | | | |
| 2 | | Jeff Newport President Goldshield Fiberglass, Inc. 2004 Patterson ST Decatur IN 46733 *(RO CAATS)* | | | | | | | | | |
| 3 | | Adams County Commissioners 313 West Jefferson Street Decatur IN 46733 *(Local Official)* | | | | | | | | | |
| 4 | | Adams County Health Department County Svcs Complex, 313 W. Jefferson # 314 Decatur IN 46733-1673 *(Health Department)* | | | | | | | | | |
| 5 | | Mr. Kevin Parks D & B Environmental Services, Inc. 401 Lincoln Way West Osceola IN 46561 *(Consultant)* | | | | | | | | | |
| 6 | | Decatur City Council and Mayors Office 225 W. Monroe St. Decatur IN 46733 *(Local Official)* | | | | | | | | | |
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