



# 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](http://www.idem.IN.gov)

**Michael R. Pence**  
*Governor*

**Thomas W. Easterly**  
*Commissioner*

TO: Interested Parties / Applicant

DATE: June 20, 2013

RE: GM Components Holdings, LLC / 067-33053-00061

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

## Notice of Decision: Approval – Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-17-3-4 and 326 IAC 2, this permit modification is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

Pursuant to 326 IAC 2-7-18(d), any person may petition the U.S. EPA to object to the issuance of a Title V operating permit 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 impracticable 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  
Governor

Thomas W. Easterly  
Commissioner

Mr. Stephen Dixon  
GM Components Holdings  
2100 E Lincoln Rd  
Kokomo, IN 46904

June 20, 2013

Re: 067-33053-00061  
Minor Permit Modification to  
Part 70 Permit No.: 067-23927-00061

Dear Mr. Stephen Dixon:

GM Components Holdings was issued a Part 70 Operating Permit No.: 067-23927-00061 on December 22, 2008 for a stationary source which produces electronic components principally for the automotive industry located at 2100 E Lincoln Rd, Kokomo, IN 46904. An application requesting changes to this permit was received on January 29, 2013. Pursuant to the provisions of 326 IAC 2-7-12, a minor permit modification to this permit is hereby approved as described in the attached Technical Support Document.

For your convenience, the entire Part 70 Operating Permit Renewal as modified is attached.

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

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Julie Alexander, of my staff, at 317-233-1782 or 1-800-451-6027, and ask for extension 3-1782.

Sincerely,

Jenny Acker, Section Chief  
Permits Branch  
Office of Air Quality

Attachment(s): Updated Permit, Technical Support Document and Appendix A

JA/jla

cc: File - Howard County  
Howard County Health Department  
U.S. EPA, Region V  
Compliance and Enforcement Branch  
Billing, Licensing and Training Section



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Governor

Thomas W. Easterly  
Commissioner


Part 70 Operating Permit Renewal  
OFFICE OF AIR QUALITY

GM Components Holdings LLC  
2100 East Lincoln Road  
Kokomo, Indiana, 46904

(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.: T067-23927-00061	
Original Issued by:  Donald F. Robin, P.E., Section Chief Permits Branch Office of Air Quality	Issuance Date: December 22, 2008  Expiration Date: December 22, 2013
Administrative Amendment No. 067-28570-00061, issued on October 26, 2009 Significant Permit Modification No. 067-30666-00061, issued on November 21, 2011	
Minor Permit Modification No.: 067-33053-00061	
Issued by:  Jenny Acker, Section Chief Permits Branch Office of Air Quality	Issuance Date: June 20, 2013  Expiration Date: December 22, 2013



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## SECTION A

## SOURCE SUMMARY

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

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

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The Permittee owns and operates a stationary produces electronic components principally for the automotive industry.

Source Address:	2100 East Lincoln Road, Kokomo, Indiana, 46904
General Source Phone Number:	765-451-8440
SIC Code:	3471, 3674, 3679, 3694
County Location:	Howard
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Part 70 Operating Permit Program Major Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

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

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This source which produces electronic components principally for the automotive industry consists of Plants 6, 7, and 9 (Plant ID 067-00022); Plants 8, and 10 (Plant ID 067-00023); and Fab III (Plant ID 067-00051), located respectively at 1800 - 2100 and 2150 East Lincoln Road and 2033 East Boulevard Avenue, Kokomo, Indiana.

Since these plants are located on contiguous or adjacent properties, belong to the same industrial grouping, and are under common control of the same entity, they will be considered one (1) source. One combined Part 70 Permit will be issued to GM Components Holdings LLC- Kokomo. The new plant ID for the combined source is 067-00061.

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

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

- (a) One (1) wave soldering system, referred to as EU\_WS, and comprised of the following emission units:
  - (1) Four (4) solder machines, identified as Tech 2000, Dept. 9502; one (1) approved for construction in 2007, identified as MW TECH 2000 HV, ID# 208554; one (1) constructed in 2001, ID# 6040058; one (1) constructed in 2003, ID# 6033795; and one (1) constructed in 2004, ID# 6044245; with a total capacity (all machines) of 1150 boards per hour, exhausting to stacks, 9-Z21-2, 9-Z21-1, 9-Z23-1, and 7-R24-1 respectively;
  - (2) One (1) wave solder machine constructed in 2004, identified as #6049632 exhausting to stack 7-T17-1 (Plant 7, Dept 7643), with a maximum capacity of 500 boards per hour and a maximum flux usage of 0.44 pounds per unit.
  
