

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: August 5, 2013

RE: Industrial Dielectrics, Inc. dba IDI Composites International

FROM: Matthew Stuckey, Branch Chief

Permits Branch
Office of Air Quality

Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-6-1(b) or IC 13-15-6-1(a) require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204.

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

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

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

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

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



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

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

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

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

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



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Michael R. Pence

Thomas W. Easterly

Commissioner

PART 70 OPERATING PERMIT RENEWAL OFFICE OF AIR QUALITY

Industrial Dielectrics, Inc. dba IDI Composites International 407 South 7th Street Noblesville, Indiana 46060

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

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

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

Operation Permit No.: T057-31912-00042			
Issued by:	Issuance Date:	August 5,	2013
CHIC	Expiration Date:	August 5,	2018
Chrystal A. Wagner, Section Chief			
Permits Branch	;		
Office of Air Quality			



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Industrial Dielectrics, Inc. dba IDI Composites International

Noblesville, Indiana

Permit Reviewer: Roger Osburn

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 molding compound facility.

Source Address: 407 South 7th Street, Noblesville, Indiana 46060

General Source Phone Number: 317-773-1766

SIC Code: 3087 County Location: Hamilton

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

Minor Source, under PSD Rules and Nonattainment

NSR

Major Source, Section 112 of the Clean Air Act

Not 1 of 28 Source Categories

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

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

- (a) One (1) 39" sheet molding compound (SMC) line, identified as SMC Line 2, consisting of a Large Mixer, constructed in 2002, relocated from the laboratory, also including other mixers where pigment and thickeners are added, for SMC production, and the 39" SMC machine. The maximum throughput is 5,832 pounds per hour, with PM emissions from the Large Mixer and glass chopper controlled by a baghouse B2, exhausting to stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.
- (b) One (1) sheet molding compound (SMC) mixer, identified as SMC Drum Mixer, constructed prior to 1980, for (SMC) production. The maximum throughput is 1,200 pounds per hour, with PM emissions controlled by SMC Baghouse B2 exhausting to stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.
- (c) One (1) 48" sheet molding compound (SMC) line, identified as SMC Line 1, consisting of a Large Mixer, originally constructed prior to 1980 and modified in 2012, also including other mixers where pigment and thickener are added, for SMC production, and the 48" SMC Machine. The maximum throughput is 7,200 pounds per hour, with PM emissions from the Large Mixer and glass chopper controlled by SMC baghouse B2 exhausting to stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.
- (d) Six (6) bulk molding compound (BMC) mixers, identified as BMC Mixer #1 through BMC Mixer #5, constructed after 1980, and BMC Mixer #6, constructed in 2008, for bulk molding compound (BMC) production, with BMC Mixer #1 through BMC Mixer #5 each having a maximum throughput of 1,200 pounds per hour, and BMC Mixer #6 having a maximum throughput of 2,200 lbs/hr, with PM emissions from all BMC mixers controlled by BMC Baghouse B1 and all exhausting to stack S1. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation. The BMC

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mixer process description also include a Filler Cut Scale for weighing filler powders used in each mixer, withy a maximum throughput of 492 pounds per hour, with PM emissions also controlled by BMC Baghouse B1 exhausting to Stack S1. Also included is the final packaging operations associated with the BMC material from these mixers, including two (2) compound feeders and six (6) extruders used to package BMC material for shipping, with no emission controls.

- (e) Four (4) bulk molding compound (BMC) mixers, identified as Rosite Mixer #L1 through Rosite Mixer #L4, constructed in 2005, for Rosite production, each with a maximum capacity of 1,000 pounds per hour with PM emissions from all Rosite mixers controlled by SMC baghouse B2, exhausting to Stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation. The Rosite mixer process description also include a Filler Cut Scale for weighing filler powders used in each mixer, with a maximum throughput of 2,400 pounds per hour, with PM emissions also controlled by SMC Baghouse B2 exhausting to Stack S2. Also included is the Rosite Resin Blending Mixer used to blend resins for the Rosite mixers, with no emission controls.
- (f) One (1) electric oven, identified as O3, approved for construction in 2013, for treatment of unusable raw materials prior to disposal, with a maximum capacity of 1,600 pounds per hour, with no emission controls and exhausting to Stack S6.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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

- (a) One (1) laboratory bulk molding compound (BMC) mixer, identified as Rosite Mixer #16, constructed in 2005, for Rosite production, with a maximum throughput of 10 pounds per hour, to model the operation of Rosite Mixer #11 through Rosite #14 with no emission controls. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation.
- (b) Four (4) laboratory bulk molding compound (BMC) mixers, identified as BMC Mixer #17 through BMC Mixer #20, for BMC production, with BMC Mixer #17 and BMC Mixer #18 each having a maximum throughput of 150 pounds per hour, with PM emissions controlled by Lab Baghouse B3 exhausting to stack S3, and BMC Mixer #19 and BMC Mixer #20, each having a maximum throughput of 20 pounds per hour, with no emission controls. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation.
- (c) One (1) Vazo Blender, constructed in 2005, with a maximum throughput of 180 batches of material per year, with each batch composed of 758 pounds of raw materials, with PM emissions controlled by Vazo Baghouse B5, exhausting to Stack S5. [40 CFR Part 63, Subpart WWWW]
- (d) Three (3) SMC laboratory mixers identified as Mixer #23, Mixer #24, with a maximum capacity of 50 lbs/hr, and Mixer #25 with a maximum process capacity of 15 lbs/hr with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]
- (e) One (1) PolyM Dispersion Mixer, used to set up scrap SMC and BMC material through polymerization, with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]
- (f) QA/QC process involving laboratory testing and sample molding presses, with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]

- (g) Cleaning solvent identified as IDI Ship Shape having a vapor pressure equal to or less than 0.7kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F).
- (h) The following equipment related to manufacturing activities not resulting in the emission of HAPs: cutting torches, soldering equipment, welding equipment.
- Solvent recycling systems with batch capacity less than or equal to 100 gallons.
- (j) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (k) Paved and unpaved roads and parking lots with public access.
- (I) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower
- (m) Stationary fire pumps.
- (n) A laboratory as defined in 326 IAC 2-7-1(21)(G), which includes the following:
 - One (1) 24" sheet molding compound SMC line, identified as Laboratory SMC Line 3, located in the laboratory, with no emission controls. [40 CFR 63, Subpart WWWW]
 - 2. Two (2) small laboratory extruders, with no pollution control equipment and exhausting inside the building.
- (o) Eleven (11) aboveground polyester resin storage tanks, identified as T_1 through T_{11} . Tanks T_1 through T_6 have a maximum capacity of 7,200 gallons, tank T_7 has a maximum capacity of 6,000 gallons, and tanks T_8 through T_{11} each have a capacity of 5,400 gallons. Each aboveground tank is equipped with one vent and each has the potential to emit less than 1 ton VOC/year.
- (p) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
- (q) Two (2) saws, identified as SA₁ and SA₂, for plastic sheet production, each with a maximum capacity of 20 pounds per hour, with no emission controls and no outside exhaust.
- (r) One (1) stationary emergency generator burning diesel fuel, with a maximum output of 10 KW, manufactured in 2012. Under 40 CFR 60, Subpart IIII, this is an affected unit.

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

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

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

Industrial Dielectrics, Inc. dba IDI Composites International Page 7 of 38 Noblesville, Indiana T057-31912-00042

Permit Reviewer: Roger Osburn

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, T049-24588-00018, 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).

Industrial Dielectrics, Inc. dba IDI Composites International Page 9 of 38 Noblesville, Indiana T057-31912-00042

Permit Reviewer: Roger Osburn

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

- (a) 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.

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

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

Compliance and Enforcement Branch), or

Telephone Number: 317-233-0178 (ask for Office of Air Quality,

Compliance and Enforcement Branch) Facsimile Number: 317-233-6865

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

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

Indiana Department of Environmental Management Compliance 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)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.
- (g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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:

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(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;
- 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 T049-24588-00018 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.

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

Indiana Department of Environmental Management
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),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.
 - Such records shall consist of all information required to be submitted to IDEM, OAQ in the notices specified in 326 IAC 2-7-20(b)(1), (c)(1), and (e)(2).
- (b) The Permittee may make Section 502(b)(10) of the Clean Air Act changes (this term is defined at 326 IAC 2-7-1(36)) without a permit revision, subject to the constraint of 326 IAC 2-7-20(a). For each such Section 502(b)(10) of the Clean Air Act change, the required written notification shall include the following:
 - (1) A brief description of the change within the source;
 - (2) The date on which the change will occur;
 - (3) Any change in emissions; and
 - (4) Any permit term or condition that is no longer applicable as a result of the change.

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require 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.

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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.

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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 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.7 Performance Testing [326 IAC 3-6]

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

Indiana Department of Environmental Management Compliance and Enforcement Branch, Office of Air Quality

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

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

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

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

Unless otherwise specified in this permit, 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.

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C.10 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

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

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

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

- (a) The Permittee shall 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.12 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.13 Response to Excursions or Exceedances [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;
 - 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.
 - Upon detecting an excursion or exceedance, subject to CAM, the (1) 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:

- 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

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to normal or usual manner of operation.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or

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

- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

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

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall 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.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]
 In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2004 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1(32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.

The statement must be submitted to:

Indiana Department of Environmental Management Technical Support and Modeling Section, Office of Air Quality 100 North Senate Avenue MC 61-50 IGCN 1003 Indianapolis, Indiana 46204-2251

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

(a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the

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

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported 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.18 Compliance with 40 CFR 82 and 326 IAC 22-1

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

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SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) 39" sheet molding compound (SMC) line, identified as SMC Line 2, consisting of a Large Mixer, constructed in 2002, relocated from the laboratory, also including other mixers where pigment and thickeners are added, for SMC production, and the 39" SMC machine. The maximum throughput is 5,832 pounds per hour, with PM emissions from the Large Mixer and glass chopper controlled by SMC baghouse B2, exhausting to stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.
- (b) One (1) sheet molding compound (SMC) mixer, identified as SMC Drum Mixer, constructed prior to 1980, for (SMC) production. The maximum throughput is 1,200 pounds per hour, with PM emissions controlled by SMC Baghouse B2 exhausting to stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.
- (c) One (1) 48" sheet molding compound (SMC) line, identified as SMC Line 1, consisting of a Large Mixer, originally constructed prior to 1980 and modified in 2012, also including other mixers where pigment and thickener are added, for SMC production, and the 48" SMC Machine. The maximum throughput is 7,200 pounds per hour, with PM emissions from the Large Mixer and glass chopper controlled by SMC baghouse B2 exhausting to stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.
- (d) Six (6) bulk molding compound (BMC) mixers, identified as BMC Mixer #1 through BMC Mixer #5, constructed after 1980, and BMC Mixer #6, constructed in 2008, for bulk molding compound (BMC) production, with BMC Mixer #1 through BMC Mixer #5 each having a maximum throughput of 1,200 pounds per hour, and BMC Mixer #6 having a maximum throughput of 2,200 lbs/hr, with PM emissions from all BMC mixers controlled by BMC Baghouse B1 and all exhausting to stack S1. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation. The BMC mixer process description also include a Filler Cut Scale for weighing filler powders used in each mixer, withy a maximum throughput of 492 pounds per hour, with PM emissions also controlled by BMC Baghouse B1 exhausting to Stack S1. Also included is the final packaging operations associated with the BMC material from these mixers, including two (2) compound feeders and six (6) extruders used to package BMC material for shipping, with no emission controls.
- (e) Four (4) bulk molding compound (BMC) mixers, identified as Rosite Mixer #L1 through Rosite Mixer #L4, constructed in 2005, for Rosite production, each with a maximum capacity of 1,000 pounds per hour with PM emissions from all Rosite mixers controlled by SMC baghouse B2, exhausting to Stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation. The Rosite mixer process description also include a Filler Cut Scale for weighing filler powders used in each mixer, with a maximum throughput of 2,400 pounds per hour, with PM emissions also controlled by SMC Baghouse B2 exhausting to Stack S2. Also included is the Rosite Resin Blending Mixer used to blend resins for the Rosite mixers, with no emission controls.

Insignificant Activities

(a) One (1) laboratory bulk molding compound (BMC) mixer, identified as Rosite Mixer #16, constructed in 2005, for Rosite production, with a maximum throughput of 10 pounds per hour, to model the operation of Rosite Mixer #11 through Rosite #14 with

no emission controls. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation.

- (b) Four (4) laboratory bulk molding compound (BMC) mixers, identified as BMC Mixer #17 through BMC Mixer #20, constructed prior to 1980, for BMC production, with BMC Mixer #17 and BMC Mixer #18 each having a maximum throughput of 150 pounds per hour, with PM emissions controlled by Lab Baghouse B3 exhausting to stack S3, and BMC Mixer #19 and BMC Mixer #20, each having a maximum throughput of 20 pounds per hour, with no emission controls. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation.
- (c) One (1) Vazo Blender, constructed in 2005, with a maximum throughput of 180 batches of material per year, with each batch composed of 758 pounds of raw materials, with PM emissions controlled by Vazo Baghouse B5, exhausting to Stack S5. [40 CFR Part 63, Subpart WWWW]
- (d) Three (3) SMC laboratory mixers identified as Mixer #23, Mixer #24, with a maximum capacity of 50 lbs/hr, and Mixer #25 with a maximum process capacity of 15 lbs/hr with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]
- (e) One (1) PolyM Dispersion Mixer, used to set up scrap SMC and BMC material through polymerization, with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]
- (f) QA/QC process involving laboratory testing and sample molding presses, with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]
- (g) A laboratory as defined in 326 IAC 2-7-1(21)(G) which includes the following:
 - 1. One (1) 24" sheet molding compound SMC line, identified as SMC Line 3, located in the laboratory. [40 CFR Part 63, Subpart WWWW]

(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 Particulate Matter (PM) [326 IAC 6-3-2(e)][326 IAC 2-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices and Control Technologies) and 326 IAC 2-2 (Prevention of Significant Deteiroration), the allowable PM emission rate from the fiberglass facilities shall not exceed the rates outlined below:

Facility	P = Process Weight tons/hr	E = Allowable Emissions lbs/hr
SMC Drum Mixer	0.6	2.91
39" SMC Line 2	2.92	8.40
48" SMC Line 1	3.60	9.67
BMC Mixer #1 - #5 (each)	0.6	2.91
BMC Mixer #6	1.1	4.37

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Rosite Mixer #L1 - #L4 (each)	0.50	2.58
BMC Mixer #15	0.05	0.551
BMC Mixer #17 - #18 (each)	0.075	0.551

The pounds per hour PM limitations shall be calculated with the following equation:

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

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

Compliance with these limitations will render the requirements of 326 IAC 2-2 (Prevention of Significant Deteiroration) not applicable to the source for particulates.

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

A Preventive Maintenance Plan is required for these emission units and control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the Preventive Maintenance Plan required by this condition.

D.1.3 Particulate Matter (PM)

- (a) The SMC baghouse B2 shall be in operation at all times when raw material is being added into or blended product is being removed from the SMC mixers associated with the 39" SMC Line, the 48" SMC Line and the SMC Drum Mixer, as well as the BMC mixers for Rosite production identified as Rosite Mixer #L1 through Rosite Mixer #L4, in order to comply with the PM limits under 326 IAC 6-3-2, in Condition D.1.1.
- (b) The BMC Baghouse B1 shall be in operation at all times when raw material is being added into or blended product is being removed from the BMC mixers identified as BMC Mixer #1 through BMC Mixer #6, in order to comply with the PM limits under 326 IAC 6-3-2, in Condition D.1.1.
- (c) The Lab Baghouse B3 shall be in operation at all times when raw material is being added into or blended product is being removed from the BMC laboratory mixers identified as BMC Mixer #17 and BMC Mixer #18 in order to comply with the PM limits under 326 IAC 6-3-2, in Condition D.1.1.

Compliance Monitoring Requirements [326 IAC 2-7-5(3)]

D.1.4 Monitoring [40 CFR Part 64]

(a) Daily visible emissions notations of the stack exhausts of BMC Baghouse B1 exhausting through Stack S1, SMC Baghouse B2 exhausting through Stack S2, and Lab Baghouse B3 exhausting through Stack S3, shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing 80% of the time the process is in operation, not counting startup or shut down time. In the case of discontinuous operations, readings must be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee that has worked at the plant least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. If abnormal emissions are observed, the Permittee will take reasonable steps. Section C - Response to Excursions or Exceedances,

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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) The Permittee shall record the pressure drop across baghouses B1, B2, and B3 at least once per day when the processes are in operation and exhausting to the atmosphere. If the pressure drop is outside the normal range of 0.5 to 6.0 inches of water, or a range established during the latest stack test, then the Permittee must take reasonable 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.
- (c) In the case of broken or failed bag detection in a continuously operated process, the failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced. If the baghouse controls emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line. Operations may continue only if the event qualifies as an emergency as described in Section B Emergency Provisions.

SECTION E.1

FACILITY OPERATION CONDITIONS

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

- (a) One (1) 39" sheet molding compound (SMC) line, identified as SMC Line 2, consisting of a Large Mixer, constructed in 2002, relocated from the laboratory, also including other mixers where pigment and thickeners are added, for SMC production, and the 39" SMC machine. The maximum throughput is 5,832 pounds per hour, with PM emissions from the Large Mixer and glass chopper controlled by SMC baghouse B2, exhausting to stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.
- (b) One (1) sheet molding compound (SMC) mixer, identified as SMC Drum Mixer, constructed prior to 1980, for (SMC) production. The maximum throughput is 1,200 pounds per hour, with PM emissions controlled by SMC Baghouse B2 exhausting to stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.
- (c) One (1) 48" sheet molding compound (SMC) line, identified as SMC Line 1, consisting of a Large Mixer, originally constructed prior to 1980 and modified in 2012, also including other mixers where pigment and thickener are added, for SMC production, and the 48" SMC Machine. The maximum throughput is 7,200 pounds per hour, with PM emissions from the Large Mixer and glass chopper controlled by SMC baghouse B2 exhausting to stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.
- (d) Six (6) bulk molding compound (BMC) mixers, identified as BMC Mixer #1 through BMC Mixer #5, constructed after 1980, and BMC Mixer #6, constructed in 2008, for bulk molding compound (BMC) production, with BMC Mixer #1 through BMC Mixer #5 each having a maximum throughput of 1,200 pounds per hour, and BMC Mixer #6 having a maximum throughput of 2,200 lbs/hr, with PM emissions from all BMC mixers controlled by BMC Baghouse B1 and all exhausting to stack S1. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation. The BMC mixer process description also include a Filler Cut Scale for weighing filler powders used in each mixer, withy a maximum throughput of 492 pounds per hour, with PM emissions also controlled by BMC Baghouse B1 exhausting to Stack S1. Also included is the final packaging operations associated with the BMC material from these mixers, including two (2) compound feeders and six (6) extruders used to package BMC material for shipping, with no emission controls.
- (e) Four (4) bulk molding compound (BMC) mixers, identified as Rosite Mixer #L1 through Rosite Mixer #L4, constructed in 2005, for Rosite production, each with a maximum capacity of 1,000 pounds per hour with PM emissions from all Rosite mixers controlled by SMC baghouse B₂, exhausting to Stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation. The Rosite mixer process description also includes a Filler Cut Scale for weighing filler powders used in each mixer, with a maximum throughput of 2,400 pounds per hour, with PM emissions also controlled by SMC Baghouse B2 exhausting to Stack S2. Also included is the Rosite Resin Blending Mixer used to blend resins for the Rosite mixers, with no emission controls.

Insignificant Activities

(a) One (1) laboratory bulk molding compound (BMC) mixer, identified as Rosite Mixer #16, constructed in 2005, for Rosite production, with a maximum throughput of 10 pounds per hour, to model the operation of Rosite Mixer #11 through Rosite #14 with no emission controls. Under 40 CFR 63, Subpart WWWW, this is considered a bulk

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molding compound manufacturing operation.

(b) Four (4) laboratory bulk molding compound (BMC) mixers, identified as BMC Mixer #17 through BMC Mixer #20, constructed prior to 1980, for BMC production, with BMC Mixer #17 and BMC Mixer #18 each having a maximum throughput of 150 pounds per hour, with PM emissions controlled by Lab Baghouse B3 exhausting to stack S3, and BMC Mixer #19 and BMC Mixer #20, each having a maximum throughput of 20 pounds per hour, with no emission controls. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation.

- (c) One (1) Vazo Blender, constructed in 2005, with a maximum throughput of 180 batches of material per year, with each batch composed of 758 pounds of raw materials, with PM emissions controlled by Vazo Baghouse B5, exhausting to Stack S5. [40 CFR Part 63, Subpart WWWW]
- (d) Three (3) SMC laboratory mixers identified as Mixer #23, Mixer #24, with a maximum capacity of 50 lbs/hr, and Mixer #25 with a maximum process capacity of 15 lbs/hr with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]
- (e) One (1) PolyM Dispersion Mixer, used to set up scrap SMC and BMC material through polymerization, with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]
- (f) QA/QC process involving laboratory testing and sample molding presses, with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]
- (g) One (1) 24" sheet molding compound SMC line, identified as Laboratory SMC Line 3, located in the laboratory. [40 CFR Part 63, Subpart WWWW]

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

E.1.1 General Provisions Relating to NESHAP WWWW [326 IAC 20-1] [40 CFR Part 63, Subpart A]

- (a) The provisions of 40 CFR Part 63, Subpart A General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart WWWW.
- E.1.2 National Emission Standards for Reinforced Plastics Composites Production [40 CFR Part 63, Subpart WWWW]
 - (a) Pursuant to 40 CFR Part 63, Subpart WWWW, the Permittee shall comply with the provisions of National Emission Standards for Plastic Composites Production which are incorporated by reference as 326 IAC 20-56-1, for the units as specified above. A copy of this rule is included as Attachment A. This source is subject to the following requirements of 40 CFR Part 63, Subpart WWWW:
 - (1) 40 CFR 63.5800
 - (2) 40 CFR 63.5805(a)
 - (3) 40 CFR 63.5830(b)
 - (4) 40 CFR 63.5835(a) and (c)
 - (5) 40 CFR 63.5840
 - (6) 40 CFR 63.5860(a)
 - (7) 40 CFR 63.5895(b) and (e)
 - (8) 40 CFR 63.5900(a)(4),(b), and (e)
 - (9) 40 CFR 63.5905

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- (10) 40 CFR 63.5910(a),(b),(c),(d),(g) and (h)
- (11) 40 CFR 63.5915(a) and (d)
- (12) 40 CFR 63.5920
- (13) 40 CFR 63.5925
- (14) 40 CFR 63.5930
- (15) 40 CFR 63.5935
- (16) Table 1 to 40 CFR 63 Subpart WWWW (the applicable portions)
- (17) Table 3 to 40 CFR 63 Subpart WWWW (the applicable portions)
- (18) Table 4 to 40 CFR 63 Subpart WWWW (the applicable portions)
- (19) Table 5 to 40 CFR 63 Subpart WWWW (the applicable portions)
- (20) Table 7 to 40 CFR 63 Subpart WWWW (the applicable portions)
- (21) Table 8 to 40 CFR 63 Subpart WWWW (the applicable portions)
- (22) Table 9 to 40 CFR 63 Subpart WWWW (the applicable portions)
- (23) Table 13 to 40 CFR 63 Subpart WWWW (the applicable portions)
- (24) Table 14 to 40 CFR 63 Subpart WWWW (the applicable portions)

Noblesville, Indiana

Permit Reviewer: Roger Osburn

SECTION E.2

EMISSIONS UNIT OPERATION CONDITIONS

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

Insignificant Activities

(r) one (1) stationary emergency generator burning diesel fuel, with a maximum output of 10 KW, manufactured in 2012. Under 40 CFR 60, Subpart IIII, this is an affected unit.

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

General Provisions Relating to NSPS Subpart IIII [326 IAC 12-1] [40 CFR Part 60, Subpart A] E.2.1

The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated as 326 IAC 12-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart IIII.

Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 E.2.2 CFR Part 60, Subpart IIII]

- Pursuant to 40 CFR Part 60, Subpart IIII, the Permittee shall comply with the provisions (a) of NSPS Standards of Performance for Stationary Compression Ignition Internal Combustion Engines which are incorporated by reference as 326 IAC 12-1-1, for the unit as specified above. A copy of this rule is included as Attachment B. This source is subject to the following requirements of 40 CFR Part 60, Subpart IIII:
 - (1) 40 CFR 60.4200(a)(2)(i),(4)
 - 40 CFR 60.4205(b) (2)
 - 40 CFR 60.4206 (3)
 - 40 CFR 60.4207(b) (4)
 - 40 CFR 60.4209 (5)
 - 40 CFR 60.4211(a),(c),(f),(g)(1) (6)
 - 40 CFR 60.4212 (7)
 - 40 CFR 60.4214(b),(c) (8)
 - 40 CFR 60.4219 (9)
 - (10)Table 2 to 40 CFR 60 Subpart IIII (the applicable portions)
 - Table 4 to 40 CFR 60 Subpart IIII (the applicable portions) (11)

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Industrial Dielectrics, Inc. dba IDI Composites International

Noblesville, Indiana

Permit Reviewer: Roger Osburn

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

Industrial Dielectrics, Inc. dba IDI Composites International 407 South 7th Street, Noblesville, IN 46060 Source Name:

Source Address:

Part 70 Permit No.: T057-31912-00042

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:

Industrial Dielectrics, Inc. dba IDI Composites International

Noblesville, Indiana

Permit Reviewer: Roger Osburn

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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 Phone: 317-233-0178 Fax: 317-233-6865

PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT

Source Name: Industrial Dielectrics, Inc. dba IDI Composites International

Source Address: 407 South 7th Street, Noblesville, IN 46060

Part 70 Permit Renewal No.: T057-31912-00042

Th	iis	form	consis	ts of 2	2 pages	

Page 1 of 2

- $\hfill\Box$ 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:
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:
Vas 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:
stimated 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:
applicable, describe the reasons why continued operation of the facilities are necessary to prevent mminent 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:

Industrial Dielectrics, Inc. dba IDI Composites International

Noblesville, Indiana

Permit Reviewer: Roger Osburn

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

PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Industrial Dielectrics, Inc. dba IDI Composites International

Source Address: 407 South 7th Street, Noblesville, IN 46060

Part 70 Permit Renewal No.: T057-31912-00042

Months: to	Year:
	Page 1 of 2
This report shall be submitted quarterly based on a requirements of this permit, the date(s) of each devite response steps taken must be reported. A devia applicable requirement that exists independent of the schedule stated in the applicable requirement and Additional pages may be attached if necessary. If marked "No deviations occurred this reporting periods."	viation, the probable cause of the deviation, and ation required to be reported pursuant to an the permit, shall be reported according to the does not need to be included in this report. The no deviations occurred, please specify in the box
☐ NO DEVIATIONS OCCURRED THIS REPORTI	NG PERIOD.
☐ THE FOLLOWING DEVIATIONS OCCURRED	THIS REPORTING PERIOD
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
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:	

Indiana Department of Environmental Management Office of Air Quality Attachment A to a Part 70 Operating Permit Renewal

Source Background and Description

Source Name: Industrial Dielectrics, Inc. dba IDI Composites

International

Source Location: 407 South 7th Street, Noblesville, IN 46060

County: Hamilton SIC Code: 3087

Operation Permit Renewal No.: T057-31912-00042

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 sitespecific organic HAP emissions factors discussed in §63.5796. The emission factor calculation should include any and all emission reduction techniques used including any add-on controls. If you are using vapor suppressants to reduce HAP emissions, you must determine the vapor suppressant effectiveness (VSE) by conducting testing according to the procedures specified in appendix A to subpart WWWW of 40 CFR part 63. If you are using an add-on control device to reduce HAP emissions, you must determine the add-on control factor by conducting capture and control efficiency testing using the procedures specified in §63.5850. The organic HAP emissions factor calculated from the equations in Table 1 to this subpart, or a site-specific emissions factor, is multiplied by the add-on control factor to calculate the organic HAP emissions factor after control. Use Equation 1 of this section to calculate the add-on control factor used in the organic HAP emissions factor equations.

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

Where:

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

- (2) If the calculated emission factor is less than or equal to the appropriate emission limit, you have demonstrated that this process stream complies with the emission limit in Table 3 to this subpart. It is not necessary that all your process streams, considered individually, demonstrate compliance to use this option for some process streams. However, for any individual resin or gel coat you use, if any of the process streams that include that resin or gel coat are to be used in any averaging calculations described in paragraphs (b) through (d) of this section, then all process streams using that individual resin or gel coat must be included in the averaging calculations.
- (b) Demonstrate that, on average, you meet the individual organic HAP emissions limits for each combination of operation type and resin application method or gel coat type. Demonstrate that on average you meet the individual organic HAP emissions limits for each unique combination of operation type and resin application method or gel coat type shown in Table 3 to this subpart that applies to you.
- (1)(i) Group the process streams described in paragraph (a) to this section by operation type and resin application method or gel coat type listed in Table 3 to this subpart and then calculate a weighted average emission factor based on the amounts of each individual resin or gel coat used for the last 12 months. To do this, sum the product of each individual organic HAP emissions factor calculated in paragraph (a)(1) of this section and the amount of neat resin plus and neat gel coat plus usage that corresponds to the individual factors and divide the numerator by the total amount of neat resin plus and neat gel coat plus used in that operation type as shown in Equation 2 of this section.

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

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

(Eq. 2)

Where:

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

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

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

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

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

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

Where:

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

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

n=number of operations.

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

Actual Weighted

Average organic

HAP Emissions

Factor

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

Where:

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

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

n=number of operations.

(3) Compare the values calculated in paragraphs (c)(1) and (2) of this section. If each 12-month rolling average organic HAP emissions factor is less than or equal to the corresponding 12-month rolling average organic HAP emissions limit, then you are in compliance.

- (d) Meet the organic HAP emissions limit for one application method and use the same resin(s) for all application methods of that resin type. This option is limited to resins of the same type. The resin types for which this option may be used are noncorrosion-resistant, corrosion-resistant and/or high strength, and tooling.
- (1) For any combination of manual resin application, mechanical resin application, filament application, or centrifugal casting, you may elect to meet the organic HAP emissions limit for any one of these application methods and use the same resin in all of the resin application methods listed in this paragraph (d)(1). Table 7 to this subpart presents the possible combinations based on a facility selecting the application process that results in the highest allowable organic HAP content resin. If the resin organic HAP content is below the applicable value shown in Table 7 to this subpart, the resin is in compliance.
- (2) You may also use a weighted average organic HAP content for each application method described in paragraph (d)(1) of this section. Calculate the weighted average organic HAP content monthly. Use Equation 2 in paragraph (b)(1) of this section except substitute organic HAP content for organic HAP emissions factor. You are in compliance if the weighted average organic HAP content based on the last 12 months of resin use is less than or equal to the applicable organic HAP contents in Table 7 to this subpart.
- (3) You may simultaneously use the averaging provisions in paragraph (b) or (c) of this section to demonstrate compliance for any operations and/or resins you do not include in your compliance demonstrations in paragraphs (d)(1) and (2) of this section. However, any resins for which you claim compliance under the option in paragraphs (d)(1) and (2) of this section may not be included in any of the averaging calculations described in paragraph (b) or (c) of this section.
- (4) You do not have to keep records of resin use for any of the individual resins where you demonstrate compliance under the option in paragraph (d)(1) of this section unless you elect to include that resin in the averaging calculations described in paragraph (d)(2) of this section.

[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 wetout 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.

$$PR = \frac{\text{(Inlet)} - \text{(Outlet)}}{\text{(Inlet)}} \times 100 \quad \text{(Eq. 1)}$$

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.

$$PR = \frac{(WAE_{ci} + O_{d}) - (WAE_{co} + O_{co})}{(WAE_{ci} + WAE_{n} + O_{ci} + O_{n})} \times 100$$
 (Eq. 2)

Where:

PR=percent reduction;

WAEici=wet-out area organic HAP emissions, lbs per year, vented to a control device;

WAEi_u=wet-out area organic HAP emissions, lbs per year, not vented to a control device;

Oj_u=oven organic HAP emissions, lbs per year, not vented to a control device;

Ojci=oven organic HAP emissions, lbs per year, vented to a control device;

WAEi_{co}=wet-out area organic HAP emissions, lbs per year, from the control device outlet;

Oi_{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.

$$PR = \frac{\left(\sum_{i=1}^{m} WAEi_{ci} + \sum_{j=1}^{n} Oj_{ci}\right) - \left(\sum_{i=1}^{m} WAEi_{co} + \sum_{j=1}^{n} Oj_{co}\right)}{\left(\sum_{i=1}^{m} WAEi_{ci} + \sum_{j=1}^{n} Oj_{ci} + \sum_{i=1}^{m} WAEi_{u} + \sum_{j=1}^{n} Oj_{u}\right)} \times 100$$
 (Eq. 3)

Where:

PR=percent reduction;

WAEi_{ci}=wet-out area organic HAP emissions from wet-out area i, lbs per year, sent to a control device;

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;

Ojci=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]

Noblesville, Indiana Permit Reviewer: RLO

§ 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, = 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.

$$E = \frac{\sum_{i=1}^{m} WAE_{ui} + \sum_{i=1}^{o} WAE_{ai} + \sum_{j=1}^{n} O_{uj} + \sum_{j=1}^{p} O_{qj}}{(R + G)}$$
 (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

WAEci=controlled organic HAP emissions from wet-out area i, lbs per year

O_{ui}=uncontrolled organic HAP emissions from oven j, lbs per year

O_{ci}=controlled organic HAP emissions from oven j, lbs per year

i=number of wet-out areas

i=number of ovens

m=number of wet-out areas uncontrolled

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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).

Noblesville, Indiana Permit Reviewer: RLO

[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 \geq 12.0 or \leq 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

As specified in \$63.5810, dentrifugal casting process	,	use the equations in the following table to calculate organic MAP emissions factors for specific open molding and streams:	s organic HAP emissions factors	
If your operation type is a new or existing	And you use	With	Use this organic HAP Endstons Factor (EF) Equation for materials with less than 33 percent organic HAP (19 percent organic HAP 234 nematemised gel cost)	One this organic HAP emissions Factor (EF) Equation for naterials With 33 percent or more organic HAP of (19 percent for nonatomized gel coat)
1. open molding operation	a. manual resin application	i. nonvapor-suppressed resin	BF = 0.126 x MAP x 2000	EP = {{0.286 x %HAP}-0.0529} x 2000
		ii. vapor-suppressed resin).126 x *HAP x 3000 5 x VSE factor))	<pre>RP = (0.286 x %HAP)-0.0529] x 2000 x (1-[0.5 x VSE factox))</pre>
		iii. vacuum bagging/clomed- mold curing with roll out		EF = ({0.286 x NHAP}-0.0529] x 2000 x 0.8
			RP = (0.126 x *HAP x 2000 x 0.5	. [10.286 x *HAP]-0.0529) x 2000
	b. Atomized mechanical resin application	i. nonvapor-suppressed resin	EF = 0.169 x 8HAP x 2000	EF = ((0.714 x MAP)-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 = {{0.714 x %BAP}-0.18} x 2000 x C
		iv, vacuum bagging/closed-moid curing without roll-out	EF = 0.169	BF = ((0.714 x 5HAP)-0.18) x 2000 x 0.55
	c. nonatomized nechanical resin application	i. nonvapor-suppressed resin	SF = 0.107 x WHAP x 2000	BF = {{0.157 x MHAP}-0.0165} x 2000
		ii. vapor-suppressed resin	EF = 0.107 x \$KAP x 2000 x [1-(0.45 x VSE factor])	St = ([0.157 x WRAP]-0.0155 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 0.05
		<pre>iv. vacuum bagging/closed-mold ouring without roll-out</pre>		BP = ((0.157 x %MAP)-0.0165) x 2000 x 0.55
	 d. atomised mechanical resin application with robotic or autgmated spray control 	nonvapor-suppressed resin	EF = 0.169 x \$HAP x 2000 x	EF = 0.77 x ((0.714 x %HAF)-0.18) x 2000
	e. filament application 6	i, nonvapor-suppressed resin	EP = 0.184 x WHAP x 2000	EP = ((0.2746 x 8HAP)-0.0298; x 2000
		ii. vapor-suppressed resin	SF = 0.12 x %HAP x 2000	R? = [10.2746 x bHAP]-0.0298} x 2000 x 0.65
	 atomized spray gel coat application 	nonvapor-suppressed gel	SP = 0.445 x \$HAP x 2000	EZ = ((1.03646 x %HAP)-0.195) x 2000

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	 nonatomized spray gel 	nonvapor-suppressed gel RF = 0.185 x WAAP x 2000	RF = 0.185 x	VHAP x 2000	EF = ((0.4506 x WHAP)-0.0505) x 2000
	coat application	cost			coat application coat
	h. atomized spray gel cost	nonvapor-suppressed gel	EP = 0.445 x	*HAP x 2000 x	EP = 0.445 x %HAP x 2000 x EP = ((1.03646 x %HAP)-0.195) x 2000
	application using	coat	0.73		x 0.73
	robotic or automated				
	spray				
centrifugal	a. heated air blown through	nonvapor-suppressed resin	EF = 0.558 x	(%HAP) x 2000	nonvapor-suppressed resin RF = 0.558 x (%HAP) x 2000 RF = 0.558 x (NHAD) x 2000
casting TR	molds				nolds
operations	b. vented nolds, but air	nonvapor-suppressed resin EF = 0.026 x (%HAP) x 2000	EF = 0.026 x	(%HAP) x 2000	EF = 0.026 x (WARP) x 2000
	vented through the molds				
	is not heated				

Pootnotes to Table 1

These equations may not be the most appropriate mathod 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. emission limits in subpart NWWW emission factors to demonstrate compliance with the calculating use in The equations in this table are intended for

2 or gel coat applied. gel cost prior add-on control resin or gel put as 0.33, 3 s multiply the RF above by the organic NAP per ton of resin o * Percent HAF means total weight percent of organic HAP (styrene, methy) methacrylate, and any other organic HAP) in the res the addition of fillers, catalyst, and promoters. Input the percent HAP as a decimal, i.e., 33 percent HAP should be input operation with an add-on control device emissions factors have units of lbs of o the organic HAP ² To obtain the organic HAP emissions factor value for calculated using Equation 1 of \$63.5810. The organic P

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

This equation is based on a organic MAP 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 apray guns must use the appropriate mechanical atomized or mechanical nonatomized organic NAP emissions factor equation. Automated or robotic spray systems using nonatomized spray should use the This equation is based on a organic HAP emissions factor equation developed appropriate nonatomized mechanical resin application equation.

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

ö

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

Bit 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 closed centrifugal casting mold. If the closed centrifugal casting mold during spinning, use the appropriate centrifugal casting to calculate an emission factor for the portion of the process where spinning and cure court. If a centrifugal casting operation to an egen centrifugal casting operation uses mechanical or manual resin emplication techniques to apply resin to an egen 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	publication date of this subpart	i. April 21, 2006, or ii. You must accept and meet an enforceable HAP emissions limit below the major source threshold prior to April 21, 2006.
2. An existing source that is an area source	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	organic HAP emissions to 100 tpy or more from these operations, which requires that the facility must now	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		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	organic HAP emissions to 100 tpy or more from the combination of these operations, which requires that the facility must now meet the standards	compliance report indicates your facility

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
resistant and/or high strength	a. mechanical resin application b. filament application c. manual resin application	113 lb/ton. 171 lb/ton. 123 lb/ton.
CR/HS	a. mechanical resin application b. filament application c. manual resin application	88 lb/ton. 188 lb/ton. 87 lb/ton.

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3. open molding—tooling	a. mechanical resin application b. manual resin application	254 lb/ton. 157 lb/ton.
4. open molding—low-flame spread/low-smoke products	a. mechanical resin application b. filament application c. manual resin application	497 lb/ton. 270 lb/ton. 238 lb/ton.
5. open molding—shrinkage controlled resins ²	a. mechanical resin application b. filament application c. manual resin application	354 lb/ton. 215 lb/ton. 180 lb/ton.
6. open molding—gel coat ³	a. tooling gel coating b. white/off white pigmented gel coating c. all other pigmented gel coating d. CR/HS or high performance gel coat e. fire retardant gel coat f. clear production gel coat	440 lb/ton. 267 lb/ton. 377 lb/ton. 605 lb/ton. 854 lb/ton. 522 lb/ton.
7. centrifugal casting—CR/HS	a. resin application with the mold closed, and the mold is vented during spinning and cure b. resin application with the mold closed, and the mold is not vented during spinning and cure c. resin application with the mold open, and the mold is vented during spinning and cure d. resin application with the mold open, and the mold is not vented during spinning and cure	25 lb/ton. ⁴ NA—this is considered to be a closed molding operation. 25 lb/ton. ⁴ Use the appropriate open molding emission limit. ⁵
8. centrifugal casting—non-CR/HS	a. resin application with the mold closed, and the mold is vented during spinning and cure b. resin application with the mold closed, and mold is not vented during the spinning and cure c. resin application with the mold open, and the mold is vented during spinning and cure d. resin application with the mold open, and the mold is not vented during spinning and cure	20 lb/ton. ⁴ NA—this is considered to be a closed molding operation. 20 lb/ton. ⁴ 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	N/A	reduce total organic HAP emissions by at least 58.5
lamination/casting		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.

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

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

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

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

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

[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
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

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

	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 wetout area(s), ii. not permit point suction of ambient air in the wet-out area(s) unless that air is directed to a control device, iii. use devices such as deflectors, baffles, and curtains when practical to reduce air flow velocity across the wet-out area(s), 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, vi. cover all reservoirs, tanks, sumps, or HAP-containing materials storage vessels except when they are being charged or filled, and vii. cover or shield from ambient air resin delivery systems to the wet-out area(s) from reservoirs, tanks, or sumps where practical.

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

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
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	1 lb/ton.

	through the mold	
9. SMC Manufacturing	N/A	2.4 lb/ton.

¹Organic 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.

³Centrifugal 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.

⁴Centrifugal 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
	for a PTE	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 route organic HAP	a. Determine the capture efficiency of each enclosure used to	204B through E of	(1) Enclosures that do not meet the requirements for a PTE must determine the capture efficiency by constructing a temporary total enclosure

²These 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.

emissions to an add- on control device that is not a PTE	capture organic HAP emissions sent to an add-on control device	CFR part 51, or	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

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

[70 FR 50133, Aug. 25, 2005]

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	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 rolling average 1 year after the appropriate compliance date, and/or ii. you demonstrate that any individual resins or gel coats not included in (i) above, as applied, meet their applicable emission limits, or iii. you demonstrate 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.
casting, continuous	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		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

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

³Nonatomized mechanical application must be used.

		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 HAP emissions by at least 60 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 60 percent by weight, and/or 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
operation using		the owner or operator submits a certified statement in the notice of
	For machines with multiple molds, one	

	loader. For machines fed by hoppers,	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	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	containing storage containers are
4. an existing or new SMC manufacturing operation	to the doctor box on each SMC	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	atmosphere while the mixing agitator is turning, except that venting is allowed	the owner or operator submits a certified statement in the notice of compliance status that mixers are not actively vented to the atmosphere when the agitator is turning except

	safety	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), ii. not permit point suction of ambient air in the wet-out area(s) unless that air is directed to a control device, iii. use devices such as deflectors, baffles, and curtains when practical to reduce air flow velocity across the wet-out area(s), 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, vi. clover all reservoirs, tanks, sumps, or HAP-containing materials storage vessels except when they are being charged or filled, and 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		i. Annual uncontrolled wet-out area organic HAP emissions, ii. Annual controlled wet-out area organic HAP emissions, iii. Annual uncontrolled oven organic HAP emissions, iv. The capture efficiency of the wet-out

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		area enclosure,
		v. The destruction efficiency of the add-on control device, and 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 addon control device		i. Annual uncontrolled wet-out area organic HAP emissions, ii. Annual controlled wet-out area organic HAP emissions, 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, v. The destruction efficiency of the add-on control device, and vi. The amount of neat resin plus and neat gel coat plus applied.
3. Is uncontrolled	add-on control device	i. Annual uncontrolled wet-out area organic HAP emissions, ii. Annual uncontrolled oven organic HAP emissions, iii. Annual controlled oven organic HAP emissions, iv. The capture efficiency of the oven, v. the destruction efficiency of the add-on control device, and 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	add-on control device	i. Annual uncontrolled wet-out area organic HAP emissions, ii. Annual controlled wet-out area organic HAP emissions, iii. Annual uncontrolled oven organic HAP emissions, iv. Annual controlled oven organic HAP emissions; v. The capture efficiency of the wet-out area enclosure, vi. Inlet organic HAP emissions to the addon control device, vii. Outlet organic HAP emissions from the add-on control device, and 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 addon control device	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, 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.
	a. Has an enclosure that is not a PTE	i. The capture efficiency of the enclosure, and ii. Annual organic HAP emissions that escape the enclosure.
	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 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, ii. Annual uncontrolled oven organic HAP emissions, and 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, ii. Annual controlled wet-out area organic HAP emissions, iii. Annual uncontrolled oven organic HAP emissions,
		iv. The capture efficiency of the wet-out area enclosure, v. The destruction efficiency of the add-on control device, and vi. The amount of neat resin plus and neat gel coat plus applied.
3. Has an enclosure that is a PTE, and the	a. Is uncontrolled	i. Annual uncontrolled wet-out area organic

captured organic HAP emissions are controlled by an add-on control device		HAP emissions, ii. Annual controlled wet-out area organic HAP emissions, 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, v. The destruction efficiency of the add-on control device, and vi. The amount of neat resin plus and neat gel coat plus applied.
4. Is uncontrolled	add-on control device	i. Annual uncontrolled wet-out area organic HAP emissions, ii. Annual uncontrolled oven organic HAP emissions, iii. Annual controlled oven organic HAP emissions,
		iv. The capture efficiency of the oven, v. The destruction efficiency of the add-on control device, and 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, ii. Annual controlled wet-out area organic HAP emissions, iii. Annual uncontrolled oven organic HAP emissions,
		iv. Annual controlled oven organic HAP emissions, v. The capture efficiency of the wet-out area enclosure, vi. The capture efficiency of the oven,
		vii. The destruction efficiency of the add-on control device, and 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		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, ii. The capture efficiency of the oven, iii. Inlet organic HAP emissions to the an addon 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.
	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
	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	Semiannually according to the requirements in §63.5910(b).

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

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§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	
§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	

Waiver of performance tests	Yes	
Applicability of monitoring requirements	Yes	
Reserved	No	
Monitoring requirements when using flares	Yes	
Conduct of monitoring exceptions	Yes	
Multiple effluents and multiple monitoring systems	Yes	
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.
Monitoring system installation	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
CMS requirements	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
Continuous Opacity Monitoring System (COMS) minimum procedures	No	Subpart WWWW of Part 63 does not contain opacity standards.
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.
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.
Performance evaluation of CMS	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
Notification of performance evaluation	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
CMS requirements/alternatives	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
Reporting performance evaluation results	Yes	This section applies if you elect to use a CMS to demonstrate continuous compliance with an emission limit.
Results of COMS performance evaluation	No	Subpart WWWW of Part 63 does not contain opacity standards.
Use of an alternative monitoring method	Yes	
Request to use an alternative monitoring method	Yes	
	Applicability of monitoring requirements Reserved Monitoring requirements when using flares Conduct of monitoring exceptions Multiple effluents and multiple monitoring systems Compliance with CMS operation and maintenance requirements Monitoring system installation CMS requirements Continuous Opacity Monitoring System (COMS) minimum procedures CMS calibration and periods CMS is out of control CMS quality control program, including test plan and all previous versions Performance evaluation of CMS Notification of performance evaluation CMS requirements/alternatives Reporting performance evaluation results Results of COMS performance evaluation Use of an alternative monitoring method Request to use an alternative monitoring	Applicability of monitoring requirements Reserved No Monitoring requirements when using flares Conduct of monitoring exceptions Multiple effluents and multiple monitoring systems Compliance with CMS operation and maintenance requirements Monitoring system installation Yes CMS requirements Yes Continuous Opacity Monitoring System (COMS) minimum procedures CMS calibration and periods CMS is out of control CMS quality control program, including test plan and all previous versions Performance evaluation of CMS Yes Notification of performance evaluation Yes Reporting performance evaluation results Yes Results of COMS performance evaluation Use of an alternative monitoring method Yes Request to use an alternative monitoring 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) through (5)	Data reduction	Yes	
§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.
§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	Yes	This section applies if you elect to use

	alternative to relative accuracy testing has been exceeded		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) through (4)	Reserved	No	
§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.
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 \times 3&inch;-6&inch; roller length. ¹⁰
- 6.1.11 Hygrometer or psychrometer¹¹ 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 interface¹³ 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.

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- 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/ft² 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 analysis¹⁵; 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 3¹⁶ 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 Systems¹⁷ 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 3¹⁶ 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 nonsuppressed 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:

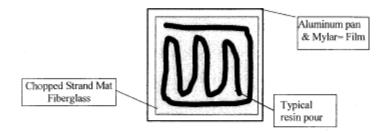


Figure 11.6 Resin Distribution Diagram

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- 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) x 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) x 100

12.2.8 Average % Emission Weight Loss (assuming six test runs):

Average % Emission Weight Loss =
$$\sum_{i}^{N-6}$$
 (% Emission Weight Loss_i)/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	11.91
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 = $((0.286 \times \%HAP)-0.0529) \times 2000 \times (1-(0.5 \times VSE factor))$

HAP Emissions with vapor suppresants = $((0.286 \times .35) - 0.0529) \times 2000 \times (1 - (0.5 \times .45))$

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.

	Test]	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	

Table 13.1—Round Robin Testing Results

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.

16.2 References

1. Phase 1—Baseline Study Hand Lay-up, CFA, 1996

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/ft² 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.

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Industrial Dielectrics, Inc. dba IDI Composites International Noblesville, Indiana Permit Reviewer: RLO

- 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

Tes	st Number		Test Type			
			VS (_)	NVS ()	
Resin	•		Filled ()	Unfilled	
Initiator				Initiator,		
Vapor Suppr	essant			VS, %		
Weight of 2 layers of glass, g		Weight of 1st glass layer, g		Weight of 2 nd glass layer, g		
Initial Res Weight, (g)	in		Time (Min.)	Weight g	Temp °F	
Glass conte	ent, (%)		55			
Initial Temperature	°F:		60			
Initial Hum	nidity %		65			
Resin Initi Level,%	ator		70			
Resin gel time, (min.)			75			
Resin filler content, %			80			
Roll out time, (min.)			85			
Time, W (min.) g	Weight,	Temp,	90			

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Final Time, min.	Final Weight, g.	Final Temp, °F	Final Humidity, %
		n:	
50		155	
45		150	
40		145	
35		140	
30		135	
25		130	
20		125	
15		120	
10		115	
5		110	
0		105	
		100	
Initial		95	

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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		Tempera	ture	- Laminate roll	Relative humidity, %		Resin	Glass	Darin	Meets
	Min	Max	Delta	out time, min		Final	weight, (g)	content, %	Resin distribution	criteria Y/N
1										
2										
3										
4										
5										
6										
7										
8										
9										

10							
11							
12							
	Aver	age					
		±10% of Average	±15 of Average	±10% of Avg.	< 1/2 inch off mat	All Y	

17.3 VSE Factor Calculation

Table 17.3—Calculations Worksheet

Vapor suppres	Noi	n-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

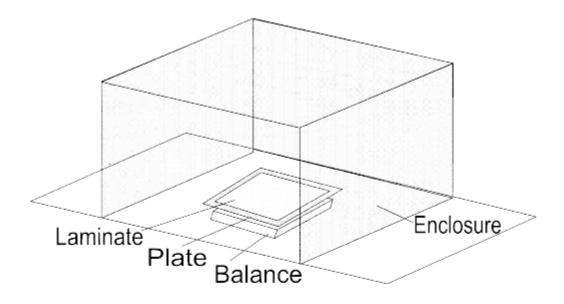


Figure 17.1. Typical Balance Enclosure

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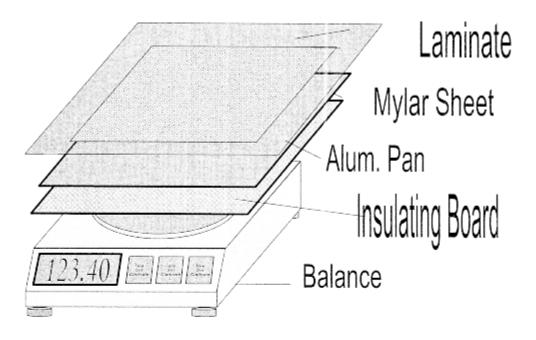
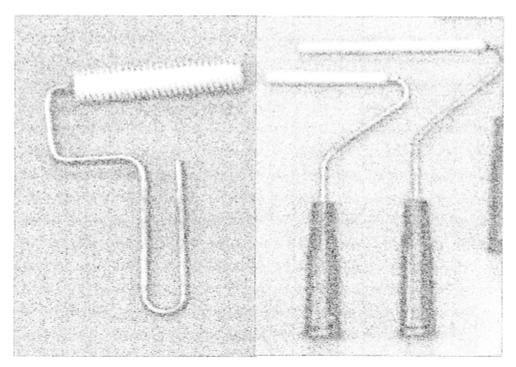


Figure 17.2. Scale, Plate, Insulating Board, Mylar, Laminate Order

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FRP Rollers

Figure 17.3. Typical FRP Rollers

Indiana Department of Environmental Management Office of Air Quality Attachment B to a Part 70 Operating Permit Renewal

Source Background and Description

Source Name: Industrial Dielectrics, Inc. dba IDI Composites

International

Source Location: 407 South 7th Street, Noblesville, IN 46060

County: Hamilton SIC Code: 3087

Operation Permit No.: T057-31912-00042

Subpart IIII—Standards of Performance for Stationary Compression Ignition Internal Combustion Engines.

What This Subpart Covers § 60.4200 Am I subject to this subpart?

- (a) The provisions of this subpart are applicable to manufacturers, owners, and operators of stationary compression ignition (CI) internal combustion engines (ICE) and other persons as specified in paragraphs (a)(1) through (4) of this section. For the purposes of this subpart, the date that construction commences is the date the engine is ordered by the owner or operator.
 - (1) Manufacturers of stationary CI ICE with a displacement of less than 30 liters per cylinder where the model year is:
 - (i) 2007 or later, for engines that are not fire pump engines;
 - (ii) The model year listed in Table 3 to this subpart or later model year, for fire pump engines.
 - Owners and operators of stationary CI ICE that commence construction after July 11, 2005, where the stationary CI ICE are:
 - (i) Manufactured after April 1, 2006, and are not fire pump engines, or
 - (ii) Manufactured as a certified National Fire Protection Association (NFPA) fire pump engine after July 1, 2006.
 - Owners and operators of any stationary CI ICE that are modified or reconstructed after July 11, 2005 and any person that modifies or reconstructs any stationary CI ICE after July 11, 2005.
 - (4) The provisions of § 60.4208 of this subpart are applicable to all owners and operators of stationary CI ICE that commence construction after July 11, 2005.
- (b) The provisions of this subpart are not applicable to stationary CI ICE being tested at a stationary CI ICE test cell/stand.
- (c) If you are an owner or operator of an area source subject to this subpart, you are exempt from the obligation to obtain a permit under 40 CFR part 70 or 40 CFR part 71, provided you are not

required to obtain a permit under 40 CFR 70.3(a) or 40 CFR 71.3(a) for a reason other than your status as an area source under this subpart. Notwithstanding the previous sentence, you must continue to comply with the provisions of this subpart applicable to area sources.

- (d) Stationary CI ICE may be eligible for exemption from the requirements of this subpart as described in 40 CFR part 1068, subpart C (or the exemptions described in 40 CFR part 89, subpart J and 40 CFR part 94, subpart J, for engines that would need to be certified to standards in those parts), except that owners and operators, as well as manufacturers, may be eligible to request an exemption for national security.
- (e) Owners and operators of facilities with CI ICE that are acting as temporary replacement units and that are located at a stationary source for less than 1 year and that have been properly certified as meeting the standards that would be applicable to such engine under the appropriate nonroad engine provisions, are not required to meet any other provisions under this subpart with regard to such engines.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

Emission Standards for Manufacturers

§ 60.4201 What emission standards must I meet for non-emergency engines if I am a stationary CI internal combustion engine manufacturer?

- (a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later non-emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 kilowatt (KW) (3,000 horsepower (HP)) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 89.112, 40 CFR 89.113, 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same model year and maximum engine power.
- (b) Stationary CI internal combustion engine manufacturers must certify their 2007 through 2010 model year non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.
- (c) Stationary CI internal combustion engine manufacturers must certify their 2011 model year and later non-emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder to the certification emission standards for new nonroad CI engines in 40 CFR 1039.101, 40 CFR 1039.102, 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, and 40 CFR 1039.115, as applicable, for all pollutants, for the same maximum engine power.
- (d) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:
 - (1) Their 2007 model year through 2012 non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;
 - (2) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

- (3) Their 2013 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.
- (e) Stationary CI internal combustion engine manufacturers must certify the following non-emergency stationary CI ICE to the certification emission standards and other requirements for new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.110, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, as applicable, for all pollutants, for the same displacement and maximum engine power:
 - (1) Their 2013 model year non-emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and
 - (2) Their 2014 model year and later non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.
- (f) Notwithstanding the requirements in paragraphs (a) through (c) of this section, stationary nonemergency CI ICE identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 1 to 40 CFR 1042.1 identifies 40 CFR part 1042 as being applicable, 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:
 - (1) Areas of Alaska not accessible by the Federal Aid Highway System (FAHS); and
 - (2) Marine offshore installations.
- (g) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (e) of this section that are applicable to the model year, maximum engine power, and displacement of the reconstructed stationary CI ICE.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37967, June 28, 2011]

§ 60.4202 What emission standards must I meet for emergency engines if I am a stationary CI internal combustion engine manufacturer?

- (a) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power less than or equal to 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (a)(1) through (2) of this section.
 - (1) For engines with a maximum engine power less than 37 KW (50 HP):
 - (i) The certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants for model year 2007 engines, and
 - (ii) The certification emission standards for new nonroad CI engines in 40 CFR 1039.104, 40 CFR 1039.105, 40 CFR 1039.107, 40 CFR 1039.115, and table 2 to this subpart, for 2008 model year and later engines.

- (2) For engines with a maximum engine power greater than or equal to 37 KW (50 HP), the certification emission standards for new nonroad CI engines for the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants beginning in model year 2007.
- (b) Stationary CI internal combustion engine manufacturers must certify their 2007 model year and later emergency stationary CI ICE with a maximum engine power greater than 2,237 KW (3,000 HP) and a displacement of less than 10 liters per cylinder that are not fire pump engines to the emission standards specified in paragraphs (b)(1) through (2) of this section.
 - (1) For 2007 through 2010 model years, the emission standards in table 1 to this subpart, for all pollutants, for the same maximum engine power.
 - (2) For 2011 model year and later, the certification emission standards for new nonroad CI engines for engines of the same model year and maximum engine power in 40 CFR 89.112 and 40 CFR 89.113 for all pollutants.
- (c) [Reserved]
- (d) Beginning with the model years in table 3 to this subpart, stationary CI internal combustion engine manufacturers must certify their fire pump stationary CI ICE to the emission standards in table 4 to this subpart, for all pollutants, for the same model year and NFPA nameplate power.
- (e) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE that are not fire pump engines to the certification emission standards for new marine CI engines in 40 CFR 94.8, as applicable, for all pollutants, for the same displacement and maximum engine power:
 - (1) Their 2007 model year through 2012 emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder;
 - (2) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder;
 - (3) Their 2013 model year emergency stationary CI ICE with a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder; and
 - (4) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power greater than or equal to 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.
- (f) Stationary CI internal combustion engine manufacturers must certify the following emergency stationary CI ICE to the certification emission standards and other requirements applicable to Tier 3 new marine CI engines in 40 CFR 1042.101, 40 CFR 1042.107, 40 CFR 1042.115, 40 CFR 1042.120, and 40 CFR 1042.145, for all pollutants, for the same displacement and maximum engine power:
 - (1) Their 2013 model year and later emergency stationary CI ICE with a maximum engine power less than 3,700 KW (4,958 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 15 liters per cylinder; and

- (2) Their 2014 model year and later emergency stationary CI ICE with a maximum engine power less than 2,000 KW (2,682 HP) and a displacement of greater than or equal to 15 liters per cylinder and less than 30 liters per cylinder.
- (g) Notwithstanding the requirements in paragraphs (a) through (d) of this section, stationary emergency CI internal combustion engines identified in paragraphs (a) and (c) may be certified to the provisions of 40 CFR part 94 or, if Table 2 to 40 CFR 1042.101 identifies Tier 3 standards as being applicable, the requirements applicable to Tier 3 engines in 40 CFR part 1042, if the engines will be used solely in either or both of the following locations:
 - (1) Areas of Alaska not accessible by the FAHS; and
 - (2) Marine offshore installations.
- (h) Notwithstanding the requirements in paragraphs (a) through (f) of this section, stationary CI internal combustion engine manufacturers are not required to certify reconstructed engines; however manufacturers may elect to do so. The reconstructed engine must be certified to the emission standards specified in paragraphs (a) through (f) of this section that are applicable to the model year, maximum engine power and displacement of the reconstructed emergency stationary CI ICE.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011]

§ 60.4203 How long must my engines meet the emission standards if I am a manufacturer of stationary CI internal combustion engines?

Engines manufactured by stationary CI internal combustion engine manufacturers must meet the emission standards as required in §§ 60.4201 and 60.4202 during the certified emissions life of the engines.

[76 FR 37968, June 28, 2011]

Emission Standards for Owners and Operators § 60.4204 What emission standards must I meet for non-emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

- (a) Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of less than 10 liters per cylinder must comply with the emission standards in table 1 to this subpart. Owners and operators of pre-2007 model year non-emergency stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder must comply with the emission standards in 40 CFR 94.8(a)(1).
- (b) Owners and operators of 2007 model year and later non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder must comply with the emission standards for new CI engines in § 60.4201 for their 2007 model year and later stationary CI ICE, as applicable.
- (c) Owners and operators of non-emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the following requirements:
 - (1) For engines installed prior to January 1, 2012, limit the emissions of NOX in the stationary CI internal combustion engine exhaust to the following:

- (i) 17.0 grams per kilowatt-hour (g/KW-hr) (12.7 grams per horsepower-hr (g/HP-hr)) when maximum engine speed is less than 130 revolutions per minute (rpm);
- (ii) 45 · n-0.2 g/KW-hr (34 · n-0.2 g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and
- (iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.
- (2) For engines installed on or after January 1, 2012 and before January 1, 2016, limit the emissions of NOX in the stationary CI internal combustion engine exhaust to the following:
 - (i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
 - (ii) 44 · n-0.23 g/KW-hr (33 · n-0.23 g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and
 - (iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.
- (3) For engines installed on or after January 1, 2016, limit the emissions of NOX in the stationary CI internal combustion engine exhaust to the following:
 - (i) 3.4 g/KW-hr (2.5 g/HP-hr) when maximum engine speed is less than 130 rpm;
 - (ii) 9.0 \cdot n=0.20 g/KW-hr (6.7 \cdot n=0.20 g/HP-hr) where n (maximum engine speed) is 130 or more but less than 2,000 rpm; and
 - (iii) 2.0 g/KW-hr (1.5 g/HP-hr) where maximum engine speed is greater than or equal to 2,000 rpm.
- (4) Reduce particulate matter (PM) emissions by 60 percent or more, or limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.15 g/KW-hr (0.11 g/HP-hr).
- (d) Owners and operators of non-emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the not-to-exceed (NTE) standards as indicated in § 60.4212.
- (e) Owners and operators of any modified or reconstructed non-emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed non-emergency stationary CI ICE that are specified in paragraphs (a) through (d) of this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37968, June 28, 2011]

§ 60.4205 What emission standards must I meet for emergency engines if I am an owner or operator of a stationary CI internal combustion engine?

(a) Owners and operators of pre-2007 model year emergency stationary CI ICE with a displacement of less than 10 liters per cylinder that are not fire pump engines must comply with the emission standards in Table 1 to this subpart. Owners and operators of pre-2007 model year emergency

stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards in 40 CFR 94.8(a)(1).

- (b) Owners and operators of 2007 model year and later emergency stationary CI ICE with a displacement of less than 30 liters per cylinder that are not fire pump engines must comply with the emission standards for new nonroad CI engines in § 60.4202, for all pollutants, for the same model year and maximum engine power for their 2007 model year and later emergency stationary CI ICE.
- (c) Owners and operators of fire pump engines with a displacement of less than 30 liters per cylinder must comply with the emission standards in table 4 to this subpart, for all pollutants.
- (d) Owners and operators of emergency stationary CI engines with a displacement of greater than or equal to 30 liters per cylinder must meet the requirements in this section.
 - (1) For engines installed prior to January 1, 2012, limit the emissions of NOX in the stationary CI internal combustion engine exhaust to the following:
 - (i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
 - (ii) 45 · n−0.2 g/KW-hr (34 · n−0.2 g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and
 - (iii) 9.8 g/kW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.
 - (2) For engines installed on or after January 1, 2012, limit the emissions of NOX in the stationary CI internal combustion engine exhaust to the following:
 - (i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
 - (ii) $44 \cdot n$ -0.23 g/KW-hr (33 · n-0.23 g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and
 - (iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.
 - (3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).
- (e) Owners and operators of emergency stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests in-use must meet the NTE standards as indicated in § 60.4212.
- (f) Owners and operators of any modified or reconstructed emergency stationary CI ICE subject to this subpart must meet the emission standards applicable to the model year, maximum engine power, and displacement of the modified or reconstructed CI ICE that are specified in paragraphs (a) through (e) of this section.

§ 60.4206 How long must I meet the emission standards if I am an owner or operator of a stationary CI internal combustion engine?

Owners and operators of stationary CI ICE must operate and maintain stationary CI ICE that achieve the emission standards as required in §§ 60.4204 and 60.4205 over the entire life of the engine.

[76 FR 37969, June 28, 2011]

Fuel Requirements for Owners and Operators

§ 60.4207 What fuel requirements must I meet if I am an owner or operator of a stationary CI internal combustion engine subject to this subpart?

- (a) Beginning October 1, 2007, owners and operators of stationary CI ICE subject to this subpart that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(a).
- (b) Beginning October 1, 2010, owners and operators of stationary CI ICE subject to this subpart with a displacement of less than 30 liters per cylinder that use diesel fuel must use diesel fuel that meets the requirements of 40 CFR 80.510(b) for nonroad diesel fuel, except that any existing diesel fuel purchased (or otherwise obtained) prior to October 1, 2010, may be used until depleted.
- (c) [Reserved]
- (d) Beginning June 1, 2012, owners and operators of stationary CI ICE subject to this subpart with a displacement of greater than or equal to 30 liters per cylinder are no longer subject to the requirements of paragraph (a) of this section, and must use fuel that meets a maximum pergallon sulfur content of 1,000 parts per million (ppm).
- (e) Stationary CI ICE that have a national security exemption under § 60.4200(d) are also exempt from the fuel requirements in this section.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011; 78 FR 6695, Jan. 30, 2013]

Other Requirements for Owners and Operators § 60.4208 What is the deadline for importing or installing stationary CI ICE produced in previous model years?

- (a) After December 31, 2008, owners and operators may not install stationary CI ICE (excluding fire pump engines) that do not meet the applicable requirements for 2007 model year engines.
- (b) After December 31, 2009, owners and operators may not install stationary CI ICE with a maximum engine power of less than 19 KW (25 HP) (excluding fire pump engines) that do not meet the applicable requirements for 2008 model year engines.
- (c) After December 31, 2014, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 19 KW (25 HP) and less than 56 KW (75 HP) that do not meet the applicable requirements for 2013 model year non-emergency engines.
- (d) After December 31, 2013, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 56 KW (75 HP) and less than 130 KW (175 HP) that do not meet the applicable requirements for 2012 model year non-emergency engines.

- (e) After December 31, 2012, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 130 KW (175 HP), including those above 560 KW (750 HP), that do not meet the applicable requirements for 2011 model year non-emergency engines.
- (f) After December 31, 2016, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power of greater than or equal to 560 KW (750 HP) that do not meet the applicable requirements for 2015 model year non-emergency engines.
- (g) After December 31, 2018, owners and operators may not install non-emergency stationary CI ICE with a maximum engine power greater than or equal to 600 KW (804 HP) and less than 2,000 KW (2,680 HP) and a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder that do not meet the applicable requirements for 2017 model year non-emergency engines.
- (h) In addition to the requirements specified in §§ 60.4201, 60.4202, 60.4204, and 60.4205, it is prohibited to import stationary CI ICE with a displacement of less than 30 liters per cylinder that do not meet the applicable requirements specified in paragraphs (a) through (g) of this section after the dates specified in paragraphs (a) through (g) of this section.
- (i) The requirements of this section do not apply to owners or operators of stationary CI ICE that have been modified, reconstructed, and do not apply to engines that were removed from one existing location and reinstalled at a new location.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§ 60.4209 What are the monitoring requirements if I am an owner or operator of a stationary CI internal combustion engine?

If you are an owner or operator, you must meet the monitoring requirements of this section. In addition, you must also meet the monitoring requirements specified in § 60.4211.

- (a) If you are an owner or operator of an emergency stationary CI internal combustion engine that does not meet the standards applicable to non-emergency engines, you must install a non-resettable hour meter prior to startup of the engine.
- (b) If you are an owner or operator of a stationary CI internal combustion engine equipped with a diesel particulate filter to comply with the emission standards in § 60.4204, the diesel particulate filter must be installed with a backpressure monitor that notifies the owner or operator when the high backpressure limit of the engine is approached.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

Compliance Requirements

§ 60.4210 What are my compliance requirements if I am a stationary CI internal combustion engine manufacturer?

(a) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of less than 10 liters per cylinder to the emission standards specified in § 60.4201(a) through (c) and § 60.4202(a), (b) and (d) using the certification procedures required in 40 CFR part 89, subpart B, or 40 CFR part 1039, subpart C, as applicable, and must test their engines as specified in those parts. For the purposes of this subpart, engines certified to the standards in table 1 to this subpart shall be subject to the same requirements as engines certified to the standards in 40 CFR part 89. For the purposes of this subpart, engines certified to the standards in table 4 to this subpart shall be subject to the same requirements as engines certified

to the standards in 40 CFR part 89, except that engines with NFPA nameplate power of less than 37 KW (50 HP) certified to model year 2011 or later standards shall be subject to the same requirements as engines certified to the standards in 40 CFR part 1039.

- (b) Stationary CI internal combustion engine manufacturers must certify their stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder to the emission standards specified in § 60.4201(d) and (e) and § 60.4202(e) and (f) using the certification procedures required in 40 CFR part 94, subpart C, or 40 CFR part 1042, subpart C, as applicable, and must test their engines as specified in 40 CFR part 94 or 1042, as applicable.
- (c) Stationary CI internal combustion engine manufacturers must meet the requirements of 40 CFR 1039.120, 1039.125, 1039.130, and 1039.135, and 40 CFR part 1068 for engines that are certified to the emission standards in 40 CFR part 1039. Stationary CI internal combustion engine manufacturers must meet the corresponding provisions of 40 CFR part 89, 40 CFR part 94 or 40 CFR part 1042 for engines that would be covered by that part if they were nonroad (including marine) engines. Labels on such engines must refer to stationary engines, rather than or in addition to nonroad or marine engines, as appropriate. Stationary CI internal combustion engine manufacturers must label their engines according to paragraphs (c)(1) through (3) of this section.
 - (1) Stationary CI internal combustion engines manufactured from January 1, 2006 to March 31, 2006 (January 1, 2006 to June 30, 2006 for fire pump engines), other than those that are part of certified engine families under the nonroad CI engine regulations, must be labeled according to 40 CFR 1039.20.
 - (2) Stationary CI internal combustion engines manufactured from April 1, 2006 to December 31, 2006 (or, for fire pump engines, July 1, 2006 to December 31 of the year preceding the year listed in table 3 to this subpart) must be labeled according to paragraphs (c)(2)(i) through (iii) of this section:
 - (i) Stationary CI internal combustion engines that are part of certified engine families under the nonroad regulations must meet the labeling requirements for nonroad CI engines, but do not have to meet the labeling requirements in 40 CFR 1039.20.
 - (ii) Stationary CI internal combustion engines that meet Tier 1 requirements (or requirements for fire pumps) under this subpart, but do not meet the requirements applicable to nonroad CI engines must be labeled according to 40 CFR 1039.20. The engine manufacturer may add language to the label clarifying that the engine meets Tier 1 requirements (or requirements for fire pumps) of this subpart.
 - (iii) Stationary CI internal combustion engines manufactured after April 1, 2006 that do not meet Tier 1 requirements of this subpart, or fire pumps engines manufactured after July 1, 2006 that do not meet the requirements for fire pumps under this subpart, may not be used in the U.S. If any such engines are manufactured in the U.S. after April 1, 2006 (July 1, 2006 for fire pump engines), they must be exported or must be brought into compliance with the appropriate standards prior to initial operation. The export provisions of 40 CFR 1068.230 would apply to engines for export and the manufacturers must label such engines according to 40 CFR 1068.230.
 - (3) Stationary CI internal combustion engines manufactured after January 1, 2007 (for fire pump engines, after January 1 of the year listed in table 3 to this subpart, as applicable) must be labeled according to paragraphs (c)(3)(i) through (iii) of this section.