- (b) One (1) combustion system, referred to as EU\_CO, comprised of the following emission units:



- (1) One (1) natural gas-fired boiler, referred to as Boiler #9, Plt. 6, ID# 16554, constructed in 1977, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 6-K12-1;
- (2) One (1) natural gas-fired boiler, referred to as Boiler #10, Plt. 6, ID# 21492, constructed in 1980, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 6-K12-2;
- (3) One (1) natural gas-fired boiler, referred to as Boiler #1E, Plt. 8, ID# 38302, constructed in 1966, with a capacity of 14.6 MMBtu/hr, and exhausting to stack 8-A11-3;
- (4) One (1) natural gas-fired boiler, referred to as Boiler #2E, Plt. 8, ID# 13313, constructed in 1966, with a capacity of 14.6 MMBtu/hr, and exhausting to stack 8-A11-4;
- (5) One (1) natural gas-fired boiler, referred to as Boiler #3E, Plt. 8, ID# 13312, constructed in 1966, with a capacity of 14.6 MMBtu/hr, and exhausting to stack 8-B11-1;
- (6) One (1) natural gas-fired boiler, referred to as Boiler #1W, Plt. 8, ID# 852, constructed in 1967, with a capacity of 14.6 MMBtu/hr, and exhausting to stack 8-A13-4;
- (7) One (1) natural gas fired boiler, referred to as Boiler Clayton 8W1, Plt. 8, constructed in 1996, with a capacity of 24.5 MMBtu/hr, and exhausting to stack 8-A13-7; [NSPS]
- (8) One (1) natural gas-fired boiler, referred to as Boiler Clayton 8W2, Plt. 8, constructed in 1996, with a capacity of 24.5 MMBtu/hr, and exhausting to stack 8-A13-8; [NSPS]
- (9) One (1) natural gas-fired boiler, referred to as Boiler West (831), Plt. 8, ID# 17383, constructed in 1980, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 8-J27-1;
- (10) One (1) natural gas-fired boiler, referred to as Boiler #8W, Plt. 9, ID# 840, constructed in 1967, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 9-C25-2;
- (11) One (1) natural gas-fired boiler, referred to as Boiler #6W, Plt 9, ID# 841, constructed in 1967, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 9-C25-4;
- (12) One (1) natural gas-fired boiler, referred to as Boiler #5W, Plt. 9, ID# 5569, constructed in 1967, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 9-C25-1;
- (13) One (1) natural gas-fired boiler, referred to as Boiler #3E, Plt. 9, ID# 181067, constructed in 1990, with a capacity of 20.922 MMBtu/hr, and exhausting to stack 9-F10-2; [NSPS]
- (14) One (1) natural gas-fired boiler, referred to as Boiler #2E, Plt. 9, ID# 839, constructed in 1967, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 9-F10-5;