- (i) Stationary CI internal combustion engines that meet the requirements of this subpart and the corresponding requirements for nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate.
- (ii) Stationary CI internal combustion engines that meet the requirements of this subpart, but are not certified to the standards applicable to nonroad (including marine) engines of the same model year and HP must be labeled according to the provisions in 40 CFR parts 89, 94, 1039 or 1042, as appropriate, but the words "stationary" must be included instead of "nonroad" or "marine" on the label. In addition, such engines must be labeled according to 40 CFR 1039.20.
- (iii) Stationary CI internal combustion engines that do not meet the requirements of this subpart must be labeled according to 40 CFR 1068.230 and must be exported under the provisions of 40 CFR 1068.230.
- (d) An engine manufacturer certifying an engine family or families to standards under this subpart that are identical to standards applicable under 40 CFR parts 89, 94, 1039 or 1042 for that model year may certify any such family that contains both nonroad (including marine) and stationary engines as a single engine family and/or may include any such family containing stationary engines in the averaging, banking and trading provisions applicable for such engines under those parts.
- (e) Manufacturers of engine families discussed in paragraph (d) of this section may meet the labeling requirements referred to in paragraph (c) of this section for stationary CI ICE by either adding a separate label containing the information required in paragraph (c) of this section or by adding the words "and stationary" after the word "nonroad" or "marine," as appropriate, to the label.
- (f) Starting with the model years shown in table 5 to this subpart, stationary CI internal combustion engine manufacturers must add a permanent label stating that the engine is for stationary emergency use only to each new emergency stationary CI internal combustion engine greater than or equal to 19 KW (25 HP) that meets all the emission standards for emergency engines in § 60.4202 but does not meet all the emission standards for non-emergency engines in § 60.4201. The label must be added according to the labeling requirements specified in 40 CFR 1039.135(b). Engine manufacturers must specify in the owner's manual that operation of emergency engines is limited to emergency operations and required maintenance and testing.
- (g) Manufacturers of fire pump engines may use the test cycle in table 6 to this subpart for testing fire pump engines and may test at the NFPA certified nameplate HP, provided that the engine is labeled as "Fire Pump Applications Only".
- (h) Engine manufacturers, including importers, may introduce into commerce uncertified engines or engines certified to earlier standards that were manufactured before the new or changed standards took effect until inventories are depleted, as long as such engines are part of normal inventory. For example, if the engine manufacturers' normal industry practice is to keep on hand a one-month supply of engines based on its projected sales, and a new tier of standards starts to apply for the 2009 model year, the engine manufacturer may manufacture engines based on the normal inventory requirements late in the 2008 model year, and sell those engines for installation. The engine manufacturer may not circumvent the provisions of §§ 60.4201 or 60.4202 by stockpiling engines that are built before new or changed standards take effect. Stockpiling of such engines beyond normal industry practice is a violation of this subpart.

(i) The replacement engine provisions of 40 CFR 89.1003(b)(7), 40 CFR 94.1103(b)(3), 40 CFR 94.1103(b)(4) and 40 CFR 1068.240 are applicable to stationary CI engines replacing existing equipment that is less than 15 years old.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37969, June 28, 2011]

§ 60.4211 What are my compliance requirements if I am an owner or operator of a stationary CI internal combustion engine?

- (a) If you are an owner or operator and must comply with the emission standards specified in this subpart, you must do all of the following, except as permitted under paragraph (g) of this section:
 - (1) Operate and maintain the stationary CI internal combustion engine and control device according to the manufacturer's emission-related written instructions;
 - (2) Change only those emission-related settings that are permitted by the manufacturer; and
 - (3) Meet the requirements of 40 CFR parts 89, 94 and/or 1068, as they apply to you.
- (b) If you are an owner or operator of a pre-2007 model year stationary CI internal combustion engine and must comply with the emission standards specified in §§ 60.4204(a) or 60.4205(a), or if you are an owner or operator of a CI fire pump engine that is manufactured prior to the model years in table 3 to this subpart and must comply with the emission standards specified in § 60.4205(c), you must demonstrate compliance according to one of the methods specified in paragraphs (b)(1) through (5) of this section.
 - (1) Purchasing an engine certified according to 40 CFR part 89 or 40 CFR part 94, as applicable, for the same model year and maximum engine power. The engine must be installed and configured according to the manufacturer's specifications.
 - (2) Keeping records of performance test results for each pollutant for a test conducted on a similar engine. The test must have been conducted using the same methods specified in this subpart and these methods must have been followed correctly.
 - (3) Keeping records of engine manufacturer data indicating compliance with the standards.
 - (4) Keeping records of control device vendor data indicating compliance with the standards.
 - (5) Conducting an initial performance test to demonstrate compliance with the emission standards according to the requirements specified in § 60.4212, as applicable.
- (c) If you are an owner or operator of a 2007 model year and later stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(b) or § 60.4205(b), or if you are an owner or operator of a CI fire pump engine that is manufactured during or after the model year that applies to your fire pump engine power rating in table 3 to this subpart and must comply with the emission standards specified in § 60.4205(c), you must comply by purchasing an engine certified to the emission standards in § 60.4204(b), or § 60.4205(b) or (c), as applicable, for the same model year and maximum (or in the case of fire pumps, NFPA nameplate) engine power. The engine must be installed and configured according to the manufacturer's emission-related specifications, except as permitted in paragraph (g) of this section.

- (d) If you are an owner or operator and must comply with the emission standards specified in § 60.4204(c) or § 60.4205(d), you must demonstrate compliance according to the requirements specified in paragraphs (d)(1) through (3) of this section.
 - (1) Conducting an initial performance test to demonstrate initial compliance with the emission standards as specified in § 60.4213.
 - (2) Establishing operating parameters to be monitored continuously to ensure the stationary internal combustion engine continues to meet the emission standards. The owner or operator must petition the Administrator for approval of operating parameters to be monitored continuously. The petition must include the information described in paragraphs (d)(2)(i) through (v) of this section.
 - (i) Identification of the specific parameters you propose to monitor continuously;
 - (ii) A discussion of the relationship between these parameters and NOX and PM emissions, identifying how the emissions of these pollutants change with changes in these parameters, and how limitations on these parameters will serve to limit NOX and PM emissions;
 - (iii) A discussion of how you will establish the upper and/or lower values for these parameters which will establish the limits on these parameters in the operating limitations;
 - (iv) A discussion identifying the methods and the instruments you will use to monitor these parameters, as well as the relative accuracy and precision of these methods and instruments; and
 - (v) A discussion identifying the frequency and methods for recalibrating the instruments you will use for monitoring these parameters.
 - (3) For non-emergency engines with a displacement of greater than or equal to 30 liters per cylinder, conducting annual performance tests to demonstrate continuous compliance with the emission standards as specified in § 60.4213.
- (e) If you are an owner or operator of a modified or reconstructed stationary CI internal combustion engine and must comply with the emission standards specified in § 60.4204(e) or § 60.4205(f), you must demonstrate compliance according to one of the methods specified in paragraphs (e)(1) or (2) of this section.
 - (1) Purchasing, or otherwise owning or operating, an engine certified to the emission standards in § 60.4204(e) or § 60.4205(f), as applicable.
 - (2) Conducting a performance test to demonstrate initial compliance with the emission standards according to the requirements specified in § 60.4212 or § 60.4213, as appropriate. The test must be conducted within 60 days after the engine commences operation after the modification or reconstruction.
- (f) If you own or operate an emergency stationary ICE, you must operate the emergency stationary ICE according to the requirements in paragraphs (f)(1) through (3) of this section. In order for the engine to be considered an emergency stationary ICE under this subpart, any operation other than emergency operation, maintenance and testing, emergency demand response, and operation in non-emergency situations for 50 hours per year, as described in paragraphs (f)(1)

through (3) of this section, is prohibited. If you do not operate the engine according to the requirements in paragraphs (f)(1) through (3) of this section, the engine will not be considered an emergency engine under this subpart and must meet all requirements for non-emergency engines.

- (1) There is no time limit on the use of emergency stationary ICE in emergency situations.
- You may operate your emergency stationary ICE for any combination of the purposes specified in paragraphs (f)(2)(i) through (iii) of this section for a maximum of 100 hours per calendar year. Any operation for non-emergency situations as allowed by paragraph (f)(3) of this section counts as part of the 100 hours per calendar year allowed by this paragraph (f)(2).
 - (i) Emergency stationary ICE may be operated for maintenance checks and readiness testing, provided that the tests are recommended by federal, state or local government, the manufacturer, the vendor, the regional transmission organization or equivalent balancing authority and transmission operator, or the insurance company associated with the engine. The owner or operator may petition the Administrator for approval of additional hours to be used for maintenance checks and readiness testing, but a petition is not required if the owner or operator maintains records indicating that federal, state, or local standards require maintenance and testing of emergency ICE beyond 100 hours per calendar year.
 - (ii) Emergency stationary ICE may be operated for emergency demand response for periods in which the Reliability Coordinator under the North American Electric Reliability Corporation (NERC) Reliability Standard EOP-002-3, Capacity and Energy Emergencies (incorporated by reference, see § 60.17), or other authorized entity as determined by the Reliability Coordinator, has declared an Energy Emergency Alert Level 2 as defined in the NERC Reliability Standard EOP-002-3.
 - (iii) Emergency stationary ICE may be operated for periods where there is a deviation of voltage or frequency of 5 percent or greater below standard voltage or frequency.
- (3) Emergency stationary ICE may be operated for up to 50 hours per calendar year in non-emergency situations. The 50 hours of operation in non-emergency situations are counted as part of the 100 hours per calendar year for maintenance and testing and emergency demand response provided in paragraph (f)(2) of this section. Except as provided in paragraph (f)(3)(i) of this section, the 50 hours per calendar year for non-emergency situations cannot be used for peak shaving or non-emergency demand response, or to generate income for a facility to an electric grid or otherwise supply power as part of a financial arrangement with another entity.
 - (i) The 50 hours per year for non-emergency situations can be used to supply power as part of a financial arrangement with another entity if all of the following conditions are met:
 - (A) The engine is dispatched by the local balancing authority or local transmission and distribution system operator;

- (B) The dispatch is intended to mitigate local transmission and/or distribution limitations so as to avert potential voltage collapse or line overloads that could lead to the interruption of power supply in a local area or region.
- (C) The dispatch follows reliability, emergency operation or similar protocols that follow specific NERC, regional, state, public utility commission or local standards or guidelines.
- (D) The power is provided only to the facility itself or to support the local transmission and distribution system.
- (E) The owner or operator identifies and records the entity that dispatches the engine and the specific NERC, regional, state, public utility commission or local standards or guidelines that are being followed for dispatching the engine. The local balancing authority or local transmission and distribution system operator may keep these records on behalf of the engine owner or operator.

(ii) [Reserved]

- (g) If you do not install, configure, operate, and maintain your engine and control device according to the manufacturer's emission-related written instructions, or you change emission-related settings in a way that is not permitted by the manufacturer, you must demonstrate compliance as follows:
 - (1) If you are an owner or operator of a stationary CI internal combustion engine with maximum engine power less than 100 HP, you must keep a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, if you do not install and configure the engine and control device according to the manufacturer's emission-related written instructions, or you change the emission-related settings in a way that is not permitted by the manufacturer, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of such action.
 - (2) If you are an owner or operator of a stationary CI internal combustion engine greater than or equal to 100 HP and less than or equal to 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change emission-related settings in a way that is not permitted by the manufacturer.
 - (3) If you are an owner or operator of a stationary CI internal combustion engine greater than 500 HP, you must keep a maintenance plan and records of conducted maintenance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practice for minimizing emissions. In addition, you must conduct an initial performance test to demonstrate compliance with the applicable emission standards within 1 year of startup, or within 1 year after an engine and control device is no longer installed, configured, operated, and maintained in accordance with the manufacturer's emission-related written instructions, or within 1 year after you change

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emission-related settings in a way that is not permitted by the manufacturer. You must conduct subsequent performance testing every 8,760 hours of engine operation or 3 years, whichever comes first, thereafter to demonstrate compliance with the applicable emission standards.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37970, June 28, 2011; 78 FR 6695, Jan. 30, 2013]

Testing Requirements for Owners and Operators

§ 60.4212 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of less than 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder who conduct performance tests pursuant to this subpart must do so according to paragraphs (a) through (e) of this section.

- (a) The performance test must be conducted according to the in-use testing procedures in 40 CFR part 1039, subpart F, for stationary CI ICE with a displacement of less than 10 liters per cylinder, and according to 40 CFR part 1042, subpart F, for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder.
- (b) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1039 must not exceed the not-to-exceed (NTE) standards for the same model year and maximum engine power as required in 40 CFR 1039.101(e) and 40 CFR 1039.102(g)(1), except as specified in 40 CFR 1039.104(d). This requirement starts when NTE requirements take effect for nonroad diesel engines under 40 CFR part 1039.
- (c) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8, as applicable, must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in 40 CFR 89.112 or 40 CFR 94.8, as applicable, determined from the following equation:

NTE requirement for each pollutant = $(1.25) \times (STD)$ (Eq. 1)

Where:

STD = The standard specified for that pollutant in 40 CFR 89.112 or 40 CFR 94.8, as applicable.

Alternatively, stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR 89.112 or 40 CFR 94.8 may follow the testing procedures specified in § 60.4213 of this subpart, as appropriate.

(d) Exhaust emissions from stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in § 60.4204(a), § 60.4205(a), or § 60.4205(c) must not exceed the NTE numerical requirements, rounded to the same number of decimal places as the applicable standard in § 60.4204(a), § 60.4205(a), or § 60.4205(c), determined from the equation in paragraph (c) of this section.

Where:

STD = The standard specified for that pollutant in $\S 60.4204(a)$, $\S 60.4205(a)$, or $\S 60.4205(c)$.

Alternatively, stationary CI ICE that are complying with the emission standards for pre-2007 model year engines in § 60.4204(a), § 60.4205(a), or § 60.4205(c) may follow the testing procedures specified in § 60.4213, as appropriate.

(e) Exhaust emissions from stationary CI ICE that are complying with the emission standards for new CI engines in 40 CFR part 1042 must not exceed the NTE standards for the same model year and maximum engine power as required in 40 CFR 1042.101(c).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

§ 60.4213 What test methods and other procedures must I use if I am an owner or operator of a stationary CI internal combustion engine with a displacement of greater than or equal to 30 liters per cylinder?

Owners and operators of stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder must conduct performance tests according to paragraphs (a) through (f) of this section.

- (a) Each performance test must be conducted according to the requirements in § 60.8 and under the specific conditions that this subpart specifies in table 7. The test must be conducted within 10 percent of 100 percent peak (or the highest achievable) load.
- (b) You may not conduct performance tests during periods of startup, shutdown, or malfunction, as specified in § 60.8(c).
- (c) You must conduct three separate test runs for each performance test required in this section, as specified in § 60.8(f). Each test run must last at least 1 hour.
- (d) To determine compliance with the percent reduction requirement, you must follow the requirements as specified in paragraphs (d)(1) through (3) of this section.
 - (1) You must use Equation 2 of this section to determine compliance with the percent reduction requirement:

$$\frac{C_i - C_o}{C_i} \times 100 = R \qquad (Eq. 2)$$

Where:

 C_i = concentration of NO_x or PM at the control device inlet,

 C_o = concentration of NO_X or PM at the control device outlet, and

R = percent reduction of NO_X or PM emissions.

(2) You must normalize the NOX or PM concentrations at the inlet and outlet of the control device to a dry basis and to 15 percent oxygen (O2) using Equation 3 of this section, or an equivalent percent carbon dioxide (CO2) using the procedures described in paragraph (d)(3) of this section.

$$C_{adj} = C_d \frac{5.9}{20.9 - \% O_a}$$
 (Eq. 3)

Where:

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Cadj = Calculated NOX or PM concentration adjusted to 15 percent O2.

Cd = Measured concentration of NOX or PM, uncorrected.

5.9 = 20.9 percent O2 −15 percent O2, the defined O2 correction value, percent.

%O2 = Measured O2 concentration, dry basis, percent.

- (3) If pollutant concentrations are to be corrected to 15 percent O2 and CO2 concentration is measured in lieu of O2 concentration measurement, a CO2 correction factor is needed. Calculate the CO2 correction factor as described in paragraphs (d)(3)(i) through (iii) of this section.
 - (i) Calculate the fuel-specific Fo value for the fuel burned during the test using values obtained from Method 19, Section 5.2, and the following equation:

$$F_{\circ} = \frac{0.209_{E_{\bullet}}}{F_{\circ}}$$
 (Eq. 4)

Where:

Fo = Fuel factor based on the ratio of O2 volume to the ultimate CO2 volume produced by the fuel at zero percent excess air.

0.209 = Fraction of air that is O2, percent/100.

Fd = Ratio of the volume of dry effluent gas to the gross calorific value of the fuel from Method 19, dsm3 /J (dscf/106 Btu).

Fc = Ratio of the volume of CO2 produced to the gross calorific value of the fuel from Method 19, dsm3 /J (dscf/106 Btu).

(ii) Calculate the CO2 correction factor for correcting measurement data to 15 percent O2, as follows:

$$X_{CO_k} = \frac{5.9}{F_1}$$
 (Eq. 5)

Where:

XCO2 = CO2 correction factor, percent.

5.9 = 20.9 percent O2 -15 percent O2, the defined O2 correction value, percent.

(iii) Calculate the NOX and PM gas concentrations adjusted to 15 percent O2 using CO2 as follows:

$$C_{adj} = C_d \frac{X_{CO_d}}{\%CO_g}$$
 (Eq. 6)

Where:

Cadj = Calculated NOX or PM concentration adjusted to 15 percent O2.

Cd = Measured concentration of NOX or PM, uncorrected.

%CO2 = Measured CO2 concentration, dry basis, percent.

(e) To determine compliance with the NO_X mass per unit output emission limitation, convert the concentration of NO_X in the engine exhaust using Equation 7 of this section:

$$ER = \frac{C_4 \times 1.912 \times 10^{-3} \times Q \times T}{KW-hour} \qquad (Eq. 7)$$

Where:

ER = Emission rate in grams per KW-hour.

 C_d = Measured NO_X concentration in ppm.

 $1.912x10^{-3}$ = Conversion constant for ppm NO_X to grams per standard cubic meter at 25 degrees Celsius.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Brake work of the engine, in KW-hour.

(f) To determine compliance with the PM mass per unit output emission limitation, convert the concentration of PM in the engine exhaust using Equation 8 of this section:

$$ER = \frac{C_{adj} \times Q \times T}{KW-hour} \qquad (E \neq 8)$$

Where:

ER = Emission rate in grams per KW-hour.

Cadj = Calculated PM concentration in grams per standard cubic meter.

Q = Stack gas volumetric flow rate, in standard cubic meter per hour.

T = Time of test run, in hours.

KW-hour = Energy output of the engine, in KW.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

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Notification, Reports, and Records for Owners and Operators § 60.4214 What are my notification, reporting, and recordkeeping requirements if I am an owner or operator of a stationary CI internal combustion engine?

- (a) Owners and operators of non-emergency stationary CI ICE that are greater than 2,237 KW (3,000 HP), or have a displacement of greater than or equal to 10 liters per cylinder, or are pre-2007 model year engines that are greater than 130 KW (175 HP) and not certified, must meet the requirements of paragraphs (a)(1) and (2) of this section.
 - (1) Submit an initial notification as required in § 60.7(a)(1). The notification must include the information in paragraphs (a)(1)(i) through (v) of this section.
 - (i) Name and address of the owner or operator;
 - (ii) The address of the affected source:
 - (iii) Engine information including make, model, engine family, serial number, model year, maximum engine power, and engine displacement;
 - (iv) Emission control equipment; and
 - (v) Fuel used.
 - (2) Keep records of the information in paragraphs (a)(2)(i) through (iv) of this section.
 - (i) All notifications submitted to comply with this subpart and all documentation supporting any notification.
 - (ii) Maintenance conducted on the engine.
 - (iii) If the stationary CI internal combustion is a certified engine, documentation from the manufacturer that the engine is certified to meet the emission standards.
 - (iv) If the stationary CI internal combustion is not a certified engine, documentation that the engine meets the emission standards.
- (b) If the stationary CI internal combustion engine is an emergency stationary internal combustion engine, the owner or operator is not required to submit an initial notification. Starting with the model years in table 5 to this subpart, if the emergency engine does not meet the standards applicable to non-emergency engines in the applicable model year, the owner or operator must keep records of the operation of the engine in emergency and non-emergency service that are recorded through the non-resettable hour meter. The owner must record the time of operation of the engine and the reason the engine was in operation during that time.
- (c) If the stationary CI internal combustion engine is equipped with a diesel particulate filter, the owner or operator must keep records of any corrective action taken after the backpressure monitor has notified the owner or operator that the high backpressure limit of the engine is approached.
- (d) If you own or operate an emergency stationary CI ICE with a maximum engine power more than 100 HP that operates or is contractually obligated to be available for more than 15 hours per calendar year for the purposes specified in § 60.4211(f)(2)(ii) and (iii) or that operates for the

purposes specified in § 60.4211(f)(3)(i), you must submit an annual report according to the requirements in paragraphs (d)(1) through (3) of this section.

- (1) The report must contain the following information:
 - (i) Company name and address where the engine is located.
 - (ii) Date of the report and beginning and ending dates of the reporting period.
 - (iii) Engine site rating and model year.
 - (iv) Latitude and longitude of the engine in decimal degrees reported to the fifth decimal place.
 - (v) Hours operated for the purposes specified in § 60.4211(f)(2)(ii) and (iii), including the date, start time, and end time for engine operation for the purposes specified in § 60.4211(f)(2)(ii) and (iii).
 - (vi) Number of hours the engine is contractually obligated to be available for the purposes specified in § 60.4211(f)(2)(ii) and (iii).
 - (vii) Hours spent for operation for the purposes specified in § 60.4211(f)(3)(i), including the date, start time, and end time for engine operation for the purposes specified in § 60.4211(f)(3)(i). The report must also identify the entity that dispatched the engine and the situation that necessitated the dispatch of the engine.
- (2) The first annual report must cover the calendar year 2015 and must be submitted no later than March 31, 2016. Subsequent annual reports for each calendar year must be submitted no later than March 31 of the following calendar year.
- (3) The annual report must be submitted electronically using the subpart specific reporting form in the Compliance and Emissions Data Reporting Interface (CEDRI) that is accessed through EPA's Central Data Exchange (CDX) (www.epa.gov/cdx). However, if the reporting form specific to this subpart is not available in CEDRI at the time that the report is due, the written report must be submitted to the Administrator at the appropriate address listed in § 60.4.

[71 FR 39172, July 11, 2006, as amended at 78 FR 6696, Jan. 30, 2013]

Special Requirements

§ 60.4215 What requirements must I meet for engines used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands?

- (a) Stationary CI ICE with a displacement of less than 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the applicable emission standards in §§ 60.4202 and 60.4205.
- (b) Stationary CI ICE that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are not required to meet the fuel requirements in § 60.4207.

- (c) Stationary CI ICE with a displacement of greater than or equal to 30 liters per cylinder that are used in Guam, American Samoa, or the Commonwealth of the Northern Mariana Islands are required to meet the following emission standards:
 - (1) For engines installed prior to January 1, 2012, limit the emissions of NOX in the stationary CI internal combustion engine exhaust to the following:
 - (i) 17.0 g/KW-hr (12.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
 - (ii) 45 · n−0.2 g/KW-hr (34 · n−0.2 g/HP-hr) when maximum engine speed is 130 or more but less than 2,000 rpm, where n is maximum engine speed; and
 - (iii) 9.8 g/KW-hr (7.3 g/HP-hr) when maximum engine speed is 2,000 rpm or more.
 - (2) For engines installed on or after January 1, 2012, limit the emissions of NOX in the stationary CI internal combustion engine exhaust to the following:
 - (i) 14.4 g/KW-hr (10.7 g/HP-hr) when maximum engine speed is less than 130 rpm;
 - (ii) 44 · n-0.23 g/KW-hr (33 · n-0.23 g/HP-hr) when maximum engine speed is greater than or equal to 130 but less than 2,000 rpm and where n is maximum engine speed; and
 - (iii) 7.7 g/KW-hr (5.7 g/HP-hr) when maximum engine speed is greater than or equal to 2,000 rpm.
 - (3) Limit the emissions of PM in the stationary CI internal combustion engine exhaust to 0.40 g/KW-hr (0.30 g/HP-hr).

[71 FR 39172, July 11, 2006, as amended at 76 FR 37971, June 28, 2011]

§ 60.4216 What requirements must I meet for engines used in Alaska?

- (a) Prior to December 1, 2010, owners and operators of stationary CI ICE with a displacement of less than 30 liters per cylinder located in areas of Alaska not accessible by the FAHS should refer to 40 CFR part 69 to determine the diesel fuel requirements applicable to such engines.
- (b) Except as indicated in paragraph (c) of this section, manufacturers, owners and operators of stationary CI ICE with a displacement of less than 10 liters per cylinder located in areas of Alaska not accessible by the FAHS may meet the requirements of this subpart by manufacturing and installing engines meeting the requirements of 40 CFR parts 94 or 1042, as appropriate, rather than the otherwise applicable requirements of 40 CFR parts 89 and 1039, as indicated in sections §§ 60.4201(f) and 60.4202(g) of this subpart.
- (c) Manufacturers, owners and operators of stationary CI ICE that are located in areas of Alaska not accessible by the FAHS may choose to meet the applicable emission standards for emergency engines in § 60.4202 and § 60.4205, and not those for non-emergency engines in § 60.4201 and § 60.4204, except that for 2014 model year and later non-emergency CI ICE, the owner or operator of any such engine that was not certified as meeting Tier 4 PM standards, must meet the applicable requirements for PM in § 60.4201 and § 60.4204 or install a PM emission control device that achieves PM emission reductions of 85 percent, or 60 percent for engines with a displacement of greater than or equal to 30 liters per cylinder, compared to engine-out emissions.

- (d) The provisions of § 60.4207 do not apply to owners and operators of pre-2014 model year stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS.
- (e) The provisions of § 60.4208(a) do not apply to owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS until after December 31, 2009.
- (f) The provisions of this section and § 60.4207 do not prevent owners and operators of stationary CI ICE subject to this subpart that are located in areas of Alaska not accessible by the FAHS from using fuels mixed with used lubricating oil, in volumes of up to 1.75 percent of the total fuel. The sulfur content of the used lubricating oil must be less than 200 parts per million. The used lubricating oil must meet the on-specification levels and properties for used oil in 40 CFR 279.11.

[76 FR 37971, June 28, 2011]

§ 60.4217 What emission standards must I meet if I am an owner or operator of a stationary internal combustion engine using special fuels?

Owners and operators of stationary CI ICE that do not use diesel fuel may petition the Administrator for approval of alternative emission standards, if they can demonstrate that they use a fuel that is not the fuel on which the manufacturer of the engine certified the engine and that the engine cannot meet the applicable standards required in § 60.4204 or § 60.4205 using such fuels and that use of such fuel is appropriate and reasonably necessary, considering cost, energy, technical feasibility, human health and environmental, and other factors, for the operation of the engine.

[76 FR 37972, June 28, 2011]

General Provisions

§ 60.4218 What parts of the General Provisions apply to me?

Table 8 to this subpart shows which parts of the General Provisions in §§ 60.1 through 60.19 apply to you.

§ 60.4219 What definitions apply to this subpart?

As used in this subpart, all terms not defined herein shall have the meaning given them in the CAA and in subpart A of this part.

Certified emissions life means the period during which the engine is designed to properly function in terms of reliability and fuel consumption, without being remanufactured, specified as a number of hours of operation or calendar years, whichever comes first. The values for certified emissions life for stationary CI ICE with a displacement of less than 10 liters per cylinder are given in 40 CFR 1039.101(g). The values for certified emissions life for stationary CI ICE with a displacement of greater than or equal to 10 liters per cylinder and less than 30 liters per cylinder are given in 40 CFR 94.9(a).

Combustion turbine means all equipment, including but not limited to the turbine, the fuel, air, lubrication and exhaust gas systems, control systems (except emissions control equipment), and any ancillary components and sub-components comprising any simple cycle combustion turbine, any regenerative/recuperative cycle combustion turbine, the combustion turbine portion of any cogeneration cycle combustion system, or the combustion turbine portion of any combined cycle steam/electric generating system.

Compression ignition means relating to a type of stationary internal combustion engine that is not a spark ignition engine.

Date of manufacture means one of the following things:

- (1) For freshly manufactured engines and modified engines, date of manufacture means the date the engine is originally produced.
- (2) For reconstructed engines, date of manufacture means the date the engine was originally produced, except as specified in paragraph (3) of this definition.
- (3) Reconstructed engines are assigned a new date of manufacture if the fixed capital cost of the new and refurbished components exceeds 75 percent of the fixed capital cost of a comparable entirely new facility. An engine that is produced from a previously used engine block does not retain the date of manufacture of the engine in which the engine block was previously used if the engine is produced using all new components except for the engine block. In these cases, the date of manufacture is the date of reconstruction or the date the new engine is produced.

Diesel fuel means any liquid obtained from the distillation of petroleum with a boiling point of approximately 150 to 360 degrees Celsius. One commonly used form is number 2 distillate oil.

Diesel particulate filter means an emission control technology that reduces PM emissions by trapping the particles in a flow filter substrate and periodically removes the collected particles by either physical action or by oxidizing (burning off) the particles in a process called regeneration.

Emergency stationary internal combustion engine means any stationary reciprocating internal combustion engine that meets all of the criteria in paragraphs (1) through (3) of this definition. All emergency stationary ICE must comply with the requirements specified in § 60.4211(f) in order to be considered emergency stationary ICE. If the engine does not comply with the requirements specified in § 60.4211(f), then it is not considered to be an emergency stationary ICE under this subpart.

- (1) The stationary ICE is operated to provide electrical power or mechanical work during an emergency situation. Examples include stationary ICE used to produce power for critical networks or equipment (including power supplied to portions of a facility) when electric power from the local utility (or the normal power source, if the facility runs on its own power production) is interrupted, or stationary ICE used to pump water in the case of fire or flood, etc.
- (2) The stationary ICE is operated under limited circumstances for situations not included in paragraph (1) of this definition, as specified in § 60.4211(f).
- (3) The stationary ICE operates as part of a financial arrangement with another entity in situations not included in paragraph (1) of this definition only as allowed in § 60.4211(f)(2)(ii) or (iii) and § 60.4211(f)(3)(i).

Engine manufacturer means the manufacturer of the engine. See the definition of "manufacturer" in this section.

Fire pump engine means an emergency stationary internal combustion engine certified to NFPA requirements that is used to provide power to pump water for fire suppression or protection.

Freshly manufactured engine means an engine that has not been placed into service. An engine becomes freshly manufactured when it is originally produced.

Installed means the engine is placed and secured at the location where it is intended to be operated.

Manufacturer has the meaning given in section 216(1) of the Act. In general, this term includes any person who manufactures a stationary engine for sale in the United States or otherwise introduces a new stationary engine into commerce in the United States. This includes importers who import stationary engines for sale or resale.

Maximum engine power means maximum engine power as defined in 40 CFR 1039.801.

Model year means the calendar year in which an engine is manufactured (see "date of manufacture"), except as follows:

- (1) Model year means the annual new model production period of the engine manufacturer in which an engine is manufactured (see "date of manufacture"), if the annual new model production period is different than the calendar year and includes January 1 of the calendar year for which the model year is named. It may not begin before January 2 of the previous calendar year and it must end by December 31 of the named calendar year.
- (2) For an engine that is converted to a stationary engine after being placed into service as a nonroad or other non-stationary engine, model year means the calendar year or new model production period in which the engine was manufactured (see "date of manufacture").

Other internal combustion engine means any internal combustion engine, except combustion turbines, which is not a reciprocating internal combustion engine or rotary internal combustion engine.

Reciprocating internal combustion engine means any internal combustion engine which uses reciprocating motion to convert heat energy into mechanical work.

Rotary internal combustion engine means any internal combustion engine which uses rotary motion to convert heat energy into mechanical work.

Spark ignition means relating to a gasoline, natural gas, or liquefied petroleum gas fueled engine or any other type of engine with a spark plug (or other sparking device) and with operating characteristics significantly similar to the theoretical Otto combustion cycle. Spark ignition engines usually use a throttle to regulate intake air flow to control power during normal operation. Dual-fuel engines in which a liquid fuel (typically diesel fuel) is used for CI and gaseous fuel (typically natural gas) is used as the primary fuel at an annual average ratio of less than 2 parts diesel fuel to 100 parts total fuel on an energy equivalent basis are spark ignition engines.

Stationary internal combustion engine means any internal combustion engine, except combustion turbines, that converts heat energy into mechanical work and is not mobile. Stationary ICE differ from mobile ICE in that a stationary internal combustion engine is not a nonroad engine as defined at 40 CFR 1068.30 (excluding paragraph (2)(ii) of that definition), and is not used to propel a motor vehicle, aircraft, or a vehicle used solely for competition. Stationary ICE include reciprocating ICE, rotary ICE, and other ICE, except combustion turbines.

Subpart means 40 CFR part 60, subpart IIII.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011; 78 FR 6696, Jan. 30, 2013]

Table 1 to Subpart IIII of Part 60—Emission Standards for Stationary Pre-2007 Model Year Engines With a Displacement of <10 Liters per Cylinder and 2007-2010 Model Year Engines >2,237 KW (3,000 HP) and With a Displacement of <10 Liters per Cylinder

[As stated in §§ 60.4201(b), 60.4202(b), 60.4204(a), and 60.4205(a), you must comply with the following emission standards]

Maximum	Emission standards for stationary pre-2007 model year engines with a displacement of <10 liters per cylinder and 2007-2010 model year engines >2,237 KW (3,000 HP) and with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)						
engine power	$NMHC + NO_X$	HC	NO_X	CO	PM		
KW<8 (HP<11)	10.5 (7.8)			8.0 (6.0)	1.0 (0.75)		
8≤KW<19 (11≤HP<25)	9.5 (7.1)			6.6 (4.9)	0.80 (0.60)		
19≤KW<37 (25≤HP<50)	9.5 (7.1)			5.5 (4.1)	0.80 (0.60)		
37≤KW<56 (50≤HP<75)			9.2 (6.9)				
56≤KW<75 (75≤HP<100)			9.2 (6.9)				
75≤KW<130 (100≤HP<175)			9.2 (6.9)				
130≤KW<225 (175≤HP<300)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)		
225≤KW<450 (300≤HP<600)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)		
450≤KW≤560 (600≤HP≤750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)		
KW>560 (HP>750)		1.3 (1.0)	9.2 (6.9)	11.4 (8.5)	0.54 (0.40)		

Table 2 to Subpart IIII of Part 60—Emission Standards for 2008 Model Year and Later Emergency Stationary CI ICE <37 KW (50 HP) With a Displacement of <10 Liters per Cylinder

[As stated in § 60.4202(a)(1), you must comply with the following emission standards]

		or 2008 model year and HP) with a displacemen	_	•
Engine power	Model year(s)	NO _X + NMHC	СО	PM

	Emission standards for 2008 model year and later emergency stationary CI ICE <37 KW (50 HP) with a displacement of <10 liters per cylinder in g/KW-hr (g/HP-hr)				
Engine power	Model year(s)	NO _X + NMHC	СО	PM	
KW<8 (HP<11)	2008+	7.5 (5.6)	8.0 (6.0)	0.40 (0.30)	
8≤KW<19 (11≤HP<25)	2008+	7.5 (5.6)	6.6 (4.9)	0.40 (0.30)	
19≤KW<37 (25≤HP<50)	2008+	7.5 (5.6)	5.5 (4.1)	0.30 (0.22)	

Table 3 to Subpart IIII of Part 60—Certification Requirements for Stationary Fire Pump Engines

As stated in § 60.4202(d), you must certify new stationary fire pump engines beginning with the following model years:

Engine power	Starting model year engine manufacturers must certify new stationary fire pump engines according to § 60.4202(d) ¹
KW<75 (HP<100)	2011
75≤KW<130 (100≤HP<175)	2010
130≤KW≤560 (175≤HP≤750)	2009
KW>560 (HP>750)	2008

¹Manufacturers of fire pump stationary CI ICE with a maximum engine power greater than or equal to 37 kW (50 HP) and less than 450 KW (600 HP) and a rated speed of greater than 2,650 revolutions per minute (rpm) are not required to certify such engines until three model years following the model year indicated in this Table 3 for engines in the applicable engine power category.

[71 FR 39172, July 11, 2006, as amended at 76 FR 37972, June 28, 2011]

Table 4 to Subpart IIII of Part 60—Emission Standards for Stationary Fire Pump Engines

[As stated in §§ 60.4202(d) and 60.4205(c), you must comply with the following emission standards for stationary fire pump engines]

Maximum engine power	Model year(s)	$NMHC + NO_X$	CO	PM
KW<8 (HP<11)	2010 and earlier	10.5 (7.8)	8.0 (6.0)	1.0 (0.75)
	2011+	7.5 (5.6)		0.40 (0.30)

Maximum engine power	Model year(s)	NMHC + NO _X	со	PM
8≤KW<19 (11≤HP<25)	2010 and earlier	9.5 (7.1)	6.6 (4.9)	0.80 (0.60)
	2011+	7.5 (5.6)		0.40 (0.30)
19≤KW<37 (25≤HP<50)	2010 and earlier	9.5 (7.1)	5.5 (4.1)	0.80 (0.60)
	2011+	7.5 (5.6)		0.30 (0.22)
37≤KW<56 (50≤HP<75)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+ 1	4.7 (3.5)		0.40 (0.30)
56≤KW<75 (75≤HP<100)	2010 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2011+ 1	4.7 (3.5)		0.40 (0.30)
75≤KW<130 (100≤HP<175)	2009 and earlier	10.5 (7.8)	5.0 (3.7)	0.80 (0.60)
	2010+ ²	4.0 (3.0)		0.30 (0.22)
130≤KW<225 (175≤HP<300)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+ 3	4.0 (3.0)		0.20 (0.15)
225≤KW<450 (300≤HP<600)	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+ 3	4.0 (3.0)		0.20 (0.15)
450\(\leq KW\(\leq 560\) (600\(\leq HP\(\leq 750\))	2008 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2009+	4.0 (3.0)		0.20 (0.15)
KW>560 (HP>750)	2007 and earlier	10.5 (7.8)	3.5 (2.6)	0.54 (0.40)
	2008+	6.4 (4.8)		0.20 (0.15)

¹ For model years 2011-2013, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 revolutions per minute (rpm) may comply with the emission limitations for 2010 model year engines.

Table 5 to Subpart IIII of Part 60—Labeling and Recordkeeping Requirements for New Stationary Emergency Engines

[You must comply with the labeling requirements in § 60.4210(f) and the recordkeeping requirements in § 60.4214(b) for new emergency stationary CI ICE beginning in the following model years:]

² For model years 2010-2012, manufacturers, owners and operators of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2009 model year engines.

³ In model years 2009-2011, manufacturers of fire pump stationary CI ICE in this engine power category with a rated speed of greater than 2,650 rpm may comply with the emission limitations for 2008 model year engines.

Engine power	Starting model year
19≤KW<56 (25≤HP<75)	2013
56≤KW<130 (75≤HP<175)	2012
KW≥130 (HP≥175)	2011

Table 6 to Subpart IIII of Part 60—Optional 3-Mode Test Cycle for Stationary Fire Pump Engines

[As stated in § 60.4210(g), manufacturers of fire pump engines may use the following test cycle for testing fire pump engines:]

Mode No.	Engine speed ¹	Torque (percent) ²	Weighting factors
1	Rated	100	0.30
2	Rated	75	0.50
3	Rated	50	0.20

¹ Engine speed: ±2 percent of point.

Table 7 to Subpart IIII of Part 60—Requirements for Performance Tests for Stationary CI ICE With a Displacement of ≥30 Liters per Cylinder

[As stated in § 60.4213, you must comply with the following requirements for performance tests for stationary CI ICE with a displacement of ≥30 liters per cylinder:]

For each	Complying with the requirement to	You must	Using	According to the following requirements
combustion	NO _x emissions by 90 percent or more	sampling port location and the	1A of 40 CFR	(a) Sampling sites must be located at the inlet and outlet of the control device.
		inlet and outlet of	or 3B of 40 CFR	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurements for

² Torque: NFPA certified nameplate HP for 100 percent point. All points should be ±2 percent of engine percent load value.

For each	Complying with the requirement to	You must	Using	According to the following requirements
				NO_X concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and,		(c) Measurements to determine moisture content must be made at the same time as the measurements for NO _X concentration.
		iv. Measure NO _X at the inlet and outlet of the control device	40 CFR part 60, appendix A,	(d) NO _X concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	b. Limit the concentration of NO _X in the stationary CI internal combustion engine exhaust.	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O ₂ concentration of the stationary internal combustion engine exhaust at the sampling port location; and,	or 3B of 40 CFR part 60, appendix	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurement for NO _x concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine	(3) Method 4 of 40 CFR part 60, appendix A, Method 320 of 40 CFR part 63,	(c) Measurements to determine moisture content must be made at the same time as the measurement for

For each	Complying with the requirement to	You must	Using	According to the following requirements
		exhaust at the sampling port location; and,	appendix A, or ASTM D 6348-03 (incorporated by reference, see § 60.17)	NO_X concentration.
		the exhaust of the stationary internal	40 CFR part 60, appendix A, Method 320 of 40	(d) NO _X concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.
	c. Reduce PM emissions by 60 percent or more	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) Sampling sites must be located at the inlet and outlet of the control device.
		inlet and outlet of	or 3B of 40 CFR	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content at the inlet and outlet of the control device; and	(3) Method 4 of 40 CFR part 60, appendix A	(c) Measurements to determine and moisture content must be made at the same time as the measurements for PM concentration.
			(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

For each	Complying with the requirement to	You must	Using	According to the following requirements
	concentration of PM in the stationary CI	i. Select the sampling port location and the number of traverse points;	(1) Method 1 or 1A of 40 CFR part 60, appendix A	(a) If using a control device, the sampling site must be located at the outlet of the control device.
		ii. Determine the O ₂ concentration of the stationary internal combustion engine exhaust at the sampling port location; and	or 3B of 40 CFR part 60, appendix	(b) Measurements to determine O ₂ concentration must be made at the same time as the measurements for PM concentration.
		iii. If necessary, measure moisture content of the stationary internal combustion engine exhaust at the sampling port location; and	(3) Method 4 of 40 CFR part 60, appendix A	(c) Measurements to determine moisture content must be made at the same time as the measurements for PM concentration.
		iv. Measure PM at the exhaust of the stationary internal combustion engine	(4) Method 5 of 40 CFR part 60, appendix A	(d) PM concentration must be at 15 percent O ₂ , dry basis. Results of this test consist of the average of the three 1-hour or longer runs.

Table 8 to Subpart IIII of Part 60—Applicability of General Provisions to Subpart IIII

[As stated in § 60.4218, you must comply with the following applicable General Provisions:]

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.1	General applicability of the General Provisions	Yes	
§ 60.2	Definitions	Yes	Additional terms defined in § 60.4219.
§ 60.3	Units and abbreviations	Yes	

General Provisions citation	Subject of citation	Applies to subpart	Explanation
§ 60.4	Address	Yes	
§ 60.5	Determination of construction or modification	Yes	
§ 60.6	Review of plans	Yes	
§ 60.7	Notification and Recordkeeping	Yes	Except that § 60.7 only applies as specified in § 60.4214(a).
§ 60.8	Performance tests	Yes	Except that § 60.8 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder and engines that are not certified.
§ 60.9	Availability of information	Yes	
§ 60.10	State Authority	Yes	
§ 60.11	Compliance with standards and maintenance requirements	No	Requirements are specified in subpart IIII.
§ 60.12	Circumvention	Yes	
§ 60.13	Monitoring requirements	Yes	Except that § 60.13 only applies to stationary CI ICE with a displacement of (≥30 liters per cylinder.
§ 60.14	Modification	Yes	
§ 60.15	Reconstruction	Yes	
§ 60.16	Priority list	Yes	
§ 60.17	Incorporations by reference	Yes	
§ 60.18	General control device requirements	No	
§ 60.19	General notification and reporting requirements	Yes	

Indiana Department of Environmental Management Office of Air Quality

Addendum to the
Technical Support Document for
a Part 70 Operating Permit Renewal and
a Significant Source Modification

Source Name: Industrial Dielectrics, Inc. dba IDI Composites

International

Source Location: 407 South 7th Street, Noblesville, IN 46060

County: Hamilton SIC Code: 3087

Significant Source Modification No.: 057-31216-00042
Renewal Operating Permit No.: T057-31912-00042
Permit Reviewer: Roger Osburn

On June 14, 2013, the Office of Air Quality (OAQ) had a notice published in the *The Times* in Noblesville, Indiana, stating that Industrial Dielectrics, Inc. dba IDI Composites International had applied for a Significant Source Modification and a Part 70 Operating Permit Renewal for an existing stationary plastic custom compounding plant. The notice also stated that OAQ proposed to issue the significant source modification and permit renewal for these operations and provided information on how the public could review the proposed source modification, permit renewal and other supporting documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not the modification and permit renewal should be issued as proposed.

Changes to the permit are noted as follows: struck language has been deleted; **bold** language has been added. If necessary, the Table of Contents will be modified to reflect these changes but will not be duplicated herein.

Changes will be noted in this addendum only, as no changes will be made to the Technical Support Document as it was public noticed.

Comments on the proposed Part 70 Operating Permit Renewal / Significant Source Modification were received on July 14, 2013 from Joe VanCamp, P.E. of Cornerstone EHS, Inc., representing Industrial Dielectrics, Inc. dba IDI Composites International.

Comment #1

Please verify the Emission Statement compliance schedule for this facility. In Condition C.15 of the draft permit, the reporting schedule is identified as starting in 2005 and every three (3) years thereafter. However, in the TSD (page 13 of 115), the frequency is identified as starting in 2004 and every three (3) years after.

Response to Comment #1

This source is located in Hamilton County. Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 and every three years thereafter, sources in Hamilton County are required to submit an emission statement covering the previous calendar year. Therefore, no changes have been made to the permit as a result of this comment.

Comment #2

In Condition D.1.3(a) of each draft permit, the phrase "or blended" was inadvertently added to the language description twice.

Industrial Dielectrics, Inc. dba IDI Composites International Noblesville, Indiana Permit Reviewer: RLO Page 2 of 2 Addendum to TSD for Permit No T057-31912-00042 Addendum to TSD for Permit No 057-31216-00042

Response to Comment #2

The following changes have been made to Sections D.1.3(a) of the permit:

D.1.3 Particulate Matter (PM)

(a) The SMC baghouse B2 shall be in operation at all times when raw material is being added into or blended or blended product is being removed from the SMC mixers associated with the 39" SMC Line, the 48" SMC Line and the SMC Drum Mixer, as well as the BMC mixers for Rosite production identified as Rosite Mixer #L1 through Rosite Mixer #L4, in order to comply with the PM limits under 326 IAC 6-3-2, in Condition D.1.1.

Indiana Department of Environmental Management Office of Air Quality

Technical Support Document (TSD) for a Significant Source Modification and a Part 70
Operating Permit Renewal

Source Background and Description

Source Name: Industrial Dielectrics, Inc. dba IDI Composites

International

Source Location: 407 South 7th Street, Noblesville, IN 46060

County: Hamilton SIC Code: 3087

Significant Source Modification No.: 057-31216-00042
Renewal Operating Permit No.: T057-31912-00042
Permit Reviewer: Roger Osburn

Permitted Emission Units and Pollution Control Equipment

- (a) One (1) 39" sheet molding compound (SMC) line, identified as SMC Line 2, consisting of a Large Mixer, constructed in 2002, relocated from the laboratory, also including other mixers where pigment and thickeners are added, for SMC production, and the 39" SMC machine. The maximum throughput is 5,832 pounds per hour, with PM emissions from the Large Mixer and glass chopper controlled by a baghouse B2, exhausting to stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.
- (b) One (1) sheet molding compound (SMC) mixer, identified as SMC Drum Mixer, constructed prior to 1980, for (SMC) production. The maximum throughput is 1,200 pounds per hour, with PM emissions controlled by SMC Baghouse B2 exhausting to stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.
- (c) One (1) 48" sheet molding compound (SMC) line, identified as SMC Line 1, consisting of a Large Mixer, originally constructed prior to 1980 and modified in 2012, also including other mixers where pigment and thickener are added, for SMC production, and the 48" SMC Machine. The maximum throughput is 7,200 pounds per hour, with PM emissions from the Large Mixer and glass chopper controlled by SMC baghouse B2 exhausting to stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.
- (d) Six (6) bulk molding compound (BMC) mixers, identified as BMC Mixer #1 through BMC Mixer #5, constructed after 1980, and BMC Mixer #6, constructed in 2008, for bulk molding compound (BMC) production, with BMC Mixer #1 through BMC Mixer #5 each having a maximum throughput of 1,200 pounds per hour, and BMC Mixer #6 having a maximum throughput of 2,200 lbs/hr, with PM emissions from all BMC mixers controlled by BMC Baghouse B1 and all exhausting to stack S1. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation. The BMC mixer process description also include a Filler Cut Scale for weighing filler powders used in each mixer, with a maximum throughput of 492 pounds per hour, with PM emissions also controlled by BMC Baghouse B1 exhausting to Stack S1. Also included are the final packaging operations associated with the BMC material from these mixers, including two (2) compound feeders and six (6) extruders used to package BMC material for shipping, with no emission controls.
- (e) Four (4) bulk molding compound (BMC) mixers, identified as Rosite Mixer #L1 through Rosite Mixer #L4, constructed in 2005, for Rosite production, each with a maximum capacity of 1,000 pounds per hour with PM emissions from all Rosite mixers controlled by

TSD for Significant Source Modification No.: 057-31216-00042 TSD for Part 70 Operating Permit Renewal No: 057-31912-00042

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Permit Reviewer: Roger Osburn

SMC baghouse B2, exhausting to Stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation. The Rosite mixer process description also include a Filler Cut Scale for weighing filler powders used in each mixer, with a maximum throughput of 2,400 pounds per hour, with PM emissions also controlled by SMC Baghouse B2 exhausting to Stack S2. Also included is the Rosite Resin Blending Mixer used to blend resins for the Rosite mixers, with no emission controls.

(f) One (1) electric oven, identified as O3, approved for construction in 2013, for treatment of unusable raw materials prior to disposal, with a maximum capacity of 1,600 pounds per hour, with no emission controls and exhausting to Stack S6.

Insignificant Activities

The source also consists of the following insignificant activities:

- (a) One (1) laboratory bulk molding compound (BMC) mixer, identified as Rosite Mixer #16, constructed in 2005, for Rosite production, with a maximum throughput of 10 pounds per hour, to model the operation of Rosite Mixer #11 through Rosite #14 with no emission controls. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation.
- (b) Four (4) laboratory bulk molding compound (BMC) mixers, identified as BMC Mixer #17 through BMC Mixer #20, constructed prior to 1980, for BMC production, with BMC Mixer #17 and BMC Mixer #18 each having a maximum throughput of 150 pounds per hour, with PM emissions controlled by Lab Baghouse B3 exhausting to stack S3, and BMC Mixer #19 and BMC Mixer #20, each having a maximum throughput of 20 pounds per hour, with no emission controls. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation.
- (c) One (1) Vazo Blender, constructed in 2005, with a maximum throughput of 180 batches of material per year, with each batch composed of 758 pounds of raw materials, with PM emissions controlled by Vazo Baghouse B5, exhausting to Stack S5. [40 CFR Part 63, Subpart WWWW]
- (d) Three (3) SMC laboratory mixers identified as Mixer #23, Mixer #24, with a maximum capacity of 50 lbs/hr, and Mixer #25 with a maximum process capacity of 15 lbs/hr with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]
- (e) One (1) PolyM Dispersion Mixer, used to set up scrap SMC and BMC material through polymerization, with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]
- (f) QA/QC process involving laboratory testing and sample molding presses, with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]
- (g) Cleaning solvent identified as IDI Ship Shape having a vapor pressure equal to or less than 0.7kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F).
- (h) The following equipment related to manufacturing activities not resulting in the emission of HAPs: cutting torches, soldering equipment, welding equipment.
- (i) Solvent recycling systems with batch capacity less than or equal to 100 gallons.
- (j) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (k) Paved and unpaved roads and parking lots with public access.

- Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower
- (m) Stationary fire pumps.
- (n) A laboratory as defined in 326 IAC 2-7-1(21)(G) which includes the following:
 - 1. One (1) 24" sheet molding compound SMC line, identified as SMC Line 3, located in the laboratory. [40 CFR Part 63, Subpart WWWW]
 - 2. Two (2) small laboratory extruders, with no pollution control equipment and exhausting inside the building.
- (o) Eleven (11) aboveground polyester resin storage tanks, identified as T_1 through T_{11} . Tanks T_1 through T_6 have a maximum capacity of 7,200 gallons, tank T_7 has a maximum capacity of 6,000 gallons, and tanks T_8 through T_{11} each have a capacity of 5,400 gallons. Each aboveground tank is equipped with one vent and each has the potential to emit less than 1 ton VOC/year.
- (p) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
- (q) Two (2) saws, identified as SA₁ and SA₂, for plastic sheet production, each with a maximum capacity of 20 pounds per hour, with no emission controls and no outside exhaust.
- (r) One (1) stationary emergency generator burning diesel fuel, with a maximum output of 10 KW, manufactured in 2012. Under 40 CFR 60, Subpart IIII, this is an affected unit.

Existing Approvals

Since the issuance of Part 70 Operating Permit Renewal T057-18496-00042 on February 27, 2008, the source has constructed or has been operating under the following additional approvals:

- (a) Minor Source Modification No. 057-26977-00042 issued on October 28, 2008;
- (b) Minor Permit Modification No. 057-27094-00042 issued on December 23, 2008; and
- (c) Administrative Amendment No. 057-28062-00042 issued on June 10, 2009.

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

Enforcement Issue

There are no enforcement actions pending for the source.

Emission Calculations

Proposed New Emission Units in SSM No. 057-31216-00042 and TV Renewal PTE - See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Hamilton County.

Designation
Better than national standards.
Unclassifiable or attainment effective November 15, 1990.
Attainment effective October 19, 2007, for the 8-hour ozone standard. ¹
Unclassifiable effective November 15, 1990.
Cannot be classified or better than national standards.
Not designated.

¹Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005.

(a) Ozone Standards

Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Hamilton County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) $PM_{2.5}$

U.S. EPA, in the Federal Register Notice 70 FR 943 dated January 5, 2005, has designated Hamilton as nonattainment for PM_{2.5}. On March 7, 2005 the Indiana Attorney General's Office, on behalf of IDEM, filed a lawsuit with the Court of Appeals for the District of Columbia Circuit challenging U.S. EPA's designation of nonattainment areas without sufficient data. However, in order to ensure that sources are not potentially liable for a violation of the Clean Air Act, the OAQ is following the U.S. EPA's New Source Review Rule for PM_{2.5} promulgated on May 8, 2008. These rules became effective on July 15, 2008. Therefore, direct PM_{2.5}, and SO₂ emissions were reviewed pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5. See the State Rule Applicability – Entire Source section.

(c) Other Criteria Pollutants

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

Fugitive Emissions

Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 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 applicability.

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Basic nonattainment designation effective federally April 5, 2005, for PM2.5.

Unrestricted Potential Emissions			
Pollutant	Tons/year		
PM	391.86		
PM ₁₀	391.86		
PM _{2.5}	391.86		
SO ₂	Negl.		
VOC	22.98		
СО	Negl.		
NO _x	Negl.		
GHGs as CO₂e	Negl.		
Single HAP	>10		
Total HAP	>25		

Negl.=Negliable

(a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no regulated pollutant, excluding GHGs, is emitted at a rate of two hundred fifty (250) tons per year or more, emissions of GHGs are less than one hundred thousand (100,000) tons of CO₂ equivalent (CO₂e) emissions per year, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).

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

HAPs	Potential To Emit (ton/yr)
Single HAP	62.75 (styrene)
Total HAPs	62.76

(c) 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).

Part 70 Permit Conditions

This source is subject to the requirements of 326 IAC 2-7, because the source met the following:

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

Description of Proposed Modification

The Office of Air Quality (OAQ) has reviewed an application, submitted by Industrial Dielectrics, Inc. on December 5, 2011, relating to:

- (a) remove the two (2) fiberglass sheet production mixers identified as M1 and M2 from the facility;
- (b) rename the sheet molding compound (SMC) mixer currently identified as SMC Mixer M3, to SMC Drum Mixer and increase the maximum capacity from 313 lbs/hour to 1,200 lbs/hour:
- (c) rename the sheet molding compound (SMC) line identified as SMC Mixer M4, to SMC Line 1 and increase the maximum capacity from 1,200 lbs/hour to 7,200 lbs/hour;
- (d) remove the three (3) bulk molding compound mixers; rename the existing mixers currently identified as M5, M6, M9, M10, M11, and M27; decrease the maximum capacity of five of the mixers from 1,330 lbs/hour to 1,200 lbs/hour, increase the maximum capacity of Mixer M27 from 2,000 lbs/hour to 2,200 lbs/hour;

Emission Unit	Current Emission	Old Maximum	New Maximum
previously identified	Unit	Process Capacity	Process Capacity
as:		(lbs/hr)	(lbs/hr)
M_7, M_{12}, M_{13}	Removed	Removed	Removed
M_5	Mixer #7	1,330	1,200
M_6	Mixer #6	1,330	1,200
M ₉	Mixer #3	1,330	1,200
M ₁₀	Mixer #2	1,330	1,200
M ₁₁	Mixer #1	1,330	1,200
M ₂₇	Mixer #5	2,000	2,200

- (e) clarify the description and rename the bulk molding compound production mixers for Rosite production, currently identified as M₁₆-M₁₉, to identify and distinguish the production mixers from the other bulk molding compound mixers, and rename the existing mixers;
- (f) clarify the description of the the BMC scale identified as SC1 and rename the unit as Cut Scale;
- (g) remove one (1) saw, identified as SA2, for plastic sheet production, and decrease the maximum capacity of the remaining saw, identified as SA1, from 200 lbs/hour to 20 lbs/hour and redesignate this unit as an insignificant activity;
- (h) remove the one (1) plastic sander, identified as SN₁ for plastic sheet production;
- (i) add one (1) electric oven, identified as O3, and remove the two existing ovens;
- (j) remove one (1) grinder, identified as G₁, for fiberglass chips production,
- (k) rename two (2) BMC laboratory mixers currently identified as M₂₁ and M₂₂ renamed as Mixer #15 and Mixer #16; mixer M₂₁ is now controlled by retrofitted baghouse B1, which exhausts inside the building;
- (I) rename two BMC laboratory mixers currently identified as M₁₄ and M₁₅, increase capacity from 66 lbs/hour to 150 lbs/hour; both mixers are now controlled by retrofitted baghouse B1, which exhausts inside the building;
- (m) rename three (3) BMC laboratory mixers currently identified as M₂₃, M₂₄, M₂₅, renamed as Mixer #19, #20, and #21, and remove one (1) BMC laboratory mixer currently identified as M₂₆;
- (n) rename the baghouse currently identified as B7 to the Vazo Baghouse;

- (o) relocate the 39" SMC Line from the laboratory to full-scale production, change the maximum throughput capacity of the SMC machine associated with this mixer to 5,832 lbs/hour, clarify the description of the 39" SMC Line, and rename the line to SMC Line 2;
- (p) add three (3) SMC laboratory mixers, identified as M₂₉, M₃₀, and M₃₁, to the Insiginificant Activities list, and rename the mixers as Mixer #23, #24, and #25;
- (q) add one (1) Resin Blending Mixer and one (1) Dispersion Mixer to the Insignificant Activities list;
- (r) add QA/QC process involving laboratory testing and sample molding presses to the Insignificant Activities list;
- (s) add 326 IAC 6-3-2 PM emission limitations for many of the SMC and BMC mixers and determine if control devices (baghouses) are needed to meet the limitations;
- (t) evaluate Compliance Assurance Monitoring (CAM) requirements with the updated maximum capacities for all emission units and update permit accordingly;
- (u) remove Best Available Control Technology (BACT) [326 IAC 8-1-6] avoidance limit and corresponding compliance, recordkeeping and reporting requirements;
- (v) revise the Compliance Determination Requirements to clarify and update which baghouses are required to be in use to comply with 326 IAC 6-3-2;
- (w) add one (1) emergency generator to the Insignificant Activites list;
- (x) add six (6) aboveground storage tanks to the Insignificant Activities list, relocate existing aboveground storage tanks, clarify the description of all storage tanks, and remove two underground storage tanks;
- (y) add two (2) small laboratory extruders to the Insignificant Activities list;
- (z) add one (1) 24" sheet molding compound SMC line, identified as Laboratory SMC Line 3, to the Insignificant Activities list. The 24" SMC machine will have its own dedicated small mixer for mixing much smaller samples in 1 to 5 gallon pails/buckets.

Enforcement Issues

There are no pending enforcement actions related to this modification.

Emission Calculations

See Appendix A of this Technical Support Document for detailed emission calculations.

Source Modification 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.

PTE Before Controls of the Modification (New Units)			
Pollutant	Potential To Emit (ton/yr)		
PM	4.69		
PM ₁₀	4.69		
PM _{2.5}	4.69		
SO ₂	0.97		
VOC	13.67		
CO	3.19		
NO _X	14.83		
Single HAPs	12.63		
Total HAPs	12.64		
GHGs	3.91		

Appendix A of this TSD reflects the unrestricted potential emissions of the modification.

Increase in PTE of the Modified Process (Modified Units)				
Pollutant	PTE Before Modification	PTE After Modification	Increase from Modified Units	
DM	(ton/yr)	(ton/yr)	(ton/yr)	
PM	391.86	721.31	350.76	
PM ₁₀	391.86	721.31	350.76	
$PM_{2.5}$	391.86	721.31	350.76	
SO ₂				
VOC	22.98	67.21	46.55	
CO				
NO _X				
Single HAP (styrene)	62.76	68.27	5.51	
Total HAPs	62.76	68.27	5.51	
GHG	0.0	3.91	3.91	

Total PTE Before Controls of the Modification					
Pollutant	PTE New Emission Units (ton/yr)	Net Increase to PTE of Modified Emission Units (ton/yr)	Total PTE of Modification (ton/yr)		
PM/PM ₁₀	4.15	329.45	333.6		
PM _{2.5}	4.15	329.45	333.6		
SO ₂	0.97		0.97		
VOC	13.67	44.23	57.9		
CO	3.19		3.19		
NO _X	14.83		14.83		
Single HAP	12.63	5.51	18.14		
Total HAPs	12.64	5.51	18.15		
GHG	3.91	0.0	3.91		

- (a) Pursuant to 2-7-10.5(f)(4)(A) and 2-7-10.5(f)(6), this modification meets the definition of a significant source modification because it has a potential to emit greater than twenty-five tons of particulate matter and VOCs. Therefore, this modification will be processed as a significant source modification.
- (b) Additionally, this modification is subject to 326 IAC 2-7-12(b)(1)(c)(i), because the modification requires a case-by-case determination of an emission limitation or other standard (40 CFR 60, Subpart IIII) under Title I of the Clean Air Act (CAA). However, the permit modification will be incorporated into the Part 70 Operating Permit Renewal.

Source Modification Permit Level Determination - PSD

Any control equipment is considered federally enforceable only after issuance of this Part 70 source modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

	Potential To Emit (tons/year)							
Process	PM	PM10	PM _{2.5}	SO ₂	VOC	со	NO _X	GHG as CO₂e
SMC Production	6.87	6.87	6.87		45.82			
BMC Production								
BMC Production (Rosite)	0.0	0.0	0.0		0.0			
BMC Lab	0.09	0.09	0.09		0.32			
SMC Lab	3.11	3.11	3.11		12.63			
Emergency generator	1.04	1.04	1.04	0.98	1.04	3.19	14.87	3.91
Total for Modification	11.1	11.1	11.1	1.0	59.81	3.19	14.83	3.91
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000

(a) This modification to an existing minor stationary source is not major because the emissions increase is less than the PSD Major Source Threshold. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Potential to Emit After Issuance

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

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Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
Process	PM	PM10	PM _{2.5}	SO ₂	VOC	со	NO _X	GHG as CO₂e	HAPs Single/Combined
SMC Production									
SMC Drum Mixer	0.65	0.65	0.65		5.16				5.16/5.16
39" SMC Line 2	3.15	3.15	3.15		24.94				24.94/24.94
48" SMC Line 1	3.89	3.89	3.89		22.44				22.44/22.44
BMC Production									
Mixer #1	0.63	0.63	0.63		1.44				1.44/1.44
Mixer #2	0.63	0.63	0.63		1.44				1.44/1.44
Mixer #3	0.63	0.63	0.63		1.44				1.44/1.44
Mixer #5	1.16	1.16	1.16		2.64				2.64/2.64
Mixer #6	0.63	0.63	0.63		1.44				1.44/1.44
Mixer #7	0.63	0.63	0.63		1.44				1.44/1.44
BMC Production (Rosite)									
Mixer #11	0.53	0.53	0.53		1.20				1.20/1.20
Mixer #12	0.53	0.53	0.53		1.20				1.20/1.20
Mixer #13	0.53	0.53	0.53		1.20				1.20/1.20
Mixer #14	0.53	0.53	0.53		1.20				1.20/1.20
BMC Lab									
Mixer #15	0.05	0.05	0.05		0.12				0.12/0.12
Mixer #16	0.26	0.26	0.26		0.01				0.01/0.01
Mixer #17	0.08	0.08	0.08		0.18				0.18/0.18
Mixer #18	0.08	0.08	0.08		0.18				0.18/0.18
Mixer #19	0.53	0.53	0.53		0.02				0.02/0.02
Mixer #20	0.53	0.53	0.53		0.02				0.02/0.02
Mixer #21	0.53	0.53	0.53		0.02				0.02/0.02
SMC Lab									
Mixer #23	1.35	1.35	1.35		0.22				0.22/0.22
Mixer #24	1.35	1.35	1.35		0.22				0.22/0.22
Mixer #25	0.41	0.41	0.41		0.06				0.06/0.06
24" SMC Lab Small Mixer	0.01	0.01	0.01		12.14				12.14/12.14
Emergency generator	1.04	1.04	1.04	1.0	1.21	3.19	14.83	3.91	Negl/0.01
Total for Source	20.35	20.35	20.35	1.0	81.60	3.19	14.83	3.91	68.25/68.27
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000	10/25

This existing stationary source is not major for PSD because the emissions of each (a) regulated pollutant, excluding GHGs, are less than two hundred fifty (<250) tons per year, emissions of GHGs are less than one hundred thousand (<100,000) tons of CO₂ equivalent (CO2e) emissions per year, and it is not in one of the twenty-eight (28) listed source categories.

Federal Rule Applicability Determination

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to each existing pollutant-specific emission unit that meets the following criteria:
 - (1) has a potential to emit before controls equal to or greater than the 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.

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

Emission unit Previously Identified as:	Emission Unit	Pollutant	Control Device ID	Emission Limitation (Y/N)	Uncontrolled PTE (tons/yr)	Controlled PTE (tons/yr)	Major Source Threshold (tons/yr)	CAM Applicable (Y/N)	Large Unit (Y/N)
M3	SMC Drum Mixer	PM/PM ₁₀	B2	Y	<100	<100	100	N	N
M28	39" SMC Line 2	PM/PM ₁₀	B2	Y	>100	<100	100	Υ	N
M4	48" SMC Line 1	PM/PM ₁₀	B2	Y	>100	<100	100	Y	N
M11	Mixer #1	PM/PM ₁₀	B4	Υ	<100	<100	100	N	N
M10	Mixer #2	PM/PM ₁₀	B4	Υ	<100	<100	100	Ν	Ν
M9	Mixer #3	PM/PM ₁₀	B4	Υ	<100	<100	100	N	N
M27	Mixer #5	PM/PM ₁₀	B4	Υ	<100	<100	100	N	N
M6	Mixer #6	PM/PM ₁₀	B4	Υ	<100	<100	100	N	N
M5	Mixer #7	PM/PM ₁₀	B4	Υ	<100	<100	100	N	N
M21	Mixer #15	PM/PM ₁₀	B1	Υ	<100	<100	100	N	N
M22	Mixer #16	PM/PM ₁₀	NA	Υ	<100	<100	100	N	N
	Mixer #17	PM/PM ₁₀	В3	Υ	<100	<100	100	N	N
	Mixer #18	PM/PM ₁₀	В3	Υ	<100	<100	100	N	N
M29	Mixer #23	PM/PM ₁₀	NA	Υ	<100	<100	100	N	N
M30	Mixer #24	PM/PM ₁₀	NA	Υ	<100	<100	100	N	N
M31	Mixer #25	PM/PM ₁₀	NA	Υ	<100	<100	100	N	N
M3	SMC Drum Mixer	VOC	NA	N	<100	<100	100	N	N
M28	39" SMC Line 2	VOC	NA	N	>100	>100	100	N	N
M4	48" SMC Line 1	VOC	NA	N	>100	>100	100	N	N
new	Generator	PM/PM ₁₀	NA	N	<100	<100	100	Ζ	Ν

NA = No control device

Based on this evaluation, the requirements of 40 CFR Part 64, CAM, are applicable to 39" SMC Line Large Mixer and 48" SMC Line Large Mixer for PM/PM₁₀ upon issuance of the Title V Renewal. A CAM plan will be incorporated into this Part 70 permit renewal.

New Source Performance Standards (NSPS):

The one (1) emergency generator that is being added is subject to 40 CFR 60, Subpart IIII - Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The requirements will be included as Section E.2 in the permit and as Attachment B.

National Emission Standards for Hazardous Air Pollutants (NESHAP):

(a) The one (1) sheet molding compound line, identified as 39" SMC Line 2, three (3) SMC laboratory mixers identified as Mixer #23, Mixer #24, and Mixer #25; one (1) Resin Blending Mixer and one (1) Dispersion Mixer; one (1) electric oven, identified as O₂, for treatment of unusable raw materials prior to disposal are being added to existing units already subject to the requirements of 40 CFR 63, Subpart WWWW. There are no new NESHAP requirements included in the permit (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) due to this modification.

State Rule Applicability - Entire Source

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

This source has potential emissions of SO_2 , NO_X , VOC and CO of less than 250 tons per year before and after this modification.

The uncontrolled potential emissions of PM, PM_{10} are greater than 250 tons per year after the modification. The source is subject to the following limitations pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices and Control Technologies). Compliance with the following limitation will render 326 IAC 2-2 (PSD) not applicable to the source for particulates for this modification:

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices and Control Technologies) and 326 IAC 2-2 (Prevention of Significant Deterioration), the allowable PM emission rate from the fiberglass facilities shall not exceed the rates outlined below:

Facility	P = Process Weight tons/hr	E = Allowable Emissions lbs/hr		
SMC Drum Mixer	0.6	2.91		
39" SMC Line 2	2.92	8.40		
48" SMC Line 1	3.60	9.67		
BMC Mixer #1 - #5 (each)	0.6	2.91		
BMC Mixer #6	1.1	4.37		
Rosite Mixer #L1 - #L4 (each)	0.50	2.58		
BMC Mixer #15	0.05	0.551		
BMC Mixer #17 - #18 (each)	0.075	0.551		

The pounds per hour PM limitations shall be calculated with the following equation:

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

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

Compliance with these limitations will render the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable to the source for particulates.

326 IAC 2-4.1 (New Source Toxics Control)

Permit Reviewer: Roger Osburn

Pursuant to 326 IAC 2-4.1-1 (New Source Toxics Control), any new process or production unit, which in and of itself emits or has the potential to emit (PTE) 10 tons per year of any hazardous air pollutant (HAP) or 25 tons per year of a combination of HAPs, and is constructed or reconstructed after July 27, 1997, must be controlled using technologies consistent with Maximum Achievable Control Technology (MACT). This rule does not apply to a major source of HAPs specifically regulated by Section 112(d) of the Clean Air Act. Since the facilities at this source are regulated by Section 112(d) (40 CFR 63, Subpart WWWW), the requirements of 326 IAC 2-4.1-1 (New Source Toxics Control) do not apply to this source.