- (15) One (1) natural gas-fired boiler with No. 2 fuel oil backup, referred to as Boiler #1, Fab III, ID# 151563, constructed in 1984, with a capacity of 20.9 MMBtu/hr, and exhausting to stack 3-W6-M;
  - (16) One (1) natural gas-fired boiler with No 2 fuel oil backup, referred to as Boiler #2, Fab III, ID# 151562, constructed in 1984. with a capacity of 20.9 MMBtu/hr, and exhausting to stack 3-W6-M;
  - (17) One (1) natural gas-fired boiler, referred to as Boiler #3, Fab III, ID# 6012611 , constructed in 1992, with a capacity of 20.9 MMBtu/hr, and exhausting to stack 3-W6-M; [NSPS]
  - (18) One (1) natural gas fired Cleaver-Brooks 350 hp boiler, referred to as Boiler #1 Plt. 10, constructed in 2001, with a capacity of 14.65 MMBtu/hr, and exhausting to stack 10-E10-1; [NSPS]
  - (19) One (1) natural gas fired Cleaver-Brooks 350 hp boiler, referred to as Boiler #2 Plt. 10, ID# 201182, constructed in 1995, with a capacity of 14.65 MMBtu/hr, and exhausting to stack 10-E10-1; [NSPS]
  - (20) One (1) natural gas-fired boiler, referred to as Boiler MOS, Plt 8, ID# 15917, constructed in 1977, with a capacity of 12.6 MMBtu/hr, and exhausting to stack 8-K18-1.
- (c) One (1) degreasing system, referred to as EU\_DG, comprised of the following emission units:
- (1) One (1) semi-aqueous cleaner for ceramic substrates, (Plant 7, Dept. 850), ID# 6040222, constructed in 2002, with a maximum throughput of 1,500 ceramic substrates, and exhausting to stack 7-V24-1.
- (d) One (1) semiconductor system, referred to as EU\_CR, consisting of the following emission units:
- (1) One (1) acid mixing operation for nitric, phosphoric, sulfuric, and hydrofluoric acids, constructed in 1980, with an average throughput of 20,000 gallons/yr of sulfuric acid, 3,400 gallons/yr of phosphoric acid, 7,400 gallons/yr of nitric acid, 8,000 gallons/yr of hydrofluoric acid, and 4,100 gallons/yr of acetic acid, controlled by one (1) fume scrubber, also constructed in 1980, with a maximum capacity of 25,000 CFM;
  - (2) One (1) climate controlled clean room, designated as Fab V, constructed in 1981, including one (1) wet process exhausting through two (2) wet scrubbers with maximum air flow rates of 12000 CFM and 16000 CFM, and one (1) silicon wafer coating process; and
  - (3) One (1) climate controlled clean room, designated as Fab III constructed in 1984 and modified in 2003, including one (1) wet process exhausting through four (4) wet scrubbers with maximum air flow rates of 40000 CFM each, and one (1) silicon wafer coating process.

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

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:
  - (1) One (1) natural gas-fired boiler referred to as Boiler TTC, ID# 9424001, constructed in 1993, with a capacity of 1.8 MMBtu/hr [326 IAC 6-2-4];
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 [326 IAC 8-3-2] [326 IAC 8-3-5];
- (c) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone [326 IAC 6-3-2];
- (d) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations [326 IAC 6-3-2]; and
- (e) Sources emitting less than five (5) tons per year of PM, ten (10) tons per year of VOC, one (1) ton per year of a single HAP, and two and a half (2.5) tons per year of any combination of HAPs [326 IAC 6-3-2]:
  - (1) Solvent cleaners utilizing predominantly non-photochemically reactive compounds, emitting less than 15 lb/day;
  - (2) One (1) maintenance spray booth, constructed in 2003, located in the Central Maintenance Shop, with a total maximum paint usage of 0.71 gallons per hour, controlled by dry filters;
  - (3) One (1) wave solder machines (Vitronics Delta Wave model) (Plant 7); approved for construction in 2007 identified as 9502 E78 Lead Free, ID# 6035293, exhausting to stack 7-U17-1; with a maximum capacity of 100 boards per hour.
  - (4) Two (2) wave solder machines (Pillarhouse Topaz Solder Machine model) (Plant 7); approved for construction in 2007; one (1) identified as GMT900Solder-1, ID# 6035682 exhausting to stack 7-S19-1; and one (1) identified as GMT900Solder-2, ID# 6051546, exhausting to stack 7-S19-1; with a maximum capacity of 120 boards per hour for each unit;
  - (5) Two (2) wave solder machines (Pillarhouse Topaz Solder Machine model) (Plant 7, Dept 874); approved for construction in 2008; one (1) identified as BAS+ -1 Selective solder, ID# 700018, exhausting to stack 7-S19-1; and one (1) identified as BAS+-2 Selective Solder, no ID#, exhausting to stack 7-S19-1; with a maximum capacity of 75 boards per hour for each unit; (067-26168-00061)
  - (6) Three (3) solvent washers (TREK Industries Inc. DCC model); Two (2) approved for construction in 2007; one (1) identified as TREK 3 Washer (Plant 7), ID#6040052, exhausting to stack 9-Yn20-1; and one (1) identified as TREK 4 Washer (Plant 7), ID#6113861, no exhaust; with a maximum capacity of 1706.38 gallons per year for each unit; One(1) approved for construction in 1999; identified as TREK 1 Washer (Plant 7), ID#DE208552, no exhaust; with a maximum capacity of 1706.38 gallons per year;