326 IAC 2-6 (Emission Reporting)

Since this source is required to have an operating permit under 326 IAC 2-7, Part 70 Permit Program, this source is subject to 326 IAC 2-6 (Emission Reporting). In accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted annually if the potential to emit of VOC is greater than 250 tons per year, otherwise the emission statement needs to be submitted triennially. For this source, the source wide emissions of VOC are less than 250 tons per year. Therefore, in accordance with the compliance schedule in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1 beginning in 2004 and every 3 years after. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4.

326 IAC 5-1 (Opacity Limitations)

This source is subject to the opacity limitations specified in 326 IAC 5-1-2.

State Rule Applicability - Individual Facilities

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

(a) Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices and Control Technologies) and 326 IAC 2-2 (Prevention of Significant Deterioration), the allowable PM emission rate from the fiberglass facilities shall not exceed the rates outlined below:

Facility	P = Process Weight tons/hr	E = Allowable Emissions lbs/hr		
SMC Drum Mixer	0.6	2.91		
39" SMC Line 2	2.92	8.40		
48" SMC Line 1	3.60	9.67		
BMC Mixer #1 - #5 (each)	0.6	2.91		
BMC Mixer #6	1.1	4.37		
Rosite Mixer #L1 - #L4 (each)	0.50	2.58		
BMC Mixer #15	0.05	0.551		
BMC Mixer #17 - #18 (each)	0.075	0.551		

The pounds per hour PM limitations shall be 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

(b) The Two (2) saws, identified as SA1 and SA2, for plastic sheet production, have each reduced maximum capacity from 200 pounds per hour to 20 pounds per hour, with no emission controls and exhausting indoors. Therefore, these emission units are exempt from the requirements of 326 IAC 6-3-2 because each unit has an uncontrolled potential to emit less than 0.551 pounds of particulate per hour.

The pounds per hour PM limitations is calculated with the following equation:

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

The potential to emit particulate from SA1 and SA2 is 0.375 pounds per hour. Therefore, the saws can comply with this rule without controls.

326 IAC 8-2-1 (VOC – Surface Coating Emission Limitations)

This rule does not apply to the source because the production of reinforced plastic products is not specifically listed under this rule.

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

The requirements of Best Available Control Technology (BACT) [326 IAC 8-1-6] are applicable to facilities constructed after January 1, 1980 and which have the potential to emit of 25 tons per year or more of VOCs. These requirements will be removed from the permit because the affected units are no longer at the facility. Therefore, the affected units and corresponding compliance, recordkeeping and reporting requirements will be removed. The Mixers identified as Mixer #23, Mixer #24, and Mixer #25 are new units, but the requirements of 326 IAC 8-1-6 are not applicable because the potential to emit of each unit is less than 25 tons per year. The emission unit identified as 39" SMC Line Large Mixer is a modified unit that now has the potential to emit greater than 25 tons per year; however, the unit is already regulated by 326 IAC 20-56. Therefore, the requirements of 326 IAC 8-1-6 are not applicable.

Compliance Determination and Monitoring Requirements

Permits issued under 326 IAC 2-7 are required to ensure that sources can demonstrate compliance with all applicable state and federal rules on a continuous basis. All state and federal rules contain compliance provisions; however, these provisions do not always fulfill the requirement for a continuous demonstration. When this occurs, IDEM, OAQ, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

The emission unit identified as 39" SMC Line Large Mixer has applicable monitoring requirements as a result of this modification. Updated and new compliance determination and monitoring requirements are shown below in the "Proposed Changes" Section of this document.

Proposed Changes

The changes listed below have been made to Part 70 Operating Permit Renewal No. 057-18496-00042. Deleted language appears as strikethroughs and new language appears in **bold**. The Table of Contents has been updated accordingly without reproduction herein.

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IDEM/OAQ Changes

IDEM has modified the language for several standard Title V permitting B and C Conditions.

- **Change No. 1:** For clarity, IDEM has changed references to the general conditions: "in accordance with Section B", "in accordance with Section C", or other similar language, to "Section C ... contains the Permittee's obligations with regard to the records required by this condition."
- Change No. 2: The phrases "no later than" and "not later than" are clearer than "within" in relation to the end of a timeline. Therefore all timelines have been changed to "no later than" or "not later than" except for the timelines for Title V Fee, Emergency Provisions, Continuous Compliance Plan, and Revocation of Permits (Conditions newly numbered as B.11, B.15, B.23, and C.10) because the underlying rules state "within."
- **Change No. 3:** 326 IAC 2-7 requires that "a responsible official" perform certain actions. 326 IAC 2-7-1(34) allows for multiple people to meet the definition of "responsible official." Therefore, IDEM is revising all instances of "the responsible official" to read "a responsible official."
- **Change No. 4:** In order to clarify what rule requirements need to be met through certification, the last sentence dealing with the need for certification has been removed from the form(s) because the Condition(s) requiring the form(s) already address this issue.
- **Change No. 5:** To clarify that Section B Certification only states what a certification must be, IDEM has revised the condition.
- **Change No. 6:** IDEM has revised Section B Preventive Maintenance Plan.
- Change No. 7: IDEM, OAQ has revised Section B Emergency Provisions to delete paragraph (h). 326 IAC 2-7-5(3)(C)(ii) allows that deviations reported under an independent requirement do not have to be included in the Quarterly Deviation and Compliance Monitoring Report.
- Change No. 8: Having a separate condition for the reporting of deviations is unnecessary. Therefore, IDEM has removed Section B Deviation from Permit Requirements and Conditions and added the requirements of that condition to Section C General Reporting Requirements. Paragraph (d) of Section C General Reporting Requirements has been removed because IDEM already states the timeline and certification needs of each report in the condition requiring the report.
- **Change No. 9:** IDEM, OAQ will state which rule establishes the authority to set a deadline for the Permittee to submit additional information. Therefore, Section B Permit Renewal has been revised.
- **Change No. 10:** IDEM, OAQ will state that no notice is required for approved changes in Section B Permit Revision Under Economic Incentives and Other Programs.
- **Change No. 11:** IDEM has added 326 IAC 5-1-1 to the exception clause of Section C Opacity, since 326 IAC 5-1-1 does list exceptions.
- **Change No. 12:** IDEM has revised Section C Incineration to more closely reflect the two (2) underlying rules.
- **Change No. 13:** IDEM has removed the first paragraph of Section C Performance Testing due to the fact that specific testing conditions elsewhere in the permit will specify the timeline and procedures.
- **Change No. 14:** IDEM has revised Section C Compliance Monitoring. The reference to recordkeeping has been removed due to the fact that other conditions already address recordkeeping.

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The voice of the condition has been change to clearly indicate that it is the Permittee that must follow the requirements of the condition.

- **Change No. 15:** IDEM has removed Section C Monitoring Methods. The conditions that require the monitoring or testing, if required, state what methods shall be used.
- Change No. 16: IDEM has revised Section C Response to Excursions or Exceedances. The introduction sentence has been added to clarify that it is only when an excursion or exceedance is detected that the requirements of this condition need to be followed. The word "excess" was added to the last sentence of paragraph (a) because the Permittee only has to minimize excess emissions. The middle of paragraph (b) has been deleted as it was duplicative of paragraph (a). The phrase "or are returning" was added to subparagraph (b)(2) as this is an acceptable response assuming the operation or emission unit does return to normal or its usual manner of operation. The phrase "within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable" was replaced with "normal or usual manner of operation" because the first phrase is just a limited list of the second phrase. The recordkeeping required by paragraph (e) was changed to require only records of the response because the previously listed items are required to be recorded elsewhere in the permit.
- Change No. 17: IDEM has revised Section C Actions Related to Noncompliance Demonstrated by a Stack Test. The requirements to take response steps and minimize excess emissions have been removed because Section C Response to Excursions or Exceedances already requires response steps related to exceedances and excess emissions minimization. The start of the timelines was switched from "the receipt of the test results" to "the date of the test." There was confusion if the "receipt" was by IDEM, the Permittee, or someone else. Since the start of the timelines has been moved up, the length of the timelines was increased. The new timelines require action within a comparable timeline; and the new timelines still ensure that the Permittee will return to compliance within a reasonable timeframe.
- **Change No. 18:** Paragraph (b) of Section C Emission Statement has been removed. It was duplicative of the requirement in Section C General Reporting Requirements.
- **Change No. 19:** The voice of paragraph (b) of Section C General Record Keeping Requirements has been changed to clearly indicate that it is the Permittee that must follow the requirements of the paragraph.
- **Change No. 20:** IDEM has simplified the referencing in Section C Compliance with 40 CFR 82 and 326 IAC 22-1.

The changes No.1 through No. 20 have been made to the B and C Sections of the permit. Below is the previous version of the B and C Sections in strike-thru, and the updated version of the B and C Sections in bold type:

Current B and C Sections

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, T057-18496-00042, 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

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13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.

(b) If IDEM, OAQ upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, including any permit shield provided in 326 IAC 2-7-15, until the renewal permit has been issued or denied.

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

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

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

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

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

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

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

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

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

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

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

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

- (a) Where specifically designated by this permit or required by an applicable requirement, any application form, report, or compliance certification submitted shall contain certification by the "responsible official" of truth, accuracy, and completeness. This certification shall state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.
- (b) One (1) certification shall be included, using the attached Certification Form, with each submittal requiring certification. One (1) certification may cover multiple forms in one (1) submittal.
- (c) The "responsible official" is defined at 326 IAC 2-7-1(34).

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

The Permittee shall annually submit a compliance certification report which addresses (a) 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:
 - The appropriate identification of each term or condition of this permit that is the basis of the certification;
 - The compliance status: (2)
 - Whether compliance was continuous or intermittent;
 - 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
 - Such other facts, as specified in Sections D of this permit, as IDEM, OAQ may require to determine the compliance status of the source.

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

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

- If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
 - Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - A description of the items or conditions that will be inspected and the inspection (2)schedule for said items or conditions; and
 - Identification and quantification of the replacement parts that will be maintained (3)in inventory for quick replacement.

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

B.11 Emergency Provisions [326 IAC 2-7-16]

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

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

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

Facsimile Number: 317-233-6865

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

Indiana Department of Environmental Management Compliance 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;

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

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

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

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

(a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided that either the applicable requirements are included and specifically identified in this permit or the permit contains an explicit determination or concise summary of a determination that other specifically identified requirements are not applicable. The Indiana statutes from IC 13 and rules from 326 IAC, referenced in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a Part 70 permit under 326 IAC 2-7 or for applicable requirements for which a permit shield has been granted.

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

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

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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 toT057-18496-00042 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised under 326 IAC 2-7-10.5, or
 - (3) deleted under 326 IAC 2-7-10.5.
- (b) Provided that all terms and conditions are accurately reflected in this permit, all previous registrations and permits are superseded by this Part 70 operating permit.

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

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

B.15 Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]

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

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

using the attached Quarterly Deviation and Compliance Monitoring Report, or its equivalent. A deviation required to be reported pursuant to an applicable requirement that exists independent of this permit, shall be reported according to the schedule stated in the applicable requirement and does not need to be included in this report.

The Quarterly Deviation and Compliance Monitoring Report does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.16 Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)][326 IAC 2-7-8(a)][326 IAC 2-7-9]

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
 - (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]
- (c) Proceedings by IDEM, OAQ to reopen and revise this permit shall follow the same procedures as apply to initial permit issuance and shall affect only those parts of this permit for which cause to reopen exists. Such reopening and revision shall be made as expeditiously as practicable. [326 IAC 2-7-9(b)]
- (d) The reopening and revision of this permit, under 326 IAC 2-7-9(a), shall not be initiated before notice of such intent is provided to the Permittee by IDEM, OAQ at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ may provide a shorter time period in the case of an emergency. [326 IAC 2-7-9(c)]

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

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

Request for renewal shall be submitted to:

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100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

- (b) A timely renewal application is one that is:
 - (1) Submitted at least nine (9) months prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ, on or before the date it is due.
- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-7 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.18 Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12][40 CFR 72]

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

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

Any such application shall be certified by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

B.19 Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]

- (a) No Part 70 permit revision shall be required under any approved economic incentives, marketable Part 70 permits, emissions trading, and other similar programs or processes for changes that are provided for in a Part 70 permit.
- (b) Notwithstanding 326 IAC 2-7-12(b)(1) and 326 IAC 2-7-12(c)(1), minor Part 70 permit modification procedures may be used for Part 70 modifications involving the use of economic incentives, marketable Part 70 permits, emissions trading, and other similar approaches to the extent that such minor Part 70 permit modification procedures are explicitly provided for in the applicable State Implementation Plan (SIP) or in applicable requirements promulgated or approved by the U.S. EPA.

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

(a) The Permittee may make any change or changes at the source that are described in 326 IAC 2-7-20(b),(c), or (e) without a prior permit revision, if each of the following conditions is met:

- (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
- (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
- (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions);
- (4) The Permittee notifies the:

Indiana Department of Environmental Management
Permits 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),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

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

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

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

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(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).

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- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]

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

B.21 Source Modification Requirement [326 IAC 2-7-10.5][326 IAC 2-2-2][326 IAC 2-3-2]

- (a) A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2 and 326 IAC 2-7-10.5.
- (b) Any modification at an existing major source is governed by the requirements of 326 IAC 2-2-2 and 326 IAC 2-3-2.

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

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

- (a) Enter upon the Permittee's premises where a Part 70 source is located, or emissions related activity is conducted, or where records must be kept under the conditions of this permit;
- (b) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, have access to and copy any records that must be kept under the conditions of this permit;
- (c) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, inspect any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- (d) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, sample or monitor substances or parameters for the purpose of assuring compliance with this permit or applicable requirements; and
- (e) As authorized by the Clean Air Act, IC 13-14-2-2, IC 13-17-3-2, and IC 13-30-3-1, utilize any photographic, recording, testing, monitoring, or other equipment for the purpose of assuring compliance with this permit or applicable requirements.

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

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

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Indiana Department of Environmental Management
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100 North Senate Avenue
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The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

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

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SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

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

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

C.2 Opacity [326 IAC 5-1]

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

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

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

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

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

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

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

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

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

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

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

- (e) Procedures for Asbestos Emission Control
 - The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) Demolition and Renovation
 - The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) Indiana Accredited Asbestos Inspector

The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Accredited Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Accredited Asbestos inspector is not federally enforceable.

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

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

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

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

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no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date. The notification submitted by the Permittee does not require certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, if the Permittee submits to IDEM, OAQ, a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance. If required by Section D, the Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. If due to circumstances beyond its control, that equipment cannot be installed and operated within ninety (90) days, the Permittee may extend the compliance schedule related to the equipment for an additional ninety (90) days provided the Permittee notifies:

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

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

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

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

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

- (a) When required by any condition of this permit, an analog instrument used to measure a parameter related to the operation of an air pollution control device shall have a scale such that the expected maximum reading for the normal range shall be no less than twenty percent (20%) of full scale.
- (b) The Permittee may request that the IDEM, OAQ approve the use of an instrument that does not meet the above specifications provided the Permittee can demonstrate that an alternative instrument specification will adequately ensure compliance with permit conditions requiring the measurement of the parameters.

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

C.12 Emergency Reduction Plans [326 IAC 1-5-2][326 IAC 1-5-3]

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

- (a) The Permittee prepared and submitted written emergency reduction plans (ERPs) consistent with safe operating procedures on March 13, 2000.
- (b) Upon direct notification by IDEM, OAQ that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate episode level. [326 IAC 1-5-3]

C.13 Risk Management Plan [326 IAC 2-7-5(12)][40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

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

- (a) Upon detecting an excursion or exceedance, the Permittee shall restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction and taking any necessary corrective actions to restore normal operation and prevent the likely recurrence of the cause of an excursion or exceedance (other than those caused by excused startup or shutdown conditions). Corrective actions may include, but are not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned to normal without operator action (such as through response by a computerized distribution control system); or
 - (3) any necessary follow-up actions to return operation to within the indicator range, designated condition, or below the applicable emission limitation or standard, as applicable.
- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:

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- (1) monitoring results;
- (2) review of operation and maintenance procedures and records;
- (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall maintain the following records:
 - (1) monitoring data;
 - (2) monitor performance data, if applicable; and
 - (3) corrective actions taken.

C.15 Actions Related to Noncompliance Demonstrated by a Stack Test [326 IAC 2-7-5][326 IAC 2-7-6]

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate response actions. The Permittee shall submit a description of these response actions to IDEM, OAQ within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize excess emissions from the affected facility while the response actions are being implemented.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ may extend the retesting deadline.
- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

The response action documents submitted pursuant to this condition do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

C.16 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:
 - (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
 - (2) Indicate estimated actual emissions of regulated pollutants as defined by 326 IAC 2-7-1 (32) ("Regulated pollutant, which is used only for purposes of Section 19 of this rule") from the source, for purpose of fee assessment.
- The statement must be submitted to:

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

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

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

C.17 General Record Keeping Requirements [326 IAC 2-7-5(3)][326 IAC 2-7-6][326 IAC 2-2] [326 IAC 2-3]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.
- (c) If there is a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit or at a source with Plantwide Applicability (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
 - (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:
 - (A) A description of the project.
 - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
 - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
 - (i) Baseline actual emissions;
 - (ii) Projected actual emissions;
 - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(iii); and
 - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
 - (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
 - (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

Industrial Dielectrics, Inc. dba IDI Composites International Noblesville, Indiana

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

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported. This report shall be submitted within thirty (30) days of the end of the reporting period. The Quarterly Deviation and Compliance Monitoring Report shall include the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) The report required in (a) of this condition and reports required by conditions in Section D of this permit shall be submitted to:

Indiana Department of Environmental Management
Compliance 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) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ:
 - (1) The annual emissions, in tons per year, from the project identified in (c)(1) in Section C- General Record Keeping Requirements exceed the baseline actual emissions, as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(i), by a significant amount, as defined in 326 IAC 2-2-1(xx) and/or 326 IAC 2-3-1(qq), for that regulated NSR pollutant, and
 - (2) The emissions differ from the preconstruction projection as documented and maintained under Section C- General Record Keeping Requirements (c)(1)(C)(ii).
- (g) The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:
 - (1) The name, address, and telephone number of the major stationary source.
 - (2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C-General Record Keeping Requirements.
 - (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3).
 - (4) Any other information that the Permittee deems fit to include in this report,

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Reports required in this part 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

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

Stratospheric Ozone Protection

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

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

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

Updated B and C Sections

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, 057-18496-00042, 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:

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(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 Industrial Dielectrics, Inc. dba IDI Composites International Noblesville, Indiana

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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.
- (d) 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(1),(3) and (13)][326 IAC 2-7-6(1) and (6)][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;

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(4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, or Northern Regional Office within four (4) daytime business hours after the beginning of the emergency, or after the emergency was discovered or reasonably should have been discovered;

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

Compliance and Enforcement Branch), or

Telephone Number: 317-233-0178 (ask for Office of Air Quality,

Compliance and Enforcement Branch)

Facsimile Number: 317-233-6865

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

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

Indiana Department of Environmental Management Compliance 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)(9) be revised in response to an emergency.
- (f) Failure to notify IDEM, OAQ by telephone or facsimile of an emergency lasting more than one (1) hour in accordance with (b)(4) and (5) of this condition shall constitute a violation of 326 IAC 2-7 and any other applicable rules.

(g) If the emergency situation causes a deviation from a technology-based limit, the Permittee may continue to operate the affected emitting facilities during the emergency provided the Permittee immediately takes all reasonable steps to correct the emergency and minimize emissions.

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 057-18496-00042 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),(c), or (e) without a prior permit revision, if each of the following conditions is met:
 - (1) The changes are not modifications under any provision of Title I of the Clean Air Act;
 - (2) Any preconstruction approval required by 326 IAC 2-7-10.5 has been obtained;
 - (3) The changes do not result in emissions which exceed the limitations provided in this permit (whether expressed herein as a rate of emissions or in terms of total emissions):
 - (4) The Permittee notifies the:

Indiana Department of Environmental Management
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),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

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

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

The notification which shall be submitted is not considered an application form, report or compliance certification. Therefore, the notification by the Permittee does not require 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;

Industrial Dielectrics, Inc. dba IDI Composites International Noblesville, Indiana

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(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.

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SECTION C

Permit Reviewer: Roger Osburn

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 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.7 Performance Testing [326 IAC 3-6]

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

Indiana Department of Environmental Management

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

no later than thirty-five (35) days prior to the intended test date. The protocol submitted by the Permittee does not require a certification that meets the requirements of 326 IAC 2-7-6(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.8 Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

Unless otherwise specified in this permit, 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.

Industrial Dielectrics, Inc. dba IDI Composites International Noblesville, Indiana

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C.10 Instrument Specifications [326 IAC 2-1.1-11] [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

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

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

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

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

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

- (a) The Permittee shall 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.12 Risk Management Plan [326 IAC 2-7-5(12)] [40 CFR 68]

If a regulated substance, as defined in 40 CFR 68, is present at a source in more than a threshold quantity, the Permittee must comply with the applicable requirements of 40 CFR 68.

C.13 Response to Excursions or Exceedances [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;

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- (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.
 - 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 followup 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).

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(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

Upon detecting an excursion where a response step is required by the D Section or an exceedance of a limitation in this permit:

- (a) The Permittee shall take reasonable response steps to restore operation of the emissions unit (including any control device and associated capture system) to its normal or usual manner of operation as expeditiously as practicable in accordance with good air pollution control practices for minimizing excess emissions.
- (b) The response shall include minimizing the period of any startup, shutdown or malfunction. The response may include, but is not limited to, the following:
 - (1) initial inspection and evaluation;
 - (2) recording that operations returned or are returning to normal without operator action (such as through response by a computerized distribution control system); or

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

- (c) A determination of whether the Permittee has used acceptable procedures in response to an excursion or exceedance will be based on information available, which may include, but is not limited to, the following:
 - (1) monitoring results;
 - (2) review of operation and maintenance procedures and records; and/or
 - (3) inspection of the control device, associated capture system, and the process.
- (d) Failure to take reasonable response steps shall be considered a deviation from the permit.
- (e) The Permittee shall record the reasonable response steps taken.

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

- (a) When the results of a stack test performed in conformance with Section C Performance Testing, of this permit exceed the level specified in any condition of
 this permit, the Permittee shall 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.15 Emission Statement

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

In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(1), starting in 2004 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (3) 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.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, 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.17 General Reporting Requirements [326 IAC 2-7-5(3)(C)] [326 IAC 2-1.1-11]

- (a) The Permittee shall submit the attached Quarterly Deviation and Compliance Monitoring Report or its equivalent. Any deviation from permit requirements, the date(s) of each deviation, the cause of the deviation, and the response steps taken must be reported 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.

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Stratospheric Ozone Protection

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.

Change No. 21: In accordance with Change No. 6, the following changes have been made to the D Sections of the Permit:

D.1.2 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

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.

Change No. 22: The Compliance Monitoring Requirements of the permit have been updated as follows:

D.1.64 Monitoring [40 CFR Part 64]

- Daily visible emissions notations of the bulk molding compound mixers stack exhausts (a) shall be performed during normal daylight operations. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing 80% of the time the process is in operation, not counting startup or shut down time. In the case of discontinuous operations, readings must be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee that has worked at the plant least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. If abnormal emissions are observed, the Permittee will take reasonable steps. in accordance with 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 in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.
- (b) The Permittee shall record the pressure drop across baghouses B4 and B9 at least once per day when the processes are in operation. If the pressure drop is outside the normal range of 0.5 to 6.0 inches of water, or a range established during the latest stack test, then the Permittee must take reasonable steps. in accordance with 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 in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

Change No. 23: The phrase "of this permit" has been added to the paragraph of the Quarterly Deviation and Compliance Monitoring Report to match the underlying rule.

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

PART 70 OPERATING PERMIT QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT

Source Name: Industrial Dielectrics, Inc. Industrial Dielectrics, Inc. dba IDI Composites International

Noblesville, Indiana

Permit Reviewer: Roger Osburn

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Source Address: 407 South 7th Street, Noblesville, IN 46060

Mailing Address: P.O. Box 357, Noblesville, IN 46061

Part 70 Permit No.: T057-18496-00042

Months:	to	Year:	

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This report shall be submitted quarterly based on a calendar year. 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".

Change No. 24: IDEM is no longer including the mailing address of the source in the permit. The permit has been revised to properly reflect this.

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

The Permittee owns and operates a stationary plastic custom compounding plant that operates fiberglass molding facilities and that produces a bulk molding compound and plastic sheets.

Source Address: 407 South 7th Street, Noblesville, IN 46060

Mailing Address: P.O. Box 357, Noblesville, IN 46061

General Source Phone Number: 317-773-1766

SIC Code: 3087 County Location: Hamilton

Source Location Status: Nonattainment for PM2.5

Attainment for all other criteria pollutants

Source Status: Part 70 Operating Permit Program
Minor Source, under PSD Pulos and

Minor Source, under PSD Rules and

Nonattainment NSR

Major Source, Section 112 of the Clean Air Act

Not 1 of 28 Source Categories

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

Source Name: Industrial Dielectrics, Inc.

Source Address: 407 South 7th Street, Noblesville, IN 46060

Mailing Address: P.O. Box 357, Noblesville, IN 46061

Part 70 Permit No.: T057-18496-00042

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE BRANCH 100 North Senate Avenue

Industrial Dielectrics, Inc. dba IDI Composites International

Noblesville, Indiana Permit Reviewer: Roger Osburn

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MC 61-53 IGCN 1003 Indianapolis, IN 46204-2251 Phone: 317-233-0178 Fax: 317-233-6865

PART 70 OPERATING PERMIT EMERGENCY OCCURRENCE REPORT

Source Name: Industrial Dielectrics, Inc.

Source Address: 407 South 7th Street, Noblesville, IN 46060

Mailing Address: P.O. Box 357, Noblesville, IN 46061

Part 70 Permit No.: T057-18496-00042

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

Source Name: Industrial Dielectrics, Inc.

Source Address: 407 South 7th Street, Noblesville, IN 46060

Mailing Address: P.O. Box 357, Noblesville, IN 46061

Part 70 Permit No.: T057-18496-00042

Change No. 25: To remain consistent with the organizational structure of permits issued with NESHAP applicability, the following conditions have been struck and reformatted in a new E Section, specifying the requirements of 40 CFR 63, Subpart WWWW. The applicable NESHAP will be included as Attachment A to the permit.

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

D.1.10 NESHAP WWWW Requirements [40 CFR Part 63, Subpart WWWWI[326 IAC 20 56]

Pursuant to CFR Part 63, Subpart WWWW, the Permittee shall comply with the provisions of 40 CFR Part 63.5780, which are incorporated by reference as 326 IAC 20-56, for the two mixers, identified as M₁-and M₂-(compression/closed molding), one (1) sheet molding compound mixer, identified as SMC Mixers M₃, one (1) sheet molding compound line, identified as SMC Mixer M₄₇ nine (9) bulk molding compound mixers, identified as M₅ - M₁₃, and M27, four (4) bulk molding compound (BMC) mixers, identified as M₁₆ - M₁₉, two (2) bulk molding compound (lab) mixers, identified as M14 and M15, two (2) insignificant laboratory BMC mixers, identified as M24 and M22, four (4) bulk molding compound (lab mixers identified as M22 - M26, cleaning of materials used in reinforced plastic composites manufacture and HAP-containing material storage, as specified as follows:

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 Sec. Sec. 63.5810 through 63.5830. Use the procedures in Sec. 63.5799 to determine if you meet or exceed the 100 tpy threshold.

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

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 Sec. 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.
- (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) 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.

Where:

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

Material; = 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.

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.

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

Where:

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

Material, = neat resin plus or neat gel coat plus used during the last 12-month period for operation type i, tons; n = number of operations.

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

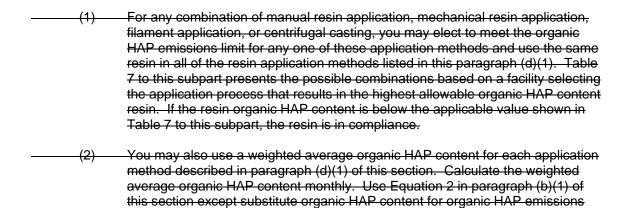
Actual Weighted
$$\sum_{i=1}^{n} (Actual \text{ Operation EF}_{i} * \text{Material}_{i})$$
Average Organic HAP =
$$\sum_{i=1}^{n} (Actual \text{ Operation EF}_{i} * \text{Material}_{i})$$
Emissions Factor
$$\sum_{i=1}^{n} Material_{i}$$
(Eq. 4)

Where:

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

Material; = 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.



(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.

organic HAP contents in Table 7 to this subpart.

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

(4) You do not have to keep records of resin use for any of the individual resins where you demonstrate compliance under the option in paragraph (d)(1) of this section unless you elect to include that resin in the averaging calculations described in paragraph (d)(2) of this section.

General Compliance Requirements

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

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

Testing and Initial Compliance Requirements

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

Open molding and centrifugal casting operations that elect to meet a organic HAP emissions limit on a 12-month rolling average must initiate collection of the required data on the compliance date, and demonstrate compliance 1 year after the compliance date.

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

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

Continuous Compliance Requirements

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

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

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

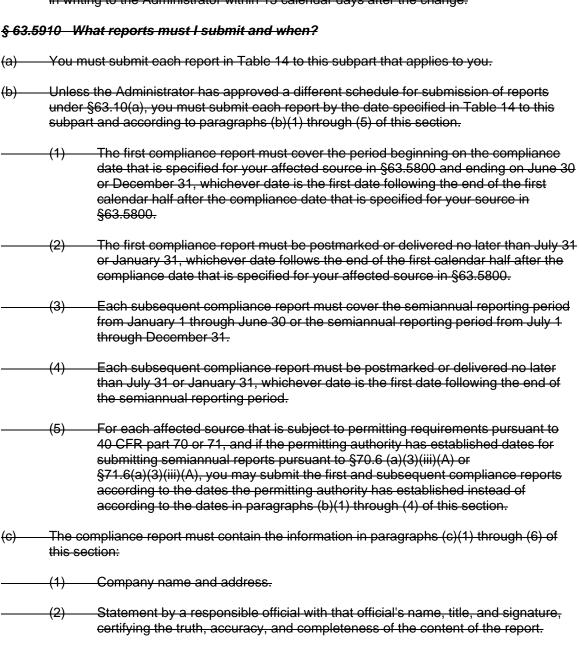
- (a) You must demonstrate continuous compliance with each standard in §63.5805 that applies to you according to the methods specified in paragraphs (a)(1) through (3) of this section.
- (2) Compliance with organic HAP emissions limits is demonstrated by maintaining an organic HAP emissions factor value less than or equal to the appropriate organic HAP emissions limit listed in Table 3 or 5 to this subpart, on a 12-month rolling average, and/or by including in each compliance report a statement that individual resins and gel coats, as applied, meet the appropriate organic HAP emissions limits, as discussed in Sec. 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 Sec. 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) During periods of startup, shutdown or malfunction, you must meet the organic HAP emissions limits and work practice standards that apply to you.

(3)

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§ 63.5905 What notifications must I submit and when?

- 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.
- 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.



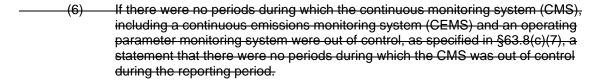
Date of the report and beginning and ending dates of the reporting period.

the compliance report must include 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,

If there are no deviations from any organic HAP emissions limitations (emissions

limit and operating limit) that apply to you, and there are no deviations from the requirements for work practice standards in Table 4 to this subpart, a statement that there were no deviations from the organic HAP emissions limitations or work practice standards during the reporting period.



- (d) For each deviation from a organic HAP emissions limitation (i.e., emissions limit and operating limit) and for each deviation from the requirements for work practice standards that occurs at an affected source where you are not using a CMS to comply with the organic HAP emissions limitations or work practice standards in this subpart, the compliance report must contain the information in paragraphs (c)(1) through (4) of this section and in paragraphs (d)(1) and (2) of this section. This includes periods of startup, shutdown, and malfunction.
- (1) The total operating time of each affected source during the reporting period.
- (2) Information on the number, duration, and cause of deviations (including unknown cause, if applicable), as applicable, and the corrective action taken.
- (g) Each affected source that has obtained a title V operating permit pursuant to 40 CFR part 70 or 71 must report all deviations as defined in this subpart in the semiannual monitoring report required by §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A). If an affected source submits a compliance report pursuant to Table 14 to this subpart along with, or as part of, the semiannual monitoring report required by §70.6(a)(3)(iii)(A) or §71.6(a)(3)(iii)(A), and the compliance report includes all required information concerning deviations from any organic HAP emissions limitation (including any operating limit) or work practice requirement in this subpart, submission of the compliance report shall be deemed to satisfy any obligation to report the same deviations in the semiannual monitoring report. However, submission of a compliance report shall not otherwise affect any obligation the affected source may have to report deviations from permit requirements to the permitting authority.
- (h) Submit compliance reports and startup, shutdown, and malfunction reports based on the requirements in Table 14 to this subpart, and not based on the requirements in §63.999.

§ 63.5915 What records must I keep?

(a)	Volumiliet keep the records	والمراجع والمراجع والمراجع المراجع والمراجع والمراجع المراجع المراجع والمراجع والمرا	/-\/ / \	(O) -f + -!+!
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- (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).
- (3) Records of performance tests, design, and performance evaluations as required in §63.10(b)(2).
- (c) You must keep all data, assumptions, and calculations used to determine organic HAP emissions factors or average organic HAP contents for operations listed in Tables 3, 5, and 7 to this subpart.

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> You must keep a certified statement that you are in compliance with the work practice requirements in Table 4 to this subpart, as applicable.

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

- 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).
- 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.
- 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.
- 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?

- 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.
- 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.
- The authorities that will not be delegated to State, local, or tribal agencies are listed in paragraphs (c)(1) through (4) of this section:
- 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.
- Approval of major changes to monitoring under §63.8(f) and as defined in §63.90.
- 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:

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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.

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

Corresion-resistant gel coat means a gel coat used on a product made with a corresion-resistant resin that has a corresion-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.

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

Corrosion-resistant resin means a resin that either:

- 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 generalpurpose resin. For example, if the general-purpose resin retains 45 percent of the relevant property when tested as specified above, then a corresion-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.

Industrial Dielectrics, Inc. dba IDI Composites International Noblesville, Indiana

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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.

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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.

Nencorresion-resistant resin means any resin other than a corresion-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.

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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.

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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.

Table 1 to Subpart WWWW of Part 63—Equations to Calculate Organic HAP Emissions Factors for Specific Open Molding and Centrifugal Casting Process Streams¹

[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:]

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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	Use this organic HAP Emissions Factor (EF) Equation for materials with 33 percent or more organic HAP (19 percent for
			for nonatomized gel coat) 34	nonatomized gel coat) ³⁴
1. Open molding operation	a. Manual resin application.	i. Nonvapor- suppressed resin. ii. Vapor- suppressed resin.	EF = 0.126 x % HAP x 2000. EF = 0.126 x % HAP x 2000 x (1-(0.5 x	EF = ((0.286 x %HAP) 0.0529) x 2000 EF = ((0.286 x %HAP) 0.0529) x
	c. Nonatomized Mechanical resin application.	v. Nonvapor- suppressed resin.	VSE factor)) EF = 0.107 x % HAP x 2000.	2000 x (1-(0.5 x VSE factor)). EF = ((0.157 x %HAP) 0.0165) x 2000

Footnotes to Table 1

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

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

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

If your operation is	And you use	Your organic HAP emissions limit is ¹
3. Open molding-tooling	b. Manual resin application	157 lb/ton

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.

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.

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.

Industrial Dielectrics, Inc. dba IDI Composites International Noblesville, Indiana

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

For . . . You must . . .

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.

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

Table 5 to Subpart WWWW of Part 63—Alternative Organic HAP Emissions Limits for Open Molding, Centrifugal Casting, and SMC Manufacturing Operations Where the Standard is 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:]

		Your organic HAP emissions
If your operation type is	And you use	limit is a ⁴
3. Open molding—tooling	b. Manual resin application	8 lb/ton.

¹Organic HAP emissions limits for open molding and centrifugal casting expressed as lb/ton are calculated using the equations shown in Table1 to this subpart. You must be at or below these values based on a 12-month rolling average.