- (7) Three (3) coaters (PVA Conformal Coater model) (Plant 7); approved for construction in 2008; two identified as APM Coater-1, ID# 6051615 and APM Coater-2, #6051616; and one (1) identified as BAS Coater-1, ID#6035513; all coaters exhausting to stack 7-S19-1; with maximum capacity of 400 units per hour for each unit.
- (8) One (1) wave solder machine, ID# 6041410 (Plant 7, Dept. 874), constructed in 2003, with a capacity of 600 boards per hour, 6.65 pounds of flux per hour, and 1.77 pounds of thinner per hour, and exhausting to stack 7-S19-1;
- (9) Two (2) coaters (PVA Conformal Coater model) (Plant 7); approved for construction in 2007; one (1) identified as GMT900 Coater-1, ID# 6051554, exhausting to stack 7-S19-1; and one (1) identified as GMT900 Coater-2, ID# 6035675, exhausting to stack 7-S19-1; with a maximum capacity of 400 units per hour for each unit.
- (f) Diesel generators not exceeding one thousand six hundred (1600) horsepower (emergency only).

A.5 Part 70 Permit Applicability [326 IAC 2-7-2]

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

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

## **SECTION B GENERAL CONDITIONS**

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

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

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

- (a) This permit, T067-23927-00061, 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. 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)]**

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

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

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- (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 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]

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall maintain and implement Preventive Maintenance Plans (PMPs) including the following information on each facility:
- (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
  - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
  - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.
- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions or potential to emit. The PMPs do not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

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

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

Telephone Number: 317-233-0178(ask for Compliance and Enforcement Branch)  
Facsimile Number: 317-233-6865

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

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

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

The notice fulfills the requirement of 326 IAC 2-7-5(3)(C)(ii) and must contain the following:

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

The notification which shall be submitted by the Permittee does not require 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. Any emergencies that have been previously reported pursuant to paragraph (b)(5) of this condition and certified by a "responsible official" need only reference the date of the original report.



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

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

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

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

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

- (a) All terms and conditions of permits established prior to T067-23927-00061 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:

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 in writing by IDEM, OAQ any additional information identified as being needed to process the application.

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

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

Indiana Department of Environmental Management  
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 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)]

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- (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]

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

- (c) Emission Trades [326 IAC 2-7-20(c)]  
The Permittee may trade emissions increases and decreases at the source, where the applicable SIP provides for such emission trades without requiring a permit revision, subject to the constraints of Section (a) of this condition and those in 326 IAC 2-7-20(c).
- (d) Alternative Operating Scenarios [326 IAC 2-7-20(d)]  
The Permittee may make changes at the source within the range of alternative operating scenarios that are described in the terms and conditions of this permit in accordance with 326 IAC 2-7-5(9). No prior notification of IDEM, OAQ, or U.S. EPA is required.
- (e) Backup fuel switches specifically addressed in, and limited under, Section D of this permit shall not be considered alternative operating scenarios. Therefore, the notification requirements of part (a) of this condition do not apply.

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

- (a) 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.

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

Upon presentation of proper identification cards, credentials, and other documents as may be required by law, and subject to the Permittee's right under all applicable laws and regulations to assert that the information collected by the agency is confidential and entitled to be treated as

such, the Permittee shall allow IDEM, OAQ, U.S. EPA, or an authorized representative to perform the following:

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

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

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

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

The application which shall be submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

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

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

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source

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

#### C.1 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.2 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.3 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.4 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.5 Stack Height [326 IAC 1-7]

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

#### C.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 61-52 IGCN 1003  
Indianapolis, Indiana 46204-2251

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project. The notifications do not require a certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

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

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

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

Indiana Department of Environmental Management  
Compliance 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 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 or ninety (90) days of initial start-up, whichever is later. 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.