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:]

	The highest resin weight is* * * percent organic HAP	
If your facility has the following resin	content, or weighted average weight percent	
type and application method	organic HAP content, you can use for	ls
8. Tooling resins, manual	Tooling atomized mechanical	4 5.9

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:]

	That must meet the following organic	You have demonstrated initial
For	HAP emissions limit	compliance if

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1. open molding and	a. an organic HAP emissions limit shown	i. you have met the appropriate
centrifugal casting	in Tables 3 or 5 to this subpart, or an	organic HAP emissions limits for
operations.	organic HAP content limit shown in Table	these operations as calculated
	7 to this subpart.	using the procedures in § 63.5810
		on a 12-month_rolling average 1
		year after the appropriate
		compliance date, and/or
		ii. you demonstrate that any
		individual resins or gel coats not
		included in (i) above, as applied,
		meet their applicable emission
		limits, or
		iii. you demonstrate 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.

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:]

Eor 2. a new or existing eleaning operation	That must meet the following standards 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.	You have demonstrated initial compliance if the owner or operator submits a certified statement in the notice of compliance status that all cleaning materials, except styrene contained in closed systems, or materials used to clean cured resin from application equipment, contain no HAP.
3. a new or existing materials HAP-containing materials storage operation.	keep containers that store HAP- containing materials closed or covered except during the addition or removal of materials. Bulk HAP-containing materials storage tanks may be vented as necessary for safety.	the owner or operator submits a certified statement in the notice of compliance status that all HAP-containing storage containers are kept closed or covered except when adding or removing materials, and that any bulk storage tanks are vented only as necessary for safety.

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

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

If your facility	You must submit	By this date
	An Initial Notification containing	
1. Is an existing source subject	the information specified in §	No later than the dates specified
to this subpart	63.9(b)(2).	in § 63.9(b)(2).

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4. Is complying with organic HAP emissions limit averaging provisions.	A Notification of Compliance Status as specified in § 63.9(h).	No later than 1 year plus 30 days after your facility's compliance date.
5. Is complying with organic HAP content limits, application equipment requirements, or organic HAP emissions limit other than organic HAP emissions limit averaging.	A Notification of Compliance Status as specified in § 63.9(h).	No later than 30 calendar days after your facility's compliance date.

Table 14 to Subpart WWWW of Part 63 Requirements for Reports

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

You must submit a(n)	The report must contain	You must submit the report
Tou must submit a(H)	a. A statement that there were no deviations	Tou must submit the report
	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	Semiannually according to
	periods during which the CMS was out of	the requirements
1. Compliance report	control during the reporting period.	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	Semiannually according to
	report must contain the information in §	the requirements
	63.5910(e).	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	Semiannually according to
	consistent with your startup, shutdown, and	the requirements
	malfunction plan.	in § 63.5910(b).

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You must submit a(n)	The report must contain	You must submit the report
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

—[A	WW of Part 63 s specified in §6 ving table:]	.5925, the parts of the General Provisions which apply to you are shown in the
The	general provisio	Subject to the s reference That addresses And applies to subpart following additional WWWW of part 63 information
Sec.	63.1(a)(1)	General applicability Yes
Sec.	63.1(a)(2) thro	gh (4)General applicability Yes
Sec.	63.1(a)(7) thro 63.1(a)(10) thr	gh (9)ReservedNo
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Sec. Sec. Sec. Sec. Sec.	63.5(d)(1)	Reserved	No In for Yes
Sec. Sec. Sec. Sec. Sec.	63.5(d)(1)	Reserved	No In for Yes
Sec. Sec. Sec. Sec. Sec.	63.5(d)(1)	Reserved	No In for Yes

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		- maintenance	
		requirements.	
Sac	63.6(2)(2)	Applicability of area	Vac
000.	ου.υ(α)(Σ)	sources that increase	100
		HAP emissions to	
_		become major sources.	
Sec.	-63.6(b)(1) throug	h (5) Compliance dates	for Yes Subpart WWWW of Part 63
			clarifies compliance
		sources.	dates in Sec.
			63.5800.
Sec.	63.6(b)(6)	Reserved No)
			Yes New operations at an
	(-/(/		existing facility are
		equipment that cause	not subject to new
			source standards.
			Source standards.
· · ·	00.0(-)(4) 1.(0)	become a major source.	O L = = (\MAAAAA = (D = = (00
Sec.	- 63.6(c)(1) and (2)	Compliance dates to	or Yes Subpart WWWW of Part 63
			clarifies compliance
			dates in Sec.
			63.5800.
Sec.	63.6(c)(3) and (4))Reserved	No
Sec.	63.6(c)(5)	Compliance dates for	Yes Subpart WWWW of Part 63
		existing area sources	clarifies compliance
		that become major.	
			- 63.5800.
200	63 6(4)	Reserved No.	
000.	σο.σ(α)	110001100	······································
The	general provisions ·	reference That addresse WWWW of p	Subject to the os And applies to subpart following addition part 63 information
			os And applies to subpart following additional part 63 information
Sec.	-63.6(e)(1) and (2)	WWWW of position & mainter programmer	es And applies to subpart following additional part 63 information
Sec.	-63.6(e)(1) and (2)	WWWW of position & mainter programmer	es And applies to subpart following additional part 63 information
Sec.	-63.6(e)(1) and (2)) Operation & mainter requirements. Startup, shutdown, and	bs And applies to subpart following additional part 63 information
Sec.	63.6(e)(1) and (2)) Operation & mainter requirements. Startup, shutdown, and malfunction plan and	bs And applies to subpart—following additional part 63 information
Sec.	63.6(e)(1) and (2)) Operation & mainter requirements. Startup, shutdown, and malfunction plan and recordkeeping.	bs And applies to subpart—following additional part 63 information
Sec.	63.6(e)(1) and (2)) Operation & mainter requirements. Startup, shutdown, and malfunction plan and recordkeeping.	es And applies to subpart—following additional part 63 information nance Yes
Sec.	63.6(e)(1) and (2)) Operation & mainter requirements. Startup, shutdown, and malfunction plan and recordkeeping.	es And applies to subpart following additional part 63 information nance Yes
Sec.	63.6(e)(1) and (2)) Operation & mainter requirements. Startup, shutdown, and malfunction plan and recordkeeping.	es And applies to subpart—following additional part 63 information nance Yes
Sec.	63.6(e)(1) and (2)) Operation & mainter requirements. Startup, shutdown, and malfunction plan and recordkeeping. Compliance except	es And applies to subpart following additional part 63 information Subpart WWWW of Part 63 information
Sec.	63.6(e)(1) and (2)) Operation & mainter requirements Startup, shutdown, and malfunction plan and recordkeeping Compliance except during periods of	es And applies to subpart following additional part 63 information Subpart WWWW of Part 63 information plan only information plan only information
Sec.	63.6(e)(1) and (2)) Operation & mainter requirements Startup, shutdown, and recordkeeping Compliance except during periods of startup, shutdown, and	es And applies to subpart following additional part 63 information nance Yes
Sec.	63.6(e)(1) and (2)) Operation & mainter requirements. Startup, shutdown, and malfunction plan and recordkeeping. Compliance except during periods of startup, shutdown, and malfunction.	es And applies to subpart following additional part 63 information nance Yes
Sec.	63.6(e)(1) and (2)) Operation & mainter requirements. Startup, shutdown, and malfunction plan and recordkeeping. Compliance except during periods of startup, shutdown, and malfunction.	es And applies to subpart following additional part 63 information nance Yes
Sec.	63.6(e)(1) and (2)	Deration & mainter requirements. Startup, shutdown, and recordkeeping. Compliance except during periods of startup, shutdown, and malfunction.	es And applies to subpart following additional part 63 information nance Yes
Sec.	63.6(e)(1) and (2)	Deration & mainter requirements. Startup, shutdown, and recordkeeping. Compliance except during periods of startup, shutdown, and malfunction.	es And applies to subpart following additional part 63 information nance Yes
Sec.	63.6(e)(1) and (2)	Deration & mainter requirements. Startup, shutdown, and recordkeeping. Compliance except during periods of startup, shutdown, and malfunction.	es And applies to subpart following additional part 63 information nance Yes
Sec.	63.6(e)(1) and (2)	Deration & mainter requirements. Startup, shutdown, and recordkeeping. Compliance except during periods of startup, shutdown, and malfunction.	es And applies to subpart following additional part 63 information nance Yes
Sec.	63.6(e)(1) and (2) 63.6(e)(3)	Departion & mainter requirements. Startup, shutdown, and malfunction plan and recordkeeping. Compliance except during periods of startup, shutdown, and malfunction.	es And applies to subpart following additional part 63 information nance Yes
Sec.	63.6(e)(1) and (2) 63.6(e)(3)	Departion & mainter requirements. Startup, shutdown, and malfunction plan and recordkeeping. Compliance except during periods of startup, shutdown, and malfunction. Methods for determine	es And applies to subpart following additional part 63 information nance Yes
Sec. Sec.	63.6(e)(1) and (2) 63.6(e)(3)	Departion & mainter requirements. Startup, shutdown, and malfunction plan and recordkeeping. Compliance except during periods of startup, shutdown, and malfunction. Methods for determine compliance.	es And applies to subpart following additional part 63 information nance Yes
Sec. Sec. Sec.	63.6(e)(1) and (2) 63.6(e)(3)		es And applies to subpart following additional part 63 information nance Yes
Sec. Sec. Sec.	63.6(e)(1) and (2) 63.6(e)(3)	Departion & mainter requirements. Startup, shutdown, and recordkeeping. Compliance except during periods of startup, shutdown, and malfunction. Methods for determine compliance. h (3) Alternative standar	os And applies to subpart following additional part 63 information nance Yes
\$ec. \$ec.	63.6(e)(1) and (2) 63.6(e)(3)	Departion & mainter requirements. Startup, shutdown, and recordkeeping. Compliance except during periods of startup, shutdown, and malfunction. Methods for determine compliance. h (3) Alternative standar	as And applies to subpart following additional part 63 information nance Yes
Sec. Sec. Sec.	63.6(e)(1) and (2) 63.6(e)(3)	Departion & mainter requirements. Startup, shutdown, and recordkeeping. Compliance except during periods of startup, shutdown, and malfunction. Methods for determine compliance. h (3) Alternative standar	as And applies to subpart following additional part 63 information nance Yes
\$66. \$66.	63.6(e)(1) and (2) 63.6(e)(3)	Departion & mainter requirements. Startup, shutdown, and recordkeeping. Compliance except during periods of startup, shutdown, and malfunction. Methods for determine compliance. h (3) Alternative standar	as And applies to subpart following additional part 63 information nance Yes
Sec. Sec. Sec. Sec.	63.6(e)(1) and (2) 63.6(e)(3)	Departion & mainter requirements. Startup, shutdown, and malfunction plan and recordkeeping. Compliance except during periods of startup, shutdown, and malfunction. Methods for determine compliance. h (3) Alternative standards. Opacity and visible hemission Standards.	as And applies to subpart following additional part 63 information nance Yes
\$06. \$06. \$06. \$06.	63.6(e)(1) and (2) 63.6(e)(3)	Departion & mainter requirements. Startup, shutdown, and recordkeeping. Compliance except during periods of startup, shutdown, and malfunction. Methods for determine compliance. h (3) Alternative standar	as And applies to subpart following additional part 63 information nance Yes

202	63 6(i)/16)	Compliance extensions Yes
		Presidential compliance Yes
		exemption.
Sec		Applicability of Yes
		performance testing
		requirements
Sec	63.7(a)(2)	Performance test dates. No Subpart WWWW of Part
	00.7 (a)(2)	63initial compliance
		requirements are in
		Sec. 63.5840.
Sec	63.7(a)(3)	CAA Section 114 Yes
		authority.
		Subject to the
Tho	general provisions	reference That addresses And applies to subpart following additional
1110	general provisions	WWWW of part 63 information
	•	
Sec.	63.7(b)(1)	Notification of Yes
	(0)(1)	performance test.
Sec.	63.7(b)(2)	Notification Yes
		rescheduled
		performance test.
Sec.	63.7(c)	Quality assurance Yes Except that the test
		program, including plan must be submitted
		test plan. with the notification
		of the performance
		test.
Sec.	63.7(d)	Performance testing Yes
		facilities.
Sec.	63.7(e)	Conditions for Yes Performance test
		conducting performance requirements are
		tests. contained in Sec.
		63.5850. Additional
		requirements for
		conducting performance
		tests for continuous
		lamination/casting are
		included in Sec.
		63.5870.
Sec.	63.7(f)	Use of alternative test. Yes
	(.)	method.
Sec	63.7(a)	Performance test data Yes
		analysis,
		recordkeeping, and
		reporting.
Sec		Waiver of performance Yes
	00.7 (11)	tests.
Sac	63.8(a)(1) and (2)	
OC0.	00.0(a)(1) and (2)	monitoring
		requirements.
Sec	63.8(3)(3)	Reserved No
		Neserveu
550.	00.0(α)(¬)	when using flares.
202	63 8(h)(1)	Conduct of monitoring Yes
ocu.		exceptions.
Sec		
000.	- ∪0.0(b)(∠) aHu (ð)	wunipie eniuento anu - i eo
		Cubiost to the
		Subject to the

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The general provisions reference . . That addresses . . . And applies to subpart following additional WWWW of part 63 . . . information . . . multiple monitoring systems. Sec. 63.8(c)(1)...... Compliance with CMS Yes...... This section applies if operation and you elect to use a CMS maintenance to demonstrate continuous compliance requirements. with an emission limit. Sec. 63.8(c)(2) and (3)..... Monitoring system Yes...... This section applies if installation. vou elect to use a CMS to demonstrate continuous compliance with an emission limit. Sec. 63.8(c)(4)...... CMS requirements...... Yes...... This section applies if vou elect to use a CMS to demonstrate continuous compliance with an emission limit. Sec. 63.8(c)(5)...... Continuous Opacity No...... Subpart WWWW of Part 63 Monitoring System does not contain (COMS) minimum opacity standards. procedures. Sec. 63.8(c)(6) through (8)...... CMS calibration and Yes...... This section applies if periods CMS is out of you elect to use a CMS control. to demonstrate continuous compliance with an emission limit. Sec. 63.8(d)...... CMS quality control Yes...... This section applies if program, including vou elect to use a CMS to demonstrate test plan and all previous versions. continuous compliance with an emission limit. Sec. 63-8(e)(1)...... Performance evaluation Yes...... This section applies if of CMS. you elect to use a CMS to demonstrate Subject to the The general provisions reference . . That addresses . . . And applies to subpart following additional WWWW of part 63 . . . information . . . continuous compliance with an emission limit. Sec. 63.8(e)(2)...... Notification of Yes...... This section applies if performance evaluation. you elect to use a CMS to demonstrate continuous compliance with an emission Sec. 63.8(e)(3) and (4)...... CMS requirements/ Yes...... This section applies if

you elect to use a CMS

alternatives.

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			to demonstrate
			— to demonstrate — continuous compliance
			— continuous compliance — with an emission
Coo	62.9(a)(E)(i)	Departing performance	limit.
500.			Yes This section applies if
		evaluation results.	
			to demonstrate
			<u>-continuous compliance</u>
			with an emission
	00.0(.)(5)('')	D 1: (00140 h	limit.
Sec.	- 63.8(e)(5)(II)		loSubpart WWWW of Part 63
		performance evaluation.	
	22.2(0)(4) 4	1 (0)	opacity standards.
Sec.	63.8(f)(1) throug	h (3) Use of an alternative	Yes
		monitoring method.	
Sec.	-63.8(f)(4)	Request to use an Yo	0\$
-		alternative monitoring	
		method.	
Sec.	-63.8(f)(5)	Approval of request to Y	es
		use an alternative	
		monitoring method.	
Sec.	63.8(f)(6)		es This section applies if
-		to relative accuracy	you elect to use a CMS
		test and associated	to demonstrate
		records.	continuous compliance
			with an emission
		gh (5) Data reduction	limit.
	general provisions	s reference That addresses	Subject to the And applies to subpart—following additional
The	general provisions	s reference That addresses	
		s reference That addresses WWWW of pa	And applies to subpart—following additional rt 63 information
		s reference That addresses WWWW of pagh (4) Notification Y	And applies to subpart—following additional rt 63 information
		s reference That addresses WWWW of pa gh (4) Notification Y requirements and	And applies to subpart—following additional rt 63 information
Sec.	-63.9(a)(1) throug	s reference That addresses WWWW of pa yh (4) Notification requirements and general information.	And applies to subpart—following additional rt 63 information
Sec.	-63.9(a)(1) throug	s reference That addresses WWWW of pa The part of the part o	And applies to subpart—following additional rt 63 information
Sec.	63.9(a)(1) throug	s reference That addresses WWWW of pa Wh (4) Notification Y requirements and general information. Initial notification Yes applicability.	And applies to subpart—following additional rt 63 information
Sec.	63.9(a)(1) throug	s reference That addresses	And applies to subpart—following additional rt 63 information
Sec.	63.9(a)(1) throug	s reference That addresses WWWW of pa gh (4) Notification Y requirements and general information. Initial notification Yes applicability. Notification for Yes affected source with	And applies to subpart—following additional rt 63 information
Sec.	63.9(a)(1) throug	s reference That addresses	And applies to subpart—following additional rt 63 information
Sec.	63.9(a)(1) throug	s reference That addresses	And applies to subpart—following additional rt 63 information
Sec. Sec.	63.9(a)(1) throug	s reference That addresses	And applies to subpart—following additional rt 63 information
Sec. Sec. Sec.	63.9(a)(1) throug 63.9(b)(1)	s reference That addresses	And applies to subpart—following additional rt 63 information
Sec. Sec. Sec.	63.9(a)(1) throug 63.9(b)(1)	s reference That addresses	And applies to subpart—following additional rt 63 information
Sec. Sec. Sec.	63.9(a)(1) throug 63.9(b)(1)	s reference That addresses	And applies to subpart—following additional rt 63 information
Sec. Sec. Sec.	63.9(a)(1) throug 63.9(b)(1)	coreference That addresses WWWW of particular particular and general information. Initial notification Yes applicability. Notification for Yes affected source with initial startup before effective date of standard. Reserved No Notification for a new Yes affected source with	And applies to subpart—following additional rt 63 information
Sec. Sec. Sec.	63.9(a)(1) throug 63.9(b)(1)	That addresses WWWW of pa Wh (4) Notification requirements and general information. Initial notification applicability. Notification for affected source with initial startup before effective date of standard. Reserved No Notification for a new or reconstructed major affected source with initial startup after	And applies to subpart—following additional rt 63 information
Sec. Sec. Sec.	63.9(a)(1) throug 63.9(b)(1)	coreference That addresses WWWW of particular particular and general information. Initial notification Yes applicability. Notification for Yes affected source with initial startup before effective date of standard. Reserved Notification for a new Yes or reconstructed major affected source with initial startup after effective date for	And applies to subpart—following additional rt 63 information
Sec. Sec. Sec.	63.9(a)(1) throug 63.9(b)(1)	s reference That addresses	And applies to subpart—following additional rt 63 information
Sec. Sec. Sec.	63.9(a)(1) throug 63.9(b)(1)	wwwww of pa wh (4) Notification Y requirements and general information. Initial notification Yes applicability. Notification for Yes affected source with initial startup before effective date of standard. Notification for a new Yes Notification for a new Yes Initial startup before effective date of standard. Notification for a new Yes or reconstructed major affected source with initial startup after effective date for which an application for approval of	And applies to subpart—following additional rt 63 information
Sec. Sec. Sec.	63.9(a)(1) throug 63.9(b)(1)	wwwww of pa wh (4) Notification Y requirements and general information. Initial notification Yes applicability. Notification for Yes affected source with initial startup before effective date of standard. Reserved No Notification for a new Yes or reconstructed major affected source with initial startup after effective date for which an application for approval of construction or	And applies to subpart—following additional rt 63 information
Sec. Sec. Sec.	63.9(b)(1)	wwww of pa wh (4) Notification Y requirements and general information. Initial notification Yes applicability. Notification for Yes affected source with initial startup before effective date of standard. Reserved No Notification for a new Yes or reconstructed major affected source with initial startup after effective date for which an application for approval of construction or reconstruction is	And applies to subpart—following additional rt 63 information
Sec. Sec. Sec.	63.9(a)(1) througe 63.9(b)(1)	sreference That addresses— WWWW of pa The standard of the standard. We require the standard of the standard. We reconstructed major affected source with initial startup before or reconstructed major affected source with initial startup date of standard. We reconstructed major affected source with initial startup date of standard. We reconstructed major affected source with initial startup after effective date for which an application for approval of construction or reconstruction is required.	And applies to subpart—following additional rt 63 information
Sec. Sec. Sec. Sec. Sec. Sec. Sec.	63.9(b)(1)	sreference That addresses WWWW of pa Wh (4) Notification Y requirements and general information. Initial notification Yes applicability. Notification for Yes affected source with initial startup before effective date of standard. Reserved No Notification for a new Yes or reconstructed major affected source with initial startup after effective date for which an application for approval of construction or reconstruction is required. ough (iv) Reserved	And applies to subpart—following additional rt 63 information
Sec. Sec. Sec. Sec. Sec. Sec. Sec.	63.9(b)(1)	sreference That addresses WWWW of pa Wh (4) Notification Y requirements and general information. Initial notification Yes applicability. Notification for Yes affected source with initial startup before effective date of standard. Reserved No Notification for a new Yes or reconstructed major affected source with initial startup after effective date for which an application for approval of construction or reconstruction is required. Dugh (iv) Reserved	And applies to subpart—following additional rt 63 information
Sec. Sec. Sec. Sec. Sec. Sec.	63.9(b)(1)	sreference That addresses WWWW of pa Wh (4) Notification Y requirements and general information. Initial notification Yes applicability. Notification for Yes affected source with initial startup before effective date of standard. Reserved No Notification for a new Yes or reconstructed major affected source with initial startup after effective date for which an application for approval of construction or reconstruction is required. ough (iv) Reserved	

		initial startup after	subpart \\\\\\\\\\ of Part
		effective date for	
		which an application	
		• •	
		for approval of construction or	
		reconstruction is	
		required.	- 1 4 4 104 1
Sec.	-63.9(b)(5)		Existing facilities do
		are subject to this	
		subpart for new or	reconstructed under
			subpart WWWW of Part
		source with initial	63.
		effective date and for	
		That a bloom	Subject to the
-I he	general provisions r	eference I hat addresses	. And applies to subpart following additional
	•		63 information
		history and the Con-	
		which an application	
		for approval of	
		construction or	
		reconstruction is not	
		required.	
Sec.		Request for compliance Ye)\$
		extension.	
Sec.	-63.9(d)	Notification of special Yes	
		compliance	
		requirements for new	
		source.	
Sec.	63.9(e)	Notification of Yes	
		performance test.	
Sec.	63.9(f)	Notification of opacity No	Subpart WWWW of Part 63
		and visible emissions	does not contain
		observations.	
			emission standards.
Sec	63 Q(a)(1)		This section applies if
0 00.	00.0(9)(1)	requirements for	
			to demonstrate
		sources using CMS.	continuous compliance
			•
			with an emission
C	C2 O(~)(2)		imit.
Sec.	- 63.9(g)(z)		Subpart WWWW of Part 63
			does not contain
		opacity emission	
			— standards.
Sec.	-63.9(g)(3)		This section applies if
		criterion to continue	
		use of alternative to	
		relative accuracy	continuous compliance
		testing has been	with an emission
		exceeded.	— limit.
	CO O/l-)/4) the manuals	(3) Notification of Ye	S
Sec.	- 63.9(n)(1) tnrouan		
Sec.	- 63.9(n)(1) througn	compliance status.	
		compliance status Reserved No	
Sec.	63.9(h)(4)	Reserved No	
Sec.	63.9(h)(4) 63.9(h)(5) and (6).	Reserved No No No No	
Sec.	63.9(h)(4) 63.9(h)(5) and (6).	Reserved No	

		Subject to the	
The general provis	ions reference That address	es And applies to subpart	following additiona
		part 63 information	•
	1 11:		
2 - 00 0(1)	deadlines.	V	
sec. 63.9(J)	Change in information	Yes	
Con 62 10(a)	provided.	20	
sec. 63.10(a)	Applicability of Ye	35	
	recordkeeping and reporting.		
Sec. 63.10(b)(1)	—— reporting. Records retention	Voc	
	through (v) Records related t		lies to
JCC. 03.10(b)(∠)(i)	etartun ehutdown and	facilities that use a	n
	malfunction.	add-on control device.	П
Sec. 63.10(b)(2)(v	ri) through (xi) CMS records, da		
500. 00.10(b)(2)(v	performance tests, CMS	100111100111111111111111111111111111111	
	— performance		
	evaluations,		
	measurements necessary		
	to determine		
	conditions of		
	performance tests, and		
	— performance		
	evaluations.		
Sec. 63.10(b)(2)(x	iii)Record of waiver of	Yes	
	recordkeeping and		
	reporting.		
Sec. 63.10(b)(2)(x	riii)Record for alternative	- Yes	
. , , , ,	to the relative		
	accuracy test.		
Sec. 63.10(b)(2)(x	iv) Records supporting	Yes	
	initial notification		
	and notification of		
	compliance status.		
Sec. 63.10(b)(3)	Records for	'es	
	applicability		
	determinations.		
Sec. 63.10(c)(1)	CMS records		pplies if
		you elect to use a CMS	
		to demonstrate	
		continuous compliance	
		with an emission	
		—— limit.	
		0.12-44-4	
The second second	That address	Subject to the	Caller Carrier Laborator
The general provis	ions reference That address		following additiona
•	VVVVVVV ot	part 63 information	
Soc. 63 10(c)(2) tl	arough (4) Pasaryad	No	
500. 00.10(6)(2) (1 500 63.10(6)(5) tl	nrough (4)Reserved nrough (8) CMS records	Vac This saction	on applies if
555. 55. 15(5)(3) tl	modgii (0) Oivio records	you elect to use a CMS	он аррисо II
		to demonstrate	
		— to demonstrate — continuous compliance	
		with an emission	
		—— With an emission ——limit-	
3ac 63 10(a)(0)	Reserved N		

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you elect to use a CMS to demonstrate continuous compliance with an emission limit. Sec. 63.10(d)(1)...... General reporting Yes...... requirements. Sec. 63.10(d)(2)..... Report of performance Yes..... test results. Sec. 63.10(d)(3)...... Reporting results of No...... Subpart WWWW of Part 63 opacity or visible does not contain emission observations. opacity or visible emission standards. Sec. 63.10(d)(4)...... Progress reports as Yes...... part of extension of compliance. Sec. 63.10(d)(5)...... Startup, shutdown, and Yes..... Only applies if you use malfunction reports. an add-on control device. Sec. 63.10(e)(1) through (3)...... Additional reporting Yes...... This section applies if requirements for CMS. you have an add-on control device and elect to use a CEM to demonstrate continuous compliance with an emission limit. Sec. 63.10(e)(4)......Reporting COMS data.... No..........Subpart WWWW of Part 63 does not contain opacity standards. Sec. 63.10(f)...... Waiver for Yes..... Subject to the The general provisions reference ... That addresses And applies to subpart following additional WWWW of part 63 . . . information . . . recordkeeping or reporting. Sec. 63.11..... Control device Yes..... Only applies if you requirements. elect to use a flare as a control device. Sec. 63.12..... State authority and -Yes.....- delegations. Sec. 63.13..... Addresses of State air Yes..... pollution control agencies and EPA Regional Offices. Sec. 63.14..... Incorporations by Yes..... reference. Sec. 63.15..... Availability of - Yes...... information and -confidentiality. D.1.16 One Time Deadlines Relating to NESHAP WWWW

- (a) Pursuant to 40 CFR 63.5905, the Permittee must submit an initial notification by November 2001 and initial statement of compliance on March 1, 2002.
- (b) The Permittee must conduct the performance tests, performance evaluations, design evaluations, capture efficiency testing, and other initial compliance demonstrations by April 21, 2006.

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- (c) The Permittee must submit a notification of compliance status no later than the dates specified in §63.9(b)(2) following the completion of the compliance demonstration.
- (d) Pursuant to 40 CFR §63.9(b)(4)(i) for the fluid impingement device to be constructed in 2007, the Permittee must submit a notification to the Administrator of the intent to reconstruct a major-emitting affected source as specified in 40 CFR §63.5(d)(1)(i).
- (e) Pursuant to 40 CFR §63.9(b)(4)(v) for the fluid impingement device to be constructed in 2007, the Permittee must submit a notification to the Administrator of the actual date of startup, delivered or postmarked within fifteen (15) calendar days after that date.

D.1.17 State only Reinforced Plastic Composites Production Requirements [326 IAC 20-56]

Pursuant to 326 IAC 20-56, the Permittee shall comply with the previous version of 40 CFR 63, Subpart WWWW, published in 68 FR 19402, April 21, 2003 with a compliance date of April 21, 2006. Compliance with the requirements specified in Condition D.1.15 shall satisfy the requirements of 326 IAC 20-56, with the exception of the requirements listed under 40 CFR 63.5805, 40 CFR 63.5810, CFR 63.5895(d), CFR 63.5900, CFR 63.5935 and Tables 1, 3, 4, 7, 8 and 9. In place of those requirements, to satisfy 326 IAC 20-56 only, the Permittee shall comply with the following

§ 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 meeting these standards described in §§63.5810 through 63.5830. Use the procedures in §63.5799 to determine if you meet or exceed the 100 tpy threshold.

- (a) If you have an existing facility that does not have any centrifugal casting or continuous lamination/casting operations, or an existing facility that does have centrifugal casting or continuous lamination/casting operations, but the combination of all centrifugal casting and continuous lamination/casting operations emit less than 100 tpy of HAP, you must meet the annual average 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.
- § 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 in §63.5805. When you are complying with an emission limit in Tables 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, covered curing techniques, and routing part or all of your emissions to an add-on control. 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 currently using unless you were using the compliant materials option in paragraph (d) of this section. In this case, you must immediately begin collecting resin and gel coat use data and demonstrate compliance 12 months after changing options.

(a) Meet the individual organic HAP emissions limits for each operation. Demonstrate that you meet the individual organic HAP emissions limits for each open molding operation and for each centrifugal casting operation type in Tables 3, or 5 to this subpart that apply to you. This is done in two steps. First, determine an organic HAP factor for each individual resin and gel coat, application method, and control method you use in a particular operation. Second, calculate, for each particular operation type, a weighted

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average of those organic HAP emissions factors based on resin and gel coat use. Your calculated organic HAP emissions factor must either be at or below the applicable organic HAP emissions limit in Tables 3 or 5 to this subpart based on a 12-month rolling average. Use the procedures described in paragraphs (a)(1) through (3) of this section to calculate average organic HAP emissions factors for each of your operations.

- 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 three characteristics vary: The neat resin plus or neat gel coat plus organic HAP content, 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. If you want to use vapor suppressants to meet the organic HAP emissions limit for open molding, you must determine the vapor suppressant effectiveness by conducting testing according to the procedures specified of appendix A to subpart WWWW of 40 CFR part 63.
 - (2) Calculate your actual operation organic HAP emissions factor for the last 12 months for each open molding operation type and for each centrifugal casting operation type by calculating the weighted average of the individual process stream organic HAP emissions factors within each respective operation. 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 correspond 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. Use Equation 2 of this section to calculate your actual organic HAP emissions factor for each open molding operation type and each centrifugal casting operation type.

Where:

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

Material_{i.}= neat resin plus or neat gel coat plus used during the last 12 calendar months for process stream i, tons

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

- (3) Compare each organic HAP emissions factor calculated in paragraph (b)(2) of this section with its corresponding organic HAP emissions limit in Tables 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.
- (b) HAP Emissions factor averaging option. Demonstrate each month that you meet each weighted average of the organic HAP emissions limits in Tables 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

TSD for Significant Source Modification No.: 057-31216-00042 TSD for Part 70 Operating Permit Renewal No: 057-31256-00042

emissions limit for all your centrifugal casting operations. Open molding operations and centrifugal casting operations may not be averaged with each other.

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 Tables 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. Use Equation 3 of this section to calculate the weighted average organic HAP emissions limit for all open molding operations and separately for all centrifugal casting operations.

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

Where:

ELi = organic HAP emissions limit for operation type i, lbs/ton from Tables 3, 5 or 7 to this subpart

Material: = neat resin plus or neat gel coat plus used during the last 12-month period for operation type i, tons n = number of operations

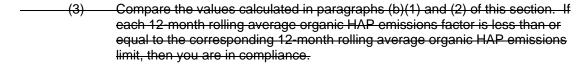
(2)Each month calculate your actual weighted average organic HAP emissions factor for open molding and centrifugal casting. To do this, multiply your actual open molding (centrifugal casting) operation organic HAP emissions factors and the amount of neat resin plus and neat gel coat plus used in each 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. You must calculate your actual individual HAP emissions factors for each operation type as described in paragraphs (a)(1) and (2) of this section. Use Equation 4 of this section to calculate your actual weighted average organic HAP emissions factor.

Where:

Actual Individual EF = Actual organic HAP emissions factor for operation type i,

Material₁= neat resin plus or neat gel coat plus used during the last 12 calendar months for operation type i, tons n = number of operations

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- (c) If you have multiple operation types, meet the organic HAP emissions limit for one operation type, and use the same resin(s) for all operations of that resin type. If you have more than one operation type, you may meet the emission limit for one of those operations, and use the same resin(s) in all other open molding and centrifugal casting operations.
- (1) 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.
- (2) 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 operations and use that operation's same resin in all of the resin operations listed in this paragraph. Table 7 to this subpart presents the possible combinations based on a facility selecting the application process that results in the highest allowable organic HAP content resin. If your resin organic HAP content is below the applicable values shown in Table 7 to this subpart, you are in compliance.
- (3) You may also use a weighted average organic HAP content for each operation described in paragraph (c)(2) of this section. Calculate the weighted average organic HAP content monthly. Use Equation 2 in §63.5810(a)(2) 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.
- (4) You may simultaneously use the averaging provisions in paragraph (b) of this section to demonstrate compliance for any operations and/or resins you do not include in your compliance demonstrations is paragraphs (c)(2) and (3) of this section. However, any resins for which you claim compliance under the option in paragraphs (c)(2) and (3) of this section may not be included in any of the averaging calculations described in paragraphs (a) or (b) of this section used for resins for which you are not claiming compliance under this option.
- (d) Use resins and gel coats that do not exceed the maximum organic HAP contents shown in Table 3 to this subpart.

Continuous Compliance Requirements

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

(d) If you initially demonstrate that all resins and gel coats individually meet the applicable organic HAP emissions limits, or organic HAP content limits, then resin and gel coat use records are not required. However, you must include a statement in each compliance report that all resins and gel coats still meet the organic HAP limits for compliant resins and gel coats shown in Tables 3 or 7 to this subpart. If after this initial demonstration, you change to a higher organic HAP resin or gel coat, or increase the resin or gel coat organic HAP content, or change to a higher emitting resin or gel coat application method, then you must either again demonstrate that all resins and gel coats still meet the applicable organic HAP emissions limits, or begin collecting resin and gel coat use records and calculate compliance on a 12- month rolling average.

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

- (a) You must demonstrate continuous compliance with each standard in §63.5805 that applies to you according to the methods specified in paragraphs (a)(1) through (3) of this section.
- (2) Compliance with organic HAP emissions limits is demonstrated by maintaining a organic HAP emissions factor value less than or equal to the appropriate organic HAP emissions limit listed in Tables 3, or 5 to this subpart, on a 12-month rolling average, or by including in each compliance report a statement that all resins and gel coats 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, or by including in each compliance report a statement that all resins and gel coats individually meet the appropriate organic HAP content limits, as discussed in § 63.5895(d).

§ 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:

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

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

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 does include any additions of styrene or methyl methacrylate monomer in any form, including in catalysts and promoters.

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. The composite materials may or may not include reinforcements. Products produced by the polymer casting process include cultured marble products and polymer concrete.

Table 1 to Subpart WWWW of Part 63--Equations to Calculate Organic HAP Emissions Factors for Specific Open Molding and Centrifugal Casting Process Streams [As required in Sec. 63.5796, 63.5799(a)(1) and (b), and 63.5810(a)(1), to calculate organic HAP emissions factors for specific open molding and centrifugal casting process streams you must use the equations in the following table:]

If your operation	And you use	With	Use this organic HAP	Use this organic HAP
type is a new or			Emissions Factor (EF)	Emissions Factor (EF)
existing			Equation for materials	Equation for materials
			with less than 33	with 33 percent or
			percent organic HAP	more organic HAP (19
			(19 percent organic	percent for
			HAP for nonatomized	nonatomized gel coat)
			gel coat) 123	123

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1. Open molding	a. Manual resin		EF = 0.126 x % HAP x	
operation	application.	i. Nonvapor-	2000.	EF = ((0.286 x %HAP)-
		suppressed resin.		0.0529) x 2000
			EF = 0.126 x % HAP x	
		ii. Vapor- suppressed	2000 x (1-(0.5 x VSE	EF = ((0.286 x %HAP)-
		resin.	factor))	0.0529) x 2000 x (1-
				(0.5 x VSE factor)).
	c. Nonatomized	i. Nonvapor-	EF = 0.107 x % HAP x	$EF = ((0.157 \times \%HAP) -$
	Mechanical resin	suppressed resin.	2000.	0.0165) x 2000
	application.			

Footnotes to Table 1

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 required in Sec. Sec. 63.5796, 63.5805 (a) through (c) and (g), 63.5810(a), (b), and (d), 63.5820(c), 63.5830, 63.5835(a), 63.5895(c) and (d), 63.5900(a)(2), and 63.5915(c), you must meet the appropriate organic HAP emissions limits in the following table:]

If your operation is	And you use	Your organic HAP emissions limit is	And the highest organic HAP content for a compliant resin or gel coat is 2
3. Open molding- tooling	b. Manual resin application	157 lb/ton	45.9

Footnotes to Table 3

Table 4 to Subpart WWWW of Part 63 Work Practice Standards

[As required in §§63.5805 (a) through (d) and (g), 63.5835(a), 63.5900(a)(3), 63.5910(c)(5), and 63.5915(d), you must meet the appropriate work practice standards in the following table:]

For	You must
	not use cleaning solvents that contain HAP, except
2. a new or existing cleaning operation.	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.
	keep containers that store HAP-containing
3. a new or existing materials HAP-containing materials storage operation.	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.

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 required in Sections. 63.5810(a) through (d),

² 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.

³The 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.

⁴ 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 A compliant resin or gel coat means that if its organic HAP content is used to calculate an organic HAP emissions factor, the factor calculated does not exceed the appropriate organic HAP emissions limit shown in the table.

63.5835(a), 63.5895(c), and 63.5900(a)(2), when electing to use the same resin(s) for multiple resin application methods you may use any resin(s) with an organic HAP contents less than or equal to the values shown in the following table, or any combination of resins whose weighted average organic HAP content based on a 12-month rolling average is less than or equal to the values shown the following table:]

If your facility has the following resin type and application method	The highest resin weight percent organic HAP content, or weighted average weight percent organic HAP content, you can use for	ls
8. Tooling resins, manual	Tooling atomized mechanical	4 5.9

Table 8 to Subpart WWWW of Part 63—Initial Compliance with Organic HAP Emissions Limits [As required 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 and 5 to this subpart, or an organic HAP content limit shown in Table 7 to this subpart.	i. You have met the appropriate organic HAP emissions limits for these operations as calculated using the procedures in § 63.5810 on a 12-month rolling average1 year after the appropriate compliance date, or ii. You demonstrate by using the appropriate values in Tables 3, or 7 to this subpart that all resins and gel coats considered individually meet the appropriate organic HAP contents, or iii. You demonstrate by using the appropriate values in Table 7 to this subpart that the weighted average of all resins and gel coats for each resin type and application method meet the appropriate organic HAP contents.

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

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

openied in the fellowing table.]		
For	That must meet the following standards	You have demonstrated initial compliance if
	otandardo	oomphanoc ii
	Not use cleaning solvents that	The owner or operator submits a
	contain HAP, except that styrene	certified statement in the notice of
	may be used in closed systems,	compliance status that all
	and organic HAP containing	cleaning materials, except
	materials may be used to clean	styrene contained in closed
2. a new or existing cleaning	cured resin from application	systems, or materials used to
operation	equipment. Application	clean cured resin from application
	equipment includes any	equipment, contain no HAP.
	equipment that directly contacts	
	resin between storage and	
	applying resin to the mold or	
	reinforcement.	
3. a new or existing materials	Keep containers that store HAP-	The owner or operator submits a
HAP-containing materials storage	containing materials closed or	certified statement in the notice of

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operation.	covered except during the	compliance status that all HAP-
	addition or removal of materials.	containing storage containers are
	Bulk HAP-containing materials	kept closed or covered except
	storage tanks may be vented as	when adding or removing
	necessary for safety.	material, and that any bulk
		storage tanks are vented only as
		necessary for safety.

SECTION E.1

FACILITY OPERATION CONDITIONS

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

- (a) Two (2) mixers, identified as M₁ and M₂, constructed prior to 1980, for fiberglass sheet production, each with a maximum capacity of 313 pounds per hour, and both exhausting to stack S₂. Under 40 CFR 63, Subpart WWWW, this is considered a closed molding reinforced plastic composites operation.
- (b) One (1) sheet molding compound mixer, identified as SMC Mixer M₃, constructed prior to 1980, for sheet molding compound production with maximum throughput of 313 pounds per hour, exhausting to stack S₃, controlled by a baghouse B₈. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.
- (c) One (1) sheet molding compound line, identified as SMC Mixer M₄, constructed prior to 1980, relocated and modified with the Cowles Mixer in 2004, and two (2) other mixers where pigment and thickener are added for sheet molding compound production, with increase in maximum throughput from 313 pounds per hour to 1,200 pounds per hour, exhausting to stack S₃, controlled by a baghouse B₈. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.
- (d) Nine (9) bulk molding compound mixers, identified as M₅ M₁₁ (constructed prior to 1980) and M₁₂ M₁₃ (constructed in 1996), for bulk molding compound (BMC) production, each with a maximum capacity of 1330 pounds per hour, and M₂₇ (approved for construction in 2008), with a maximum capacity of 2000 lbs/hr, all BMC mixers are equipped with the same baghouse B₄, and all exhausting to stack S₄. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation.
- (e) Four (4) bulk molding compound (BMC) mixers, identified as M₁₆ M₁₉, constructed in 2005, for bulk molding compound production, each with a maximum capacity of 1,000 pounds per hour with Particulate Matter (PM) emissions controlled by baghouse B₉, exhausting inside the building. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation.

Insignificant Activities

- (a) Two (2) laboratory BMC mixers, identified as M₂₁ and M₂₂, constructed in 2005, with a maximum capacity of 100 pounds per hour and 10 pounds per hour respectively, to model the operation of the new mixers M₁₆ M₁₉. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation.
- (b) Six (6) bulk molding compound (lab) mixers, identified as M₁₄ and M₁₅, each with a maximum capacity of 66 pounds per hour and M₂₃ M₂₆, each with a maximum capacity of 20 pounds per hour, each mixer was constructed prior to 1980, for bulk molding compound production, with no pollution control equipment and exhausting inside the building, with no outside exhaust. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation.

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

E.1.1 General Provisions Relating to NESHAP WWWW [326 IAC 20-1] [40 CFR Part 63, Subpart A]

(a) The provisions of 40 CFR Part 63, Subpart A - General Provisions, which are incorporated as 326 IAC 20-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 63, Subpart WWWW.

E.1.2 National Emission Standards for Reinforced Plastics Composites Production [40 CFR Part 63, Subpart WWWW]

- (a) Pursuant to 40 CFR Part 63, Subpart WWWW, the Permittee shall comply with the provisions of National Emission Standards for Plastic Composites Production which are incorporated by reference as 326 IAC 20-56-1, for the units as specified above. A copy of this rule is included as Attachment A. This source is subject to the following requirements of 40 CFR Part 63, Subpart WWWW:
 - (1) 40 CFR 63.5800;
 - (2) 40 CFR 63.5805(b);
 - (3) 40 CFR 63.5810;
 - (4) 40 CFR 63.5835(a) and (c);
 - (5) 40 CFR 63.5840;
 - (6) 40 CFR 63.5860(a);
 - (7) 40 CFR 63.5895 (c) and (d);
 - (8) 40 CFR 63.5900(a)(2), (3) and (4), (b) and (c);
 - (9) 40 CFR 63.5905;
 - (10) 40 CFR 63.5910(a), (b), (c), (d), (g) and (h);
 - (11) 40 CFR 63.5915(a), (c) and (d);
 - (12) 40 CFR 63.5920;
 - (13) 40 CFR 63.5925;
 - (14) 40 CFR 63.5930; and
 - (15) 40 CFR 63.5935.
 - (16) Table 1 to 40 CFR 63 Subpart WWWW (the applicable portions)
 - (17) Table 3 to 40 CFR 63 Subpart WWWW (the applicable portions)
 - (18) Table 4 to 40 CFR 63 Subpart WWWW (the applicable portions)
 - (19) Table 5 to 40 CFR 63 Subpart WWWW (the applicable portions)
 - (20) Table 7 to 40 CFR 63 Subpart WWWW (the applicable portions)
 - (21) Table 8 to 40 CFR 63 Subpart WWWW (the applicable portions)
 - (22) Table 9 to 40 CFR 63 Subpart WWWW (the applicable portions)
 - (23) Table 13 to 40 CFR 63 Subpart WWWW (the applicable portions)
 - (24) Table 14 to 40 CFR 63 Subpart WWWW (the applicable portions)

Change No. 26: All references to Asbestos Section, Compliance Data Section, Air Compliance Section, and Compliance Branch have been changed to Compliance and Enforcement Branch. Updates will be made throughout the permit as follows:

COMPLIANCE BRANCH
COMPLIANCE AND ENFORCEMENT BRANCH

COMPLIANCE DATA SECTION
COMPLIANCE AND ENFORCEMENT BRANCH

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Modification No.1: The two (2) mixers, identified as M1 and M2, have been removed from the facility as part of plant reorganization; therefore, they have been removed from the permit, including the reporting form, as follows:

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

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

(a) Two (2) mixers, identified as M₁ and M₂, constructed prior to 1980, for fiberglass sheet production, each with a maximum capacity of 313 pounds per hour, and both exhausting to stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a closed molding reinforced plastic composites operation.

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Two (2) mixers, identified as M₁ and M₂, constructed prior to 1980, for fiberglass sheet production, each with a maximum capacity of 313 pounds per hour, and both exhausting to stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a closed molding reinforced plastic composites operation.

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

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT **OFFICE OF AIR QUALITY COMPLIANCE DATA SECTION** Part 70 Quarterly Report

Source Name: Industrial Dielectrics, Inc.

Source Address: 407 South 7th Street, Noblesville, IN 46060

Mailing Address: P.O. Box 357, Noblesville, IN 46061

Part 70 Permit No.: T057-18496-00042

8th and 9th Bulk Molding Compound Lines with Mixers M12 and M13 Facility:

Parameter: **VOC emissions**

Limit: less than 25 tons per 12 consecutive month period for each Mixer

Modification No.2: The Permittee is requesting several emission units be renamed and the maximum capacity be changed. Therefore, the Permittee requests the sheet molding compound (SMC) mixer currently identified as SMC Mixer M3, be changed to SMC Drum Mixer and increase the maximum capacity from 313 lbs/hour to 1,200 lbs/hour in Sections A, D, and E as follows:

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

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

One (1) sheet molding compound (SMC) mixer, identified as SMC Drum Mixer H₃, constructed (b) prior to 1980, for sheet molding compound (SMC) production. with The maximum throughput of is 1,200 313 pounds per hour, with PM emissions controlled by SMC Baghouse B2 exhausting

Industrial Dielectrics, Inc. Noblesville, Indiana Permit Reviewer: Roger Osburn Page 94 of 115 TSD for Significant Source Modification No.: 057-31216-00042 TSD for Part 70 Operating Permit Renewal No: 057-31256-00042

to stack S2. controlled by a baghouse B₈. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(b) One (1) sheet molding compound **(SMC)** mixer, identified as SMC **Drum** Mixer \mathbb{H}_3 , constructed prior to 1980, for sheet molding compound **(SMC)** production. with **The** maximum throughput of is **1,200** 313 pounds per hour, with **PM** emissions controlled by **SMC** Baghouse \mathbb{B}_2 exhausting to stack S2. controlled by a baghouse $\mathbb{B}_{8^{\mp}}$ Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.

D.1.3 Particulate Matter (PM)

(a) The baghouse B₈ B₂ shall be in operation at all times when any of the sheet molding compound line mixers, identified as SMC **Drum** Mixer, 39" SMC Line Large Mixer, and 48" SMC Line Large Mixer are in operation, in order to comply with the PM limits under 326 IAC 6-3-2, in Condition D.1.1.

**

SECTION E.1

FACILITY OPERATION CONDITIONS

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

(b) One (1) sheet molding compound **(SMC)** mixer, identified as SMC **Drum** Mixer M₃, constructed prior to 1980, for sheet molding compound **(SMC)** production. with **The** maximum throughput of is **1,200** 313 pounds per hour, **with PM emissions controlled by SMC Baghouse** B₂ exhausting to stack S2. controlled by a baghouse B₈. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.

Modification No.3: The Permittee requests to rename the sheet molding compound (SMC) line identified as SMC Mixer M4, to SMC Line 1 and increase the maximum capacity from 1,200 lbs/hour to 7,200 lbs/hour in Sections A, D, and E as follows:

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

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

(c) One (1) 48" sheet molding compound (SMC) line, identified as SMC Line 1, SMC Mixer M₄, consisting of a Large Mixer, originally constructed prior to 1980 and modified in 2012, relocated and modified with the Cowles Mixer in 2004, and two (2) also including other mixers where pigment and thickener are added, for sheet molding compound production, for SMC production, and the 48" SMC Machine. with increase in The maximum throughput is increased from 1,200 313 pounds per hour to 7,200 1,200 pounds per hour, with PM emissions from the Large Mixer and glass chopper controlled by SMC baghouse B₂ exhausting to stack S2. Five hoods were added in 2007, the doctor boxes and thickening operations; which are controlled

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by a baghouse B₈ and exhausting to stack S₃, Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(c) One (1) 48" sheet molding compound **(SMC)** line, identified as **SMC Line 1**, SMC Mixer M₄, consisting of a Large Mixer, originally constructed prior to 1980 and modified in 2012, relocated and modified with the Cowles Mixer in 2004, and two (2) also including other mixers where pigment and thickener are added, for sheet molding compound production, for SMC production, and the 48" SMC Machine. with increase in The maximum throughput is increased from 1,200 313 pounds per hour to 7,200 1,200 pounds per hour, with PM emissions from the Large Mixer and glass chopper controlled by SMC baghouse B₂ exhausting to stack S2. Five hoods were added in 2007, the doctor boxes and thickening operations; which are controlled by a baghouse B₈, and exhausting to stack S₃₇. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.

**

SECTION E.1

EMISSIONS UNIT OPERATION CONDITIONS

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

(c) One (1) 48" sheet molding compound **(SMC)** line, identified as **SMC Line 1**, SMC Mixer M₄, consisting of a Large Mixer, originally constructed prior to 1980 and modified in 2012, relocated and modified with the Cowles Mixer in 2004, and two (2) also including other mixers where pigment and thickener are added, for sheet molding compound production, for SMC production, and the 48" SMC Machine. with increase in The maximum throughput is increased from 1,200 313 pounds per hour to 7,200 1,200 pounds per hour, with PM emissions from the Large Mixer and glass chopper controlled by SMC baghouse B₂ exhausting to stack S2. Five hoods were added in 2007, the doctor boxes and thickening operations; which are controlled by a baghouse B₈, and exhausting to stack S₃₇. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.

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Modification No.4: The Permittee requests the removal of three bulk molding compound mixers, to rename the existing mixers currently identified as M5, M6, M9, M10, M11, and M27, to decrease the maximum capacity of five of the mixers from 1,330 lbs/hour to 1,200 lbs/hour, and to increase the maximum capacity of Mixer M27 from 2,000 lbs/hour to 2,200 lbs/hour in Sections A and D as follows:

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

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

(d) Six (6) Nine (9) bulk molding compound (BMC) mixers, identified as M₅ - M₄₁, (constructed prior to 1980) and M₄₂ - M₄₃ (constructed in 1996), BMC Mixer #1 through BMC Mixer #5, constructed after 1980, and BMC Mixer #6, #3, and Mixer #6 - #7, constructed in 2008, for bulk molding compound (BMC) production, with BMC Mixer #1 through BMC Mixer #5 each having

with a maximum capacity throughput of 4330 1,200 pounds per hour, and BMC Mixer #6 M_{27} (approved for construction in 2008), with having a maximum capacity throughput of 2,200 2000 lbs/hr, all BMC mixers are equipped with the same baghouse B_{47} with PM emissions from all BMC mixers controlled by BMC Baghouse B1 and all exhausting to stack S1. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation. The BMC mixer process description also include a Filler Cut Scale for weighing filler powders used in each mixer, with a maximum throughput of 492 pounds per hour, with PM emissions also controlled by BMC Baghouse B1 exhausting to Stack S1. Also included are the final packaging operations associated with the BMC material from these mixers, including two (2) compound feeders and six (6) extruders used to package BMC material for shipping, with no emission controls.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(d) Six (6) Nine (9) bulk molding compound (BMC) mixers, identified as M₅—M₄₄, (constructed prior to 1980) and M₁₂ - M₁₃ (constructed in 1996), BMC Mixer #1 through BMC Mixer #5, constructed after 1980, and BMC Mixer #6, #3, and Mixer #6 - #7, constructed in 2008, for bulk molding compound (BMC) production, with BMC Mixer #1 through BMC Mixer #5 each having with a maximum capacity throughput of 1330 1,200 pounds per hour, and BMC Mixer #6 M27. (approved for construction in 2008), with having a maximum capacity throughput of 2,200 2000 lbs/hr, all BMC mixers are equipped with the same baghouse B47 with PM emissions from all BMC mixers controlled by BMC Baghouse B1 and all exhausting to stack S1. Under 40 CFR 63. Subpart WWWW, this is considered a bulk molding compound manufacturing operation. The BMC mixer process description also include a Filler Cut Scale for weighing filler powders used in each mixer, with a maximum throughput of 492 pounds per hour, with PM emissions also controlled by BMC Baghouse B1 exhausting to Stack S1. Also included are the final packaging operations associated with the BMC material from these mixers. including two (2) compound feeders and six (6) extruders used to package BMC material for shipping, with no emission controls.

SECTION E.1 FACILITY OPERATION CONDITIONS

Emissions Unit Description:

(d) Six (6) Nine (9) bulk molding compound (BMC) mixers, identified as M₅—M₄₊, (constructed prior to 1980) and M₄₂—M₄₃ (constructed in 1996), BMC Mixer #1 through BMC Mixer #5, constructed after 1980, and BMC Mixer #6, #3, and Mixer #6 - #7, constructed in 2008, for bulk molding compound (BMC) production, with BMC Mixer #1 through BMC Mixer #5 each having with a maximum eapacity throughput of 1330 1,200 pounds per hour, and BMC Mixer #6 M₂₇ (approved for construction in 2008), with having a maximum eapacity throughput of 2,200 2000 lbs/hr, all BMC mixers are equipped with the same baghouse B₄₇ with PM emissions from all BMC mixers controlled by BMC Baghouse B1 and all exhausting to stack S1. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation. The BMC mixer process description also include a Filler Cut Scale for weighing filler powders used in each mixer, with a maximum throughput of 492 pounds per hour, with PM emissions also controlled by BMC Baghouse B1 exhausting to Stack S1. Also included are the final packaging operations associated with the BMC material from these mixers,

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including two (2) compound feeders and six (6) extruders used to package BMC material for shipping, with no emission controls.

Modification No.5: The Permittee requests to clarify the description and rename the bulk molding compound production mixers for Rosite production, currently identified as M16-M19, to identify and distinguish the production mixers from the other bulk molding compound mixers, and rename the existing mixers in Sections A and D as follows:

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

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

(e) Four (4) bulk molding compound (BMC) mixers, identified as M₄₆—M₄₉ Rosite Mixer #L1 through Rosite Mixer #L4, constructed in 2005, for bulk molding compound Rosite production, each with a maximum capacity of 1,000 pounds per hour with PM emissions from all Rosite mixers controlled by SMC baghouse B2, exhausting inside the building to Stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation. The Rosite mixer process description also includes a Filler Cut Scale for weighing filler powders used in each mixer, with a maximum throughput of 2,400 pounds per hour, with PM emissions also controlled by SMC Baghouse B₂ exhausting to Stack S2. Also included is the Rosite Resin Blending Mixer used to blend resins for the Rosite mixers, with no emission controls.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(e) Four (4) bulk molding compound (BMC) mixers, identified as M₄₆—M₄₉ Rosite Mixer #L1 through Rosite Mixer #L4, constructed in 2005, for bulk molding compound Rosite production, each with a maximum capacity of 1,000 pounds per hour with PM emissions from all Rosite mixers controlled by SMC baghouse B₂, exhausting inside the building to Stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation. The Rosite mixer process description also includes a Filler Cut Scale for weighing filler powders used in each mixer, with a maximum throughput of 2,400 pounds per hour, with PM emissions also controlled by SMC Baghouse B₂ exhausting to Stack S2. Also included is the Rosite Resin Blending Mixer used to blend resins for the Rosite mixers, with no emission controls.

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

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

(e) Four (4) bulk molding compound (BMC) mixers, identified as M₄₆—M₄₉ Rosite Mixer #L1 through Rosite Mixer #L4, constructed in 2005, for bulk molding compound Rosite production, each with a maximum capacity of 1,000 pounds per hour with PM emissions from all Rosite mixers controlled by SMC baghouse B₂, exhausting inside the building to Stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation. The Rosite mixer process description

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also includes a Filler Cut Scale for weighing filler powders used in each mixer, with a maximum throughput of 2,400 pounds per hour, with PM emissions also controlled by SMC Baghouse B_2 exhausting to Stack S2. Also included is the Rosite Resin Blending Mixer used to blend resins for the Rosite mixers, with no emission controls.

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

Modification No.6: The Permittee requests to remove the unit description of the BMC scale identified as SC1 because it has been incorporated into the emission unit description in Section D.1. Therefore, the BMC scale has been removed from Sections A and D.2 as follows:

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

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

(f) One (1) bulk molding compound scale, identified as SC₁, connected to mixers M₅ - M₄₃, constructed prior to 1980, for bulk molding compound production, with a maximum capacity of 900 600 pounds (100 pounds X 9 6 lines) per hour, equipped with baghouse B₄ and exhausting to stack S₄.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(f) One (1) bulk molding compound scale, identified as SC₄ Cut Scale, connected to mixers M₅ - M₄₃, constructed prior to 1980, for bulk molding compound production, with a maximum capacity of 900 600 pounds (100 pounds X 9 6 lines) per hour, equipped with baghouse B₄ and exhausting to stack S₄.

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

Facility	P = Process Weight tons/hr	E = Allowable Emissions lbs/hr
Bulk molding processes (B ₄)	4 lines X 0.665 = 2.66	7.90

Modification No.7: The Permittee requests decreasing the maximum capacity of the saws used in plastic sheet production, identified as SA1 and SA2, from 200 lbs/hour to 20 lbs/hour and redesignating these units as an insignificant activity in Section A. The potential to emit particulate from SA1 and SA2 is 0.375 pounds per hour which is below the allowable limit for 326 IAC 6-3-2 which is 0.551 pounds per hour. Therefore, the saws are exempt from this rule and will be removed from Section D.2 of the permit as follows:

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

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

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(g) Two (2) saws, identified as SA₁ and SA₂, for plastic sheet production, each with a maximum capacity of 200 pounds per hour, and each equipped with a single stage workshop-type vacuum/bag, B₁ and B₂, with no outside exhaust.

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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

(q) Two (2) saws, identified as SA₁ and SA₂, for plastic sheet production, each with a maximum capacity of 20 pounds per hour, with no emission controls and exhausting indoors.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(g) Two (2) saws, identified as SA₁ and SA₂, for plastic sheet production, each with a maximum capacity of 200 pounds per hour, and each equipped with a single stage workshop type vacuum/bag, B₁ and B₂, with no outside exhaust.

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

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices and Control Technologies), the allowable PM emission rate from the fiberglass facilities shall not exceed the rates outlined below:

Facility	P = Process Weight tons/hr	E = Allowable Emissions lbs/hr
Bulk molding processes (B ₄) SA 1	4 lines X 0.665 = 2.66 0.01	7.90 - 0.551

The pounds per hour PM limitations shall be 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:

Compliance Determination

D.2.2 Particulate Matter (PM)

The vacuum/baghouses B_4 and B_2 for PM control shall be in operation at all times the sawing process is in operation. Baghouse B_3 shall be in operation at all times the sander is in operation. Baghouse B_4 shall be in operation at all times the bulk molding compound processes are in operation. Baghouse B_{z} shall be in operation at all times the fiberglass chips processes are in operation.

Modification No.8: The Permittee requests removal of one (1) plastic sander, identified as SN₁ for plastic sheet production, from the permit as follows:

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SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(h) One (1) plastic sander, identified as SN₁ for plastic sheet production, with a maximum capacity of 615 pounds per hour, equipped with baghouse B₃, and exhausting to stack S₁-

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

**:

Facility	P = Process Weight tons/hr	E = Allowable Emissions lbs/hr
Plastic sheet processes (B _{1,2,3})	0.3075	1.86

Modification No.9: The Permittee requests addition of one (1) electric oven, identified as O3 and to remove the one electric oven from the permit as follows:

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

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

(if) One (1) electric oven, identified as O₁, constructed prior to 1980, for treatment of unusable raw materials prior to disposal, with a maximum capacity of 400 pounds per hour, and exhausting to stack S₅.

One (1) electric oven, identified as O3, approved for construction in 2013, for treatment of unusable raw materials prior to disposal, with a maximum capacity of 1,600 pounds per hour, with no emission controls and exhausting to Stack S6.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(if) One (1) electric oven, identified as O₁, constructed prior to 1980, for treatment of unusable raw materials prior to disposal, with a maximum capacity of 400 pounds per hour, and exhausting to stack S₅.

One (1) electric oven, identified as O3, approved for construction in 2013, for treatment of unusable raw materials prior to disposal, with a maximum capacity of 1,600 pounds per hour, with no emission controls and exhausting to Stack S6.

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

Modification No.10: The Permittee requests removal of one (1) grinder, identified as G_1 , for fiberglass chips production as follows:

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

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

One (1) grinder, identified as G₁, for fiberglass chips production, with a maximum capacity of 500 pounds per hour, and equipped with baghouse B₇, and exhausting to stack S₆.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(k) One (1) grinder, identified as G₁, for fiberglass chips production, with a maximum capacity of 500 pounds per hour, and equipped with baghouse B₇, and exhausting to stack S₆.

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

Facility	P = Process Weight tons/hr	E = Allowable Emissions lbs/hr
Fiberglass chips processes (B ₇)	0.25	1.62

Modification No.11: The Permittee requests to remove Unit M₂₁, rename the BMC laboratory mixer currently identified as M22, and change the unit description as follows:

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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

(a) Two (2) One (1) laboratory bulk molding compound (BMC) mixers, identified as M₂₄ and M₂₂ Rosite Mixer #16, constructed in 2005, for Rosite production, with a maximum capacity throughput 100 pounds per hour and of 10 pounds per hour respectively, to model the operation of the new mixers M₄₆—M₄₉ Rosite M₄₆—M₄₉ Mixer #11 through Rosite #14 with no emission controls. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation.

SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) Two (2) One (1) laboratory bulk molding compound (BMC) mixers, identified as M₂₄ and M₂₂ Rosite Mixer #16, constructed in 2005, for Rosite production, with a maximum capacity throughput 100 pounds per hour and of 10 pounds per hour respectively, to model the operation of the new mixers M₄₆ - M₄₉ Rosite M₄₆ - M₄₉ Mixer #11 through Rosite #14 with no emission controls. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation.

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

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

(a) Two (2)-One (1) laboratory bulk molding compound (BMC) mixers, identified as M₂₄ and M₂₂ Rosite Mixer #16, constructed in 2005, for Rosite production, with a maximum capacity-throughput 100 pounds per hour and of 10 pounds per hour respectively, to model the operation of the new mixers M₁₆ - M₁₉ Rosite M₁₆ - M₁₉ Mixer #11 through Rosite #14 with no emission controls. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation.

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

Modification No.12: The Permittee requests to rename two BMC laboratory mixers currently identified as M14 and M15, and to increase capacity from 66 lbs/hour to 150 lbs/hour. Both mixers are now controlled by retrofitted baghouse B1, which exhausts inside the building. The Permittee also requests to rename three (3) BMC laboratory mixers currently identified as M23, M24, M25, and removal of two (2) BMC laboratory mixers currently identified as M25 and M26 as follows:

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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

(b) Six (6) Four (4) laboratory bulk molding compound (BMC) (lab) mixers, identified as M₄₄ and M₄₅ BMC Mixer #17 through BMC Mixer #20, each mixer was for BMC production, with BMC Mixer #17 and BMC Mixer #18 each with having a maximum eapacity throughput of 66 150 pounds per hour, with PM emissions particulates are controlled by Lab Baghouse B3 exhausting to stack S3, and M₂₃ - M₂₆ BMC Mixer #19 and BMC Mixer #20, each with having a maximum eapacity throughput of 20 pounds per hour, each mixer was constructed prior to 1980, for bulk molding compound production, with no pollution emission controls equipment. and exhausting inside the building, with no outside exhaust. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities

(b) Six (6) Four (4) laboratory bulk molding compound (BMC) (lab) mixers, identified as M₁₄-and M₁₅ BMC Mixer #17 through BMC Mixer #20, each mixer was for BMC production, with BMC Mixer #17 and BMC Mixer #18 each with having a maximum

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capacity throughput of 66 150 pounds per hour, with PM emissions particulates are controlled by Lab Baghouse B3 exhausting to stack S3, and M_{23} — M_{26} BMC Mixer #19 and BMC Mixer #20, each with having a maximum capacity throughput of 20 pounds per hour, each mixer was constructed prior to 1980, for bulk molding compound production, with no pollution emission controls—equipment. and exhausting inside the building, with no outside exhaust. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation.

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

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities

(b) Six (6) Four (4) laboratory bulk molding compound (BMC) (lab) mixers, identified as M₁₄ and M₁₅ BMC Mixer #17 through BMC Mixer #20, each mixer was for BMC production, with BMC Mixer #17 and BMC Mixer #18 each with having a maximum capacity throughput of 66 150 pounds per hour, with PM emissions particulates are controlled by Lab Baghouse B3 exhausting to stack S3, and M₂₃ - M₂₆ BMC Mixer #19 and BMC Mixer #20, each with having a maximum capacity throughput of 20 pounds per hour, each mixer was constructed prior to 1980, for bulk molding compound production, with no pollution emission controls equipment, and exhausting inside the building, with no outside exhaust. Under 40 CFR 63, Subpart WWWW, this is considered a bulk molding compound manufacturing operation.

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

D.1.53 Particulate Matter (PM)

(c) The **Lab** Baghouse B₄ B3 shall be in operation at all times when any of the Bulk Molding Compound Mixing Line raw material is being added into or blended product is being removed from the BMC laboratory mixers identified as M₅, M₆, M₈—M₄₄ BMC Mixer #17 through and BMC Mixer 18 in order to comply with the PM limits under 326 IAC 6-3-2, in Condition D.1.1.

Modification No.13: The Permittee requests to rename the baghouse currently identified as B7 to the Vazo Baghouse in Sections A, D and E as follows:

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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

(c) One (1) Vazo Blender, constructed in 2005, with a maximum capacity throughput of 180 batches of material per year, with each batch composed of 758 pounds of raw materials, with PM emissions The blender is controlled by Vazo Baghouse B7 B5, exhausting to Stack S6. [40 CFR Part 63, Subpart WWWW]

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

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Emissions Unit Description:

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Insignificant Activities

(c) One (1) Vazo Blender, constructed in 2005, with a maximum capacity throughput of 180 batches of material per year, with each batch composed of 758 pounds of raw materials, with PM emissions The blender is controlled by Vazo Baghouse B7 B5, exhausting to Stack S5. [40 CFR Part 63, Subpart WWWW]

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

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

Insignificant Activities

(c) One (1) Vazo Blender, constructed in 2005, with a maximum capacity throughput of 180 batches of material per year, with each batch composed of 758 pounds of raw materials, with PM emissions The blender is controlled by Vazo Baghouse B7 B5, exhausting to Stack S5. [40 CFR Part 63, Subpart WWWW]

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

Modification No.14: The Permittee requests to relocate the 39" SMC Line from the laboratory, where it was used on a limited basis for research and quality control to full-scale production. This change will increase the maximum throughput capacity of the SMC machine associated with this mixer to 5,832 lbs/hour and the description of the 39" SMC Line will be clarified in Sections A, D, and E as follows:

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

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

(a) One (1) 39" sheet molding compound (SMC) line, identified as SMC Line 2, consisting of a Large Mixer, constructed in 2002, relocated from the laboratory, also including other mixers where pigment and thickeners are added, for SMC production, and the 39" SMC machine. The maximum throughput is 5,832 pounds per hour, with PM emissions from the Large Mixer and glass chopper controlled by SMC baghouse B2, exhausting to stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(a) One (1) 39" sheet molding compound (SMC) line, identified as SMC Line 2, consisting of a Large Mixer, constructed in 2002, relocated from the laboratory, also including other mixers where pigment and thickeners are added, for SMC production, and the 39" SMC machine. The maximum throughput is 5,832 pounds per hour, with PM emissions from the Large Mixer and glass chopper controlled by a baghouse B₂, exhausting to stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.

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

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

(a) One (1) 39" sheet molding compound (SMC) line, identified as SMC Line 2, consisting of a Large Mixer, constructed in 2002, relocated from the laboratory, also including other mixers where pigment and thickeners are added, for SMC production, and the 39" SMC machine. The maximum throughput is 5,832 pounds per hour, with PM emissions from the Large Mixer and glass chopper controlled by a baghouse B₂, exhausting to stack S2. Under 40 CFR 63, Subpart WWWW, this is considered a sheet molding compound manufacturing operation.

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

Modification No.15: The Permittee requests to add three (3) SMC laboratory mixers, currently identified as M₂₉, M₃₀, and M₃₁, to the Insignificant Activities list, and rename the mixers as follows:

Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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

Three (3) SMC laboratory mixers identified as Mixer #23, Mixer #24, with a (d) maximum capacity of 50 lbs/hr, and Mixer #25 with a maximum process capacity of 15 lbs/hr with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]

SECTION D.1

EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Three (3) SMC laboratory mixers identified as Mixer #23, Mixer #24, with a (d) maximum capacity of 50 lbs/hr, and Mixer #25 with a maximum process capacity of 15 lbs/hr with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]

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

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

Three (3) SMC laboratory mixers identified as Mixer #23, Mixer #24, with a (d) maximum capacity of 50 lbs/hr, and Mixer #25 with a maximum process capacity of 15 lbs/hr with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]

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

Modification No.16: The Permittee requests the addition of one (1) Dispersion Mixer to the Insignificant Activities list as follows:

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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

(e) One (1) PolyM Dispersion Mixer, used to set up scrap SMC and BMC material through polymerization, with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

(e) One (1) PolyM Dispersion Mixer, used to set up scrap SMC and BMC material through polymerization, with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]

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

SECTION E.1 EMISSIONS UNIT OPERATION CONDITIONS

Facility Description:

(e) One (1) PolyM Dispersion Mixer, used to set up scrap SMC and BMC material through polymerization, with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]

**:

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

Modification No.17: The Permittee requests the addition of QA/QC process involving laboratory testing and sample molding presses to the Insignificant Activities list. In addition, all of the Insignificant Activities are listed in Section A.3 of the permit. Therefore, the permit has been modified as follows:

A.3 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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

- (f) QA/QC process involving laboratory testing and sample molding presses, with no pollution control equipment and exhausting inside the building. [40 CFR Part 63, Subpart WWWW]
- (g) Cleaning solvent identified as IDI Ship Shape having a vapor pressure equal to or less than 0.7kPa; 5mm Hg; or 0.1 psi measured at 20°C (68°F).

- (h) The following equipment related to manufacturing activities not resulting in the emission of HAPs: cutting torches, soldering equipment, welding equipment.
- (i) Solvent recycling systems with batch capacity less than or equal to 100 gallons.
- (j) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment.
- (k) Paved and unpaved roads and parking lots with public access.
- (I) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower
- (m) Stationary fire pumps.
- (n) A laboratory as defined in 326 IAC 2-7-1(21)(G), which includes the following:
 - 1. One (1) 24" sheet molding compound SMC line, identified as Laboratory SMC Line 3, located in the laboratory, with no emission controls. [40 CFR 63, Subpart WWWW]
 - 2. Two (2) small laboratory extruders, with no pollution control equipment and exhausting inside the building.
- (o) Eleven (11) aboveground polyester resin storage tanks, identified as T_1 through T_{11} . Tanks T_1 through T_6 have a maximum capacity of 7,200 gallons, tank T_7 has a maximum capacity of 6,000 gallons, and tanks T_8 through T_{11} each have a capacity of 5,400 gallons. Each aboveground tank is equipped with one vent and each has the potential to emit less than 1 ton VOC/year.
- (p) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour.
- (q) Two (2) saws, identified as SA₁ and SA₂, for plastic sheet production, each with a maximum capacity of 20 pounds per hour, with no emission controls and no outside exhaust.

Modification No.18: The Permittee requests the addition of 326 IAC 6-3-2 PM emission limitations for many of the SMC and BMC mixers and a determination if control devices (baghouses) are needed to meet the limitations as follows:

D.1.1 Particulate Matter (PM) [326 IAC 6-3-2(e)]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices and Control Technologies), the allowable PM emission rate from the fiberglass facilities shall not exceed the rates outlined below:

Facility	P = Process Weight tons/hr	E = Allowable Emissions lbs/hr		
Mixer M ₃	0.16	1.18		
Mixer M ₄	0.60	2.9		
Mixers M ₅ , M ₆ , M ₈ -M ₄₄ (each)	0.67	3.12		
Mixers M ₁₆ - M ₁₉ (each)	0.50	2.58		

Mixer M ₂₇	1.0	4.1
SMC Drum Mixer	0.6	2.91
39" SMC Line 2	2.92	8.40
48" SMC Line 1	3.60	9.67
BMC Mixer #1 - #5 (each)	0.6	2.91
BMC Mixer #6	1.1	4.37
Rosite Mixer #L1 - #L4 (each)	0.50	2.58
BMC Mixer #15	0.05	0.551
BMC Mixer #17 - #18 (each)	0.075	0.551

D.1.53 Particulate Matter (PM)

- (a) The **SMC** baghouse B₈ B2 shall be in operation at all times when any of the sheet molding compound line mixer, identified as SMC Mixers M₃ and M₄ is in operation raw material is being added into or blended or blended product is being removed from the SMC mixers associated with the 39" SMC Line, the 48" SMC Line and the SMC Drum Mixer, as well as the BMC mixers for Rosite production identified as Rosite Mixer #L1 through Rosite Mixer #L4, in order to comply with the PM limits under 326 IAC 6-3-2, in Condition D.1.1.
- (b) The **BMC** Baghouse B9 **B2** shall be in operation at all times when any of the Bulk Molding Compound Mixing Line, identified as M₁₆—M₁₉ raw material is being added into or blended product is being removed from the BMC mixers identified as BMC Mixer #1 through BMC Mixer #6, in order to comply with the PM limits under 326 IAC 6-3-2, in Condition D.1.1.
- (c) The **Lab** Baghouse **B**₄ **B3** shall be in operation at all times when any of the Bulk Molding Compound Mixing Line, raw material is being added into or blended product is being removed from the BMC laboratory mixers identified as M₅, M₆, M₈— M₄₄ BMC Mixer #17 and BMC Mixer #18 in order to comply with the PM limits under 326 IAC 6-3-2, in Condition D.1.1.

Modification No.19: The Permittee requests evaluating Compliance Assurance Monitoring (CAM) requirements with the updated maximum capacities for all emission units and updating the permit accordingly. In addition, the Permittee requests specific baghouse and stack identifications be used in the Compliance Monitoring Requirements. Therefore, the permit will be modified as follows:

Compliance Monitoring Requirements [326 IAC 2-7-5(3)]

D.1.64 Monitoring [40 CFR Part 64]

(a) Daily visible emissions notations of the stack exhausts of BMC Baghouse B1 exhausting through Stack S1, SMC Baghouse B2 exhausting through Stack S2, and Lab Baghouse B3 exhausting through Stack S3, shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing 80% of the time the process is in operation, not counting startup or shut down time. In the case of discontinuous operations, readings

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must be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee that has worked at the plant least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. If abnormal emissions are observed, the Permittee will take reasonable 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 record the pressure drop across baghouses **B**₁, B₂, **and B**₃, and B₉ at least once per day when the processes are in operation when exhausting to the atmosphere. If the pressure drop is outside the normal range of 0.5 to 6.0 inches of water, or a range established during the latest stack test, then the Permittee must take reasonable steps in accordance with Section C - Response to Excursions or Exceedances. A pressure reading that is outside this range is a deviation from this permit. Failure to take response steps in accordance with Section C – Response to Excursions or Exceedances, shall be considered a deviation from this permit.

Modification No.20: The Permittee requests to remove the Best Available Control Technology (BACT) [326 IAC 8-1-6] avoidance limit in the permit because the affected units are no longer at the facility. Therefore, the affected units will be removed from Section A.2, the Unit description in Section D, and corresponding compliance, recordkeeping and reporting requirements will be removed as follows:

D.1.2 Best Available Control Technology (BACT) [326 IAC 8-1-6]

Pursuant to Part 70 Permit No. 057-7683-00042, VOC emissions from M₄₂-and M₄₃-shall be limited to less than 25 tons per 12 consecutive month period, each, with compliance determined at the end of each month. Compliance with this limit makes 326 IAC 8-1-6 (Best Available Control Technology) not applicable.

Compliance Determination Requirements [40 CFR Part 64] [326 IAC 2-7-5(3)] [326 IAC 2-7-19]

D.1.4 Volatile Organic Compounds (VOC)

- (a) Compliance with the VOC content and usage limitations contained in Conditions D.1.2 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 manufacturer. IDEM, OAQ reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.
- (b) Compliance with Condition D.1.2 shall be determined by the following equation:

V * R * B * (1ton/2000 lbs) * F + X < 25 tons/year

V = VOC content of Raw Material (lbs/lb of Raw Material)

R = Raw Material input per batch (in lbs)

B = Total number of batches produced per month

F = Flash off factor = 2%

X = VOC emissions from previous 11 month period

D.1.7 Record Keeping Requirements

- (a) To document compliance with Condition D.1.2, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.2.
 - (1) The amount and VOC content of each material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall

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differentiate between those added to coatings and those used as cleanup solvents;

- (2) A log of the dates of use;
- (3) The cleanup solvent, containing VOC, usage for each month;
- (4) The total input of bulk molding compounds materials for the fiberglass molding processes for each month; and
- (5) The weight of VOCs emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C General Record Keeping Requirements, of this permit.

D.1.8 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH

Part 70 Quarterly Report

Source Name:	Industrial Dielectrics, Inc.
Source Address:	407 South 7th Street, Noblesville, IN 46060
Part 70 Permit No.:	T057-18496-00042
Facility:	8 th and 9 th Bulk Molding Compound Lines with Mixers M ₁₂ and M ₁₃
Parameter:	VOC emission
Limit:	less than 25 tons per 12 consecutive months period for each Mixer
	YEAR:
	1 = 7 (1 C.

Month	Resin Types	Resin Usage This Month (lbs)	Resin Monomer Content (%)
Month 1			
Month 2			
Month 3			

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□ No deviation occurred in this quarter.
Deviation/s occurred in this quarter. Deviation has been reported on:
Submitted by:
Title / Position:
Signature:
Date:
Phone:

Modification No.21: The Permittee also requests to change the name of the company throughout the permit from Industrial Dielectrics, Inc. to Industrial Dielectrics, Inc. dba IDI Composites International.

Modification No.22: The Permittee requests to add one (1) stationary emergency generator burning diesel fuel, with a maximum output of 10 KW, to be used as back-up power for the resin tank room exhaust. Pursuant to 40 CFR 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines), this is an affected unit. Therefore, the one (1) stationary emergency generator will be added as an Insignificant Activity, 40 CFR 60, Subpart IIII will be added as Attachment B in its entirety, and the new requirements of 40 CFR 60, Subpart IIII (Standards of Performance for Stationary Compression Ignition Internal Combustion Engines) will be added as Section E.2 as follows:

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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

(r) one (1) stationary emergency generator burning diesel fuel, with a maximum output of 10 KW, manufactured in 2012. Under 40 CFR 60, Subpart IIII, this is an affected unit.

SECTION E.2

EMISSIONS UNIT OPERATION CONDITIONS

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

Insignificant Activities

(r) one (1) stationary emergency generator burning diesel fuel, with a maximum output of 10 KW, manufactured in 2012. Under 40 CFR 60, Subpart IIII, this is an affected unit.

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

E.1.1 General Provisions Relating to NSPS Subpart IIII [326 IAC 12-1] [40 CFR Part 60, Subpart

(a) The provisions of 40 CFR Part 60, Subpart A - General Provisions, which are incorporated as 326 IAC 12-1-1, apply to the facility described in this section except when otherwise specified in 40 CFR Part 60, Subpart IIII.

E.1.2 Standards of Performance for Stationary Compression Ignition Internal Combustion Engines [40 CFR Part 60, Subpart IIII]

- (a) Pursuant to 40 CFR Part 60, Subpart IIII, the Permittee shall comply with the provisions of NSPS Standards of Performance for Stationary Compression Ignition Internal Combustion Engines which are incorporated by reference as 326 IAC 12-1-1, for the unit as specified above. A copy of this rule is included as Attachment B. This source is subject to the following requirements of 40 CFR Part 60, Subpart IIII:
 - (1) 40 CFR 60.4200(a)(2)(i),(4)
 - (2) 40 CFR 60.4205(b)
 - (3) 40 CFR 60.4206
 - (4) 40 CFR 60.4207(b)
 - (5) 40 CFR 60.4209
 - (6) 40 CFR 60.4211(a),(c),(f),(g)(1)
 - (7) 40 CFR 60.4212
 - (8) 40 CFR 60.4214(b),(c)
 - (9) 40 CFR 60.4219
 - (10) Table 2 to 40 CFR 60 Subpart IIII (the applicable portions)
 - (11) Table 4 to 40 CFR 60 Subpart IIII (the applicable portions)

Modification No.23: The Permittee requests to remove machining operations in the Insignificant Activities because it is in reference to old fabrication equipment that has been removed from the facility. Therefore, the machining operations will be removed from the permit as follows:

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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

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

Modification No.24: The Permittee requests to add six (6) aboveground storage tanks, relocate existing aboveground storage tanks, and remove two underground storage tanks in the Insignificant Activities. A summary of eleven (11) aboveground storage tanks, the new tank identification number, and the maximum capacity of each tank is provided below.

Tank ID #	Tank Size (Gals)
1	7,200
2	7,200
3	7,200
4	7,200
5	7,200
6	7,200
7	6,000
8	5,400
9	5,400
10	5,400
11	5,400

Therefore, the following changes will be made to the Insignificant Activities regarding the storage tanks:

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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

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(o) Six (6) Eleven (11) aboveground polyester resin storage tanks, identified as T₁ through T₁₁. each with Tanks T₁ through T₆ have a maximum capacity of 6,200 7,200 gallons, tank T₇ with has a maximum capacity of 4,000 6,000 gallons, and tanks T₈ through T₁₁ each have a capacity of 5,400 gallons. Each aboveground tank is equipped with one vent, V₄ — V₅ and V₂₇ and each with has the potential to emit less than 1 ton VOC/year.

(q) Two (2) underground styrene storage tank, identified as T₆ and T₈, each with a maximum capacity of 4,000 gallons, equipped with vent V6, with the potential to emit less than 1 ton styrene/year.

Modification No.25: As part of plant reorganization, the Permittee requests to add two small laboratory extruders to the insignificant activity list. Therefore, the extruders will be added to Section A as follows:

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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

(n) A laboratory as defined in 326 IAC 2-7-1(21)(G), which includes the following:

2. Two (2) small laboratory extruders, with no pollution control equipment and exhausting inside the building.

Modification No.26:, The Permittee requests specific baghouse and stack identifications be used in the Compliance Monitoring Requirements. Therefore, the permit will be modified as follows:

Compliance Monitoring Requirements [326 IAC 2-7-5(3)]

D.1.4 Monitoring [40 CFR Part 64]

- Daily visible emissions notations of the stack exhausts of the sheet molding compound (a) and bulk molding compound mixers BMC Baghouse B1 exhausting through Stack S1, SMC Baghouse B2 exhausting through Stack S2, and Lab Baghouse B3 exhausting through Stack S3. shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal. For processes operated continuously, "normal" means those conditions prevailing 80% of the time the process is in operation, not counting startup or shut down time. In the case of discontinuous operations, readings must be taken during that part of the operation that would normally be expected to cause the greatest emissions. A trained employee is an employee that has worked at the plant least one month and has been trained in the appearance and characteristics of normal visible emissions for that specific process. If abnormal emissions are observed, the Permittee will take reasonable 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) The Permittee shall record the pressure drop across baghouses B4 and B9 B1, B2, and B3 at least once per day when the processes are in operation and exhausting to the atmosphere. If the pressure drop is outside the normal range of 0.5 to 6.0 inches of water, or a range established during the latest stack test, then the Permittee must take reasonable 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.

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Modification No.27: The Permittee requests to add one (1) 24" sheet molding compound SMC line, identified as Laboratory SMC Line 3, to the Insignificant Activities list. Therefore, the Laboratory SMC line will be added to Section A, D, and E as follows:

A.3 Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)][326 IAC 2-7-5(15)]

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

- (n) A laboratory as defined in 326 IAC 2-7-1(21)(G), which includes the following:
 - 1. One (1) 24" sheet molding compound SMC line, identified as Laboratory SMC Line 3, located in the laboratory, with no emission controls. [40 CFR 63, Subpart WWWW]

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities

- (n) A laboratory as defined in 326 IAC 2-7-1(21)(G) which includes the following:
 - 1. One (1) 24" sheet molding compound SMC line, identified as Laboratory SMC Line 3, located in the laboratory. [40 CFR Part 63, Subpart WWWW]

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

SECTION E.1 FACILITY OPERATION CONDITIONS

Emissions Unit Description:

Insignificant Activities

- (n) A laboratory as defined in 326 IAC 2-7-1(21)(G) which includes the following:
 - 1. One (1) 24" sheet molding compound SMC line, identified as Laboratory SMC Line 3, located in the laboratory. [40 CFR Part 63, Subpart WWWW]

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

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Conclusion

The proposed modification shall be subject to the conditions of the attached Part 70 Significant Source Modification No. 057-31216-00042 and Part 70 Operating Permit Renewal No. 057-31912-00042. The staff recommends to the Commissioner that the Part 70 Significant Source and Significant Permit Modification be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Roger Osburn 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) 233-0242 or toll free at 1-800-451-6027 extension 3-0242.
- (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: Emission Calculations Summary Potential to Emit

Company Name: Industrial Dielectrics, Inc. dba IDI Composites International

Address: 407 South 7th Street, Noblesville, IN 46060

Significant Source Modification No.: 057-31216-00042
Part 70 Operating Permit Renewal No.: 057-31912-00042
Reviewer: Roger Osburn

Date: April 19, 2013

PTE before modifications (Uncontrolled)

	Potential Emissions (ton/yr)							
Emission Source Description	PM/PM ₁₀ /PM _{2.5}	SO2	VOC	CO	NOx	GHG's	Single HAP (Styrene)	Combined HAPs
BMC Production	228.46		10.39				15.2	15.2
SMC Production	42.24		6.72				4.99	4.99
BMC Production (Rosite)	105.65		4.8				9.37	9.37
BMC Lab	12.41		0.56				14.06	14.06
SMC Lab	3.11		0.49			-	19.13	19.14
Totals:	391.86		22.98				62.75	62.76

PTE after modifications (Uncontrolled)

	Potential Emissions (ton/yr)							
Emission Source Description	PM/PM ₁₀ /PM _{2.5}	SO ₂	VOC	CO	NO _x	GHG's	Single HAP (Styrene)	Combined HAPs
BMC Production	216.57		9.85				9.85	9.85
SMC Production	384.61		52.54				52.54	52.54
BMC Production (Rosite)	105.65		4.80				4.80	4.80
BMC Lab	12.41		0.56				0.56	0.56
SMC Lab	3.11		0.49				0.49	0.49
Emergency Generator(new)	1.04	0.97	1.04	3.19	14.83	3.91		0.01
Totals:	722.35	0.97	68.25	3.19	14.83	3.91	68.25	68.27

Sourcewide Controlled/Limited PTE

					Potential Em	issions (ton/yr)		
Emission Source Description	PM/PM ₁₀ /PM _{2.5}	SO ₂	VOC	CO	NO _x	GHG's	Single HAP (Styrene)	Combined HAPs
BMC Production	4.33		9.85				9.85	9.85
SMC Production	7.69	1	52.54			1	52.54	52.54
BMC Production (Rosite)	2.11	-	4.80			-	4.80	4.80
BMC Lab	2.06		0.56			-	0.56	0.56
SMC Lab	3.11		12.63				0.49	0.49
Emergency Generator(new)	1.04	0.97	1.21	3.19	14.83	3.91		0.01
Totals:	20.35	0.97	81.60	3.19	14.83	3.91	68.25	68.27

Note: Styrene and other HAP emissions not calculated as part of these emission calculations. Styrene is expected to make up a significant portion of the total VOCs.

Appendix A: Emission Calculations Potential to Emit 48" SMC Line Large Mixer

Company Name: Industrial Dielectrics, Inc. dba IDI Composites International

Address: 407 South 7th Street, Noblesville, IN 46060

Significant Source Modification No.: 057-31216-00042 Part 70 Operating Permit Renewal No.: 057-31912-00042 Reviewer: Roger Osburn

Date: March 19, 2012

Estimating Emission Factors from Open Molding and Other Composite Processes (SMC)

 $E = 0.1457 A_t - 0.1454$ (Equation 1),

where:

E = VOC emission rate, lb/hr, when paste is on the line

 $A_t = Total wet area of SMC machine = A_{dl} + A_{du} + W^*(L_l + L_u)$

A_{dl} = open area of the lower doctor box, ft²

 A_{du} = open area of the upper doctor box, ft^2

 $W = wet width of SMC, ft^2$

 L_{l} = Lower wet length, ft

L_u = Upper wet length, ft

Note: Equation 1 obtained from ACMA UEF-1-2010 document, pgs. 11-12

Primary Production SMC Machine (Existing 48" SMC machine)

 A_{dl} = open area of the lower doctor box, ft²

width	0.83 feet
length	3.50 feet
$A_{dl} =$	2.92 square feet

 A_{du} = open area of the upper doctor box, ft²

width	0.83	feet
length	3.50	feet
$A_{du} =$	2.92	square feet

W = wet width of SMC,
$$ft^2$$

W = 3.50

 L_{l} = Lower wet length, ft

 L_u = Upper wet length, ft

$$A_t$$
 = Total wet area of SMC machine = $A_{dl} + A_{du} + W^*(L_l + L_u)$

$$A_t = 36.17$$

 $\mathsf{E} = \mathsf{VOC}$ emission rate, lb/hr, when paste is on the line

Note: This equation represents VOC/HAP emissions from SMC Line (which includes SMC Machine, Large Mixer, Small Pigment Dissolver/Mixer, and Small Thickener Dissolver/Mixer), which are based upon the machine specifications for total wet area and open areas of the doctor boxes for the SMC material being processed.

Company Name: Industrial Dielectrics, Inc. dba IDI Composites International

Address: 407 South 7th Street, Noblesville, IN 46060

Significant Source Modification No.: 057-31216-00042 Part 70 Operating Permit Renewal No.: 057-31912-00042 Reviewer: Roger Osburn

Date: April 19, 2013

Estimating Emission Factors from Open Molding and Other Composite Processes (SMC)

 $E = 0.1457 A_t - 0.1454$ (Equation 1),

where:

E = VOC emission rate, lb/hr, when paste is on the line

 A_t = Total wet area of SMC machine = A_{dl} + A_{du} + $W^*(L_l$ + $L_u)$

A_{dl} = open area of the lower doctor box, ft²

A_{du} = open area of the upper doctor box, ft²

W = wet width of SMC, ft²

 L_{l} = Lower wet length, ft

L_u = Upper wet length, ft

Note: Equation 1 obtained from ACMA UEF-1-2010 document, pgs. 11-12

Secondary Production SMC Machine (Existing 39" SMC machine relocated from Lab)

A_{dl} = open area of the lower doctor box, ft²

width 0.91 feet length 2.83 feet $A_{dl} = 2.57$ square feet

A_{du} = open area of the upper doctor box, ft²

 $A_{du} =$

width

0.91 feet

2.57 square feet

length 2.83 feet

W = wet width of SMC, ft²

W = 2.83

 L_{l} = Lower wet length, ft

 $L_1 =$

7.50

L_u = Upper wet length, ft

l .. =

4.83

 A_t = Total wet area of SMC machine = A_{dl} + A_{du} + $W^*(L_l+L_u)$

A. =

40.08

E = VOC emission rate, lb/hr, when paste is on the line

 $E = 0.1457 A_t - 0.1454$ (Equation 1),

5.69 lb/hr

24.94 ton/yr

Note: This equation represents VOC/HAP emissions from SMC Line (which includes SMC Machine, Large Mixer, Small Pigment Dissolver/Mixer, and Small Thickener Dissolver/Mixer), which are based upon the machine specifications for total wet area and open areas of the doctor boxes for the SMC material being processed.

Company Name: Industrial Dielectrics, Inc. dba IDI Composites International

Address: 407 South 7th Street, Noblesville, IN 46060

Significant Source Modification No.: 057-31216-00042 Part 70 Operating Permit Renewal No.: 057-31912-00042 Reviewer: Roger Osburn

Date: March 19, 2012

Estimating Emission Factors from Open Molding and Other Composite Processes (SMC)

 $E = 0.1457 A_t - 0.1454$ (Equation 1),

where.

E = VOC emission rate, lb/hr, when paste is on the line

 A_t = Total wet area of SMC machine = A_{dl} + A_{du} + $W^*(L_l + L_u)$

 A_{dl} = open area of the lower doctor box, ft^2

 A_{du} = open area of the upper doctor box, ft²

 $W = wet width of SMC, ft^2$

 L_{l} = Lower wet length, ft

 L_u = Upper wet length, ft

Lab Sample SMC Machine (New 24" SMC machine)

Machine (New 24	Sivic machine)				
A _{dl} = open area of the lower doctor box, ft ²					
width	0.92 feet		11		
length_	1.83 feet		22		
$A_{dl} =$	1.68 square feet	_			

 A_{du} = open area of the upper doctor box, ft^2

width	0.92	feet	11
length	1.83	feet	22
$A_{du} =$	1.68	square feet	

W = wet width of SMC, ft²

	O, 11		
W =	1.83	22	

L_I = Lower wet length, ft

$$A_t = Total \ wet \ area \ of \ SMC \ machine = A_{dl} + A_{du} + \ W^*(L_l + L_u)$$

$$A_t = \boxed{ 20.01}$$

E = VOC emission rate, lb/hr, when paste is on the line

$$E = 0.1457 A_t - 0.1454$$
 (Equation 1),
 2.77 lb/hr
 12.14 ton/yr

Note: This equation represents VOC/HAP emissions from the new Lab SMC Machine (which does not have its own dedicated mixers), which are based upon the machine specifications for total wet area and open areas of the doctor boxes for the SMC material being processed.

Appendix A: Emission Calculations Criteria Pollutants - Internal Combustion Engines - Diesel Fuel

Company Name: Industrial Dielectrics, Inc. dba IDI Composites International

Address: 407 South 7th Street, Noblesville, IN 46060

Significant Source Modification No.: 057-31216-00042 Part 70 Operating Permit Renewal No.: 057-31912-00042

Reviewer: Roger Osburn Date: April 19, 2013

Sulfur Content (S) of Fuel (% by weight

Reciprocating Internal Combustion Engines - Diesel Fuel Output Rating (<600 HP)

Emergency Generator Per EPA Memorandum (09/06/1995), potential emissions were calculated based on 500 hours of operation per year since the generators are used solely to provide backup pow

					Diesel Industrial Engines Emission Factors (Ib/hp-hr)							
	Capacity			PM	PM-10	PM-2.5	SOx	NOx	VOC	СО		
Emission Unit ID	(KW/hr)	Capacity (HP)	hp-hr/yr	0.31	0.31	0.31	0.29	4.41	0.36	0.95		
	, ,			Potential Emissions (TPY)								
				PM	PM-10	PM-2.5	SOx	NOx	VOC	C		
Emergency Generator	10.00	13.45	6,724	PM 1.042	PM-10 1.042	PM-2.5 1.042	SOx 0.975	NOx 14.827	1.210	CO 3.194		

Emission Unit ID		Pollutant			
Emergency Back up Generator					
	CO2	CH4	N2O	Summed Potential Emissions in tons/yr	3.90E+00
Emission Factor in lb/hp-hr	1.16E+00	6.35E-05	9.30E-06	CO2e Total in tons/yr	3.91
Potential Emission in tons/vr	3.90E+00	2.13E-04	3.13E-05		

Methodology

For HP > 600		PM	PM-10	PM-2.5	SOx	NOx	VOC	СО	CO2e
HP=Kw/hr*1.344825737	Total Potential Emissions	1.042	1.042	1.042	0.975	14.827	1.210	3.194	3.91

hp-hr/yr = hp * 500 hr/yr for emergency generator: hp-hr/yr = hp * 8760 hr/yr for regularly operating generator

Emission Factors are from AP 42, Chapter 3.3, Table 3.3-1, SCC #2-02-004-01

Emission (tons/yr) = (hp-hr/yr) x Emission Factor (lb/hp-hr)/2,000 lb/to

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

355.20 (plus, the PTE from the new units, like the generator(s), etc.)

Appendix A: Emission Calculations Potential to Emit VOC and Particulate

Company Name: Industrial Dielectrics, Inc. dba IDI Composites International Address: 407 South 7th Street, Noblesville, IN 46060

Significant Source Modification No.: 057-31216-00042 Part 70 Operating Permit Renewal No.: 057-31912-00042

Reviewer: Roger Osburn

					Date:	March 19, 2013										
Emission Unit	Old Emission Unit ID#	Old Throughput (lb/hr)	Corrected Throughput (lb/hr)	Weight % VOC	Weight % Fillers	VOC/HAP Emission Factor	Potential VOC (lb/hr)	Old Potential VOC Emissions (tons/yr)	New Potential VOC Emissions (ton/yr)	Diff VOC Emissions (tons/yr)	PM Emission Factor	Old Potential PM Emissions (tons/yr)	New Potential PM Emissions (ton/yr)	Diff PM Emissions (tons/yr)	Baghouse Contol Efficiency	Controlled PM Emissions (ton/yr)
SMC Production	M3	040	1000.0	00.070/	04.700/	0.050/	4.40	1.35	5.40	3.81	1.00%	0.40	00.40	00.07	00 000/	0.05
SMC Drum Mixer	M28	313	1200.0 5832.0	39.27%	61.70%	0.25% 0.25%	1.18 5.73		5.16		1.00%	8.46	32.43 157.61	23.97	98.00%	0.65
39" SMC Line Large Mixer		50		39.27%	61.70%		7.07	0.22	24.94	24.72		1.35		156.26	98.00%	3.15
48" SMC Line Large Mixer	M4	1200	7200.0	39.27%	61.70%	0.25%		5.16 6.72	22.44 52.54	17.28 45.82	1.00%	32.43 42.24	194.58	162.15	98.00%	3.89 7.69
BMC Production						Subtotals:	13.97	6.72	52.54	45.82		42.24	384.61	342.37		7.69
Mixer #1	M11	1330	1200.0	10.97%	60.30%	0.25%	0.33	1.60	1.44	-0.16	1.00%	35.13	31.69	-3.43	98.00%	0.63
			1200.0	10.97%		0.25%	0.33		1.44				31.69		98.00%	0.63
Mixer #2	M10	1330			60.30%			1.60	1.44	-0.16	1.00%	35.13		-3.43		
Mixer #3 Mixer #5	M9 M27	1330 2000	1200.0 2200.0	10.97% 10.97%	60.30%	0.25%	0.33	1.60 2.40	1.44 2.64	-0.16 0.24	1.00%	35.13 52.82	31.69 58.11	-3.43 5.28	98.00%	0.63 1.16
Mixer #5 Mixer #6	M6	1330	1200.0	10.97%	60.30%	0.25%	0.60	1.60	1.44	-0.16	1.00%	35.13	31.69	-3.43	98.00%	0.63
Mixer #6 Mixer #7	M5	1330	1200.0	10.97%	60.30%	0.25%	0.33	1.60	1.44	-0.16	1.00%	35.13	31.69	-3.43	98.00%	0.63
Mixer #7	INIO	1330	1200.0	10.97%	60.30%			10.39			1.00%				98.00%	
NO Production (Product						Subtotals:	2.25	10.39	9.85	-0.54		228.46	216.57	-11.89		4.33
BMC Production (Rosite) Mixer #11	M16	1000	1000.0	10.97%	60.30%	0.25%	0.27		1.20		1.00%	26,41	26.41	0.00	98.00%	0.53
Mixer #11	M17	1000	1000.0	10.97%	60.30%	0.25%	0.27		1.20		1.00%	26.41	26.41	0.00	98.00%	0.53
Mixer #12 Mixer #13	M17	1000	1000.0	10.97%	60.30%	0.25%	0.27		1.20		1.00%	26.41	26.41	0.00	98.00%	0.53
Mixer #13 Mixer #14	M18	1000	1000.0		60.30%	0.25%	0.27		1.20	-	1.00%	26.41	26.41	0.00	98.00%	0.53
MIXER #14	M19	1000	1000.0	10.97%	60.30%	0.25% Subtotals:	1.10		1.20 4.80		1.00%	105.65	26.41 105.65	0.00	98.00%	2.11
nsignificant Activities						Subtotals:	1.10		4.80			105.65	105.65	0.00		2.11
BMC Lab																
Mixer #15	M21	400	100.0	10.97%	00.000/	0.050/	0.03		0.40		4.000/	0.04	0.04	0.00	00 000/	0.05
		100	100.0		60.30%	0.25% 0.25%			0.12		1.00%	2.64	2.64 0.26	0.00	98.00%	0.05
Mixer #16 Mixer #17	M22 M14	10	10.0	10.97%	60.30%	0.25%	0.00		0.01 0.18		1.00%	0.26	0.26 3.96	0.00	0.00% 98.00%	0.26
The second secon		66		10.97%	60.30%			0.02		0.16	1.00%	1.74		2.22		
Mixer #18	M15	66	150.0	10.97%	60.30%	0.25%	0.04	0.02	0.18	0.16	1.00%	1.74	3.96	2.22	98.00%	0.08
Mixer #19	M23	20	20.0	10.97%	60.30%	0.25%	0.01		0.02	-	1.00%	0.53	0.53	0.00	0.00%	0.53
Mixer #20	M24	20	20.0	10.97%	60.30% 60.30%	0.25% 0.25%	0.01		0.02		1.00%	0.53	0.53 0.53	0.00	0.00%	0.53 0.53
Mixer #21	M25	20	20.0	10.97%	60.30%	0.25% Subtotals:	0.01		0.02	0.32	1.00%	0.53 7.98	0.53 12.41	0.00 4.44	0.00%	2.06
SMC Lab						Subiotals:	U.13		0.06	0.32		7.98	12.41	4.44		2.06
Mixer #23	M29		50.0	39.27%	61.70%	0.25%	0.05	0.00	0.22	0.22	1.00%	0.00	1.35	1.35	0.00%	1.35
Mixer #24	M30		50.0	39.27%	61.70%	0.25%	0.05	0.00	0.22	0.22	1.00%	0.00	1.35	1.35	0.00%	1.35
Mixer #24 Mixer #25	M31		15.0	39.27%	61.70%	0.25%	0.05	0.00	0.22	0.22	1.00%	0.00	0.41	0.41	0.00%	0.41
24" SMC Lab Small Mixer	IVI31		20.0	39.27%	61.70%	0.25%	0.01	0.00	12.14	0.06	1.00%		0.41	0.41	98.00%	0.41
						U.Z3%	0.02		12.14		1.00%		0.54		90.00%	0.01

* I hroughput is a conservative estimate for the laboratory mixer.

Total Emissions 17.11 80.39 63.28 384.32 722.35 326.15 19.30

Weight % VOC based upon worst-case formulations for each mixer type provided by facility.

Weight % Fillers based upon worst-case formulations for each mixer type provided by facility.

VOC/HAP Emission Factor obtained from Table 5-2 of Average HAP Emission Estimation Equations by Process , pg. 5-10

PM Emission Factor obtained from AP-42, Chapter 6.4, Table 6.4-1

VOC emissions from SMC mixers are not based upon individual mixers but rather on approved open SMC paste area calculations for the SMC machine (refer to separate emission calculation spreadsheets for the 39" and 48" SMC Lines).

PTE of the modification:

Baghouse ID # provided by facility (note that some mixers will now need to be controlled to meet the state PM emission limits based upon increased process capacities).

Baghouse Control Efficiency based upon updated information provided by facility for all baghouses.

Compliance with PM emission limits for mixers is based upon the Process Weight Rate Rule in 326 IAC 6-3 (TRUE = baghouse required to comply, FALSE = baghouse not required to comply).

Existing flatsheet closed molding presses (2) not included in the emissions audit since they are not included in the existing permit and since they will be removed from the facility.

Other minor existing emission units (BMC scale, saws, sander, ovens, grinder, Vazo blender, Resin blending mixer for Rosite, and Dispersion mixer) are not included in these emission calculations since they will be removed from the facility and/or they were not included in existing permit. These emission units will not have an impact on the type of permit modification required, but will still be addressed for clarity in the permit modification request to be submitted to IDEM.

46.55 VOC

Methodology:

Notes:

Potential VOC Emissions (lb/hr) = Throughput (lb/hr) x Weight % VOC x VOC/HAP Emission Factor %

Potential VOC Emissions (ton/yr) = Potential VOC Emissions (lb/hr) x (8760 hr/yr) x (1 ton/2000 lb)

Potential PM Emissions (ton/yr) = Throughput (lb/hr) x Weight % Fillers x PM Emission Factor % x (8760 hr/yr) x (1 ton/2000 lb)

Actual PM Emissions (ton/yr) = Potential PM Emissions (ton/yr) x (1-Baghouse Control Efficiency %)



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Michael R. Pence Governor

Thomas W. Easterly

Commissioner

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Rich Snyder

Industrial Dielectrics, Inc. dba IDI Composites International

407 S 7th Street, PO Box 357

Noblesville, IN 46061

DATE: August 5, 2013

FROM: Matt Stuckey, Branch Chief

Permits Branch Office of Air Quality

SUBJECT: Final Decision

Part 70 Operating Permit Renewal

057-31912-00042

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: Jay Merrell, Executive Vice President, Responsible Official Joseph VanCamp, Cornerstone Environmental, Consultant Edward J. Stehno, III, American Environmental Corporation, Consultant 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 ibrush@idem.IN.gov.

Final Applicant Cover letter.dot 6/13/2013





INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Michael R. Pence Governor Thomas W. Easterly

Commissioner

August 5, 2013

TO: Noblesville Public Library

From: Matthew Stuckey, Branch Chief

Permits Branch Office of Air Quality

Subject: Important Information for Display Regarding a Final Determination

Applicant Name: Industrial Dielectrics, Inc. dba IDI Composites

International

Permit Number: 057-31912-00042

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, we ask that you retain this document for at least 60 days.

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures Final Library.dot 6/13/2013





Mail Code 61-53

IDEM Staff	PWAY 8/5/2013			
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1		Rich Snyder Industrial Dielectrics, Inc. dba IDI Composites In 407 S 7th St, PO Box 35	7 Noblesville	IN 46061 (So	ource CAATS)						
2		Jay Merrell Executive VP Industrial Dielectrics, Inc. dba IDI Composites In 407 S 7th	St, PO Box 3	57 Noblesville	IN 46061 (RO CAA	ATS)					
3		Noblesville City Council and Mayors Office 16 S. 10th St. Noblesville IN 46060 (Lo	cal Official)								
4		Hamilton County Health Department 18030 Foundation Dr. #A Noblesville IN 46060)-5405 <i>(Heal</i>	th Department	;)						
5		Hamilton County Board of Commissioners One Hamilton County Square Noblesville	IN 46064 <i>(L</i>	ocal Official)							
6		Mr. Joseph VanCamp Cornerstone Environmental 312 E Diamond St. Kendallville IN	46755 (Cons	ultant)							
7		Noblesville Public Library 1 Library Plaza Noblesville IN 46060 (Library)									
8		Edward J. Stehno III American Environmental Corporation 8500 Georgetown Road Inc	dianapolis IN	46268 (Cons	sultant)						
9		Glidden Fence Co. 17804 Spring Mill Rd Westfield IN 46074 (Affected Party)									
10		Environmental Field Services, Inc. 40 SR 32 W Westfield IN 46074 (Affected Party)	ı								
11		Jill Butterfield 17903 Spring Mill Rd Westfield IN 46074 (Affected Party)									
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