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

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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)]**

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- (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]**

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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.
- (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]**

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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]**

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

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

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

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

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

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

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

- (a) In accordance with the compliance schedule specified in 326 IAC 2-6-3(b)(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 61-50 IGCN 1003  
Indianapolis, Indiana 46204-2251

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

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

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

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- (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 or ninety (90) days of initial startup, whichever is later.
- (c) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A), 40 CFR 51.165(a)(6)(vi)(B), 40 CFR 51.166(r)(6)(vi)(a), and/or 40 CFR 51.166(r)(6)(vi)(b)) that a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a "major modification" (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase 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.
- (d) If there is a reasonable possibility (as defined in 40 CFR 51.165(a)(6)(vi)(A) and/or 40 CFR 51.166(r)(6)(vi)(a)) that a “project” (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, other than projects at a source with a Plantwide Applicability Limitation (PAL), which is not part of a “major modification” (as defined in 326 IAC 2-2-1(ee) and/or 326 IAC 2-3-1(z)) may result in significant emissions increase 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) 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
  - (2) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

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

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

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**

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

- (a) Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- (b) Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.

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



## SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description [326 IAC 2-7-5(15)]:

- (a) One (1) wave soldering system, referred to as EU\_WS, and comprised of the following emission units:
- (1) Four (4) solder machines, identified as Tech 2000, Dept. 9502; one (1) approved for construction in 2007, identified as MW TECH 2000 HV, ID# 208554; one (1) constructed in 2001, ID# 6040058; one (1) constructed in 2003, ID# 6033795; and one (1) constructed in 2004, ID# 6044245; with a total capacity all machines) of 1150 boards per hour, exhausting to stacks, 9-Z21-2, 9-Z21-1, 9-Z23-1, and 7-R24-1 respectively;
  - (2) One (1) wave solder machine constructed in 2004, identified as #6049632 exhausting to stack 7-T17-1 (Plant 7, Dept 7643), with a maximum capacity of 500 boards per hour and a maximum flux usage of 0.44 pounds per unit.

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

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

#### D.1.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6] [326 IAC 2-2][326 IAC 2-7-10.5(d)(4)(A)]

- (a) The input of volatile organic compounds (VOC), including flux and thinner delivered to the applicators of the four (4) soldering machines, Tech 2000 Dept. 9502 shall be less than 25.0 tons per twelve (12) consecutive month period with compliance determined at the end of each month. This renders the requirements of 326 IAC 2-2 and 326 IAC 8-1-6, respectively, not applicable.

#### 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.

### Compliance Determination Requirements

#### D.1.3 Volatile Organic Compounds (VOC)

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

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

#### D.1.4 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (3) below. Records maintained for (1) through (3) 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.1.1.
- (1) The throughput and VOC content of the flux;
  - (2) The throughput and VOC content of the thinners used; and
  - (3) VOC input including flux and thinner.

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

#### D.1.5 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1(a) 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).

## SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description [326 IAC 2-7-5(15)]:

- (b) One (1) combustion system, referred to as EU\_CO, comprised of the following emission units:
- (1) One (1) natural gas-fired boiler, referred to as Boiler #9, Plt. 6, ID# 16554, constructed in 1977, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 6-K12-1;
  - (2) One (1) natural gas-fired boiler, referred to as Boiler #10, Plt. 6, ID# 21492, constructed in 1980, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 6-K12-2;
  - (3) One (1) natural gas-fired boiler, referred to as Boiler #1E, Plt. 8, ID# 38302, constructed in 1966, with a capacity of 14.6 MMBtu/hr, and exhausting to stack 8-A11-3;
  - (4) One (1) natural gas-fired boiler, referred to as Boiler #2E, Plt. 8, ID# 13313, constructed in 1966, with a capacity of 14.6 MMBtu/hr, and exhausting to stack 8-A11-4;
  - (5) One (1) natural gas-fired boiler, referred to as Boiler #3E, Plt. 8, ID #13312, constructed in 1966, with a capacity of 14.6 MMBtu/hr, and exhausting to stack 8-B11-1;
  - (6) One (1) natural gas-fired boiler, referred to as Boiler #1W, Plt. 8, ID# 852, constructed in 1967, with a capacity of 14.6 MMBtu/hr, and exhausting to stack 8-A13-4;
  - (7) One (1) natural gas fired boiler, referred to as Boiler Clayton 8W1, Plt. 8, constructed in 1996, with a capacity of 24.5 MMBtu/hr, and exhausting to stack 8-A13-7; [NSPS]
  - (8) One (1) natural gas-fired boiler, referred to as Boiler Clayton 8W2, Plt. 8, constructed in 1996, with a capacity of 24.5 MMBtu/hr, and exhausting to stack 8-A13-8; [NSPS]
  - (9) One (1) natural gas-fired boiler, referred to as Boiler West (831), Plt. 8, ID# 17383, constructed in 1980, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 8-J27-1;
  - (10) One (1) natural gas-fired boiler, referred to as Boiler #8W, Plt. 9, ID# 840, constructed in 1967, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 9-C25-2;
  - (11) One (1) natural gas-fired boiler, referred to as Boiler #6W, Plt 9, ID #841, constructed in 1967, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 9-C25-4;
  - (12) One (1) natural gas-fired boiler, referred to as Boiler #5W, Plt. 9, ID# 5569, constructed in 1967, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 9-C25-1;
  - (13) One (1) natural gas-fired boiler, referred to as Boiler #3E, Plt. 9, ID# 181067, constructed in 1990, with a capacity of 20.922 MMBtu/hr, and exhausting to stack 9-F10-2; [NSPS]
  - (14) One (1) natural gas-fired boiler, referred to as Boiler #2E, Plt. 9, ID# 839, constructed in 1967, with a capacity of 16.7 MMBtu/hr, and exhausting to stack 9-F10-5;

## SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS (Continued)

### Emissions Unit Description [326 IAC 2-7-5(15)]:

- (15) One (1) natural gas-fired boiler with No. 2 fuel oil backup, referred to as Boiler #1, Fab III, ID# 151563, constructed in 1984, with a capacity of 20.9 MMBtu/hr, and exhausting to stack 3-W6-M;
- (16) One (1) natural gas-fired boiler with No 2 fuel oil backup, referred to as Boiler #2, Fab III, ID# 151562, constructed in 1984. with a capacity of 20.9 MMBtu/hr, and exhausting to stack 3-W6-M;
- (17) One (1) natural gas-fired boiler, referred to as Boiler #3, Fab III, ID# 6012611, constructed in 1992, with a capacity of 20.9 MMBtu/hr, and exhausting to stack 3-W6-M; [NSPS]
- (18) One (1) natural gas fired Cleaver-Brooks 350 hp boiler, referred to as Boiler #1 Plt. 10, constructed in 2001, with a capacity of 14.65 MMBtu/hr, and exhausting to stack 10-E10-1; [NSPS]
- (19) One (1) natural gas fired Cleaver-Brooks 350 hp boiler, referred to as Boiler #2 Plt. 10, ID# 201182, constructed in 1995, with a capacity of 14.65 MMBtu/hr, and exhausting to stack 10-E10-1; [NSPS]
- (20) One (1) natural gas-fired boiler, referred to as Boiler MOS, Plt 8, ID# 15917, constructed in 1977, with a capacity of 12.6 MMBtu/hr, and exhausting to stack 8-K18-1.

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

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

#### D.2.1 Particulate Matter Limitation (PM) [326 IAC 6.5-5]

Pursuant to 326 IAC 6.5-5 (Howard County), the following boilers shall only fire natural gas:

Boiler #9, Plt. 6, ID# 16554;  
Boiler #10, Plt. 6, ID# 21492;  
Boiler #1E, Plt. 8, ID# 38302;  
Boiler #2E, Plt. 8, ID# 13313;  
Boiler #3E, Plt. 8, ID# 13312;  
Boiler #1W, Plt. 8, ID# 852;  
Boiler West (831), Plt. 8, ID# 17383;  
Boiler #8W, Plt. 9, ID# 840;  
Boiler #6W, Plt. 9, ID# 841;  
Boiler #5W, Plt. 9, ID# 5569; and  
Boiler #2E, Plt. 9, ID# 839.

There are no specific emissions limitations in 326 IAC 6.5-5 for any units at this source.

#### D.2.2 Particulate Emission Limitation (PM) [326 IAC 6-2]

- (a) Pursuant to 326 IAC 6-2-3 (Particulate Emission Limitations for Sources of Indirect Heating), particulate emissions from the boiler listed in the following table shall in no case exceed the pounds of particulate per million British thermal units heat input listed in the table.

This limit was calculated using the following equation:

$$Pt = \frac{C \times a \times h}{76.5 \times Q^{0.75} \times N^{0.25}}$$

Where  
 C = 50 u/m<sup>3</sup> Pt = emission rate limit (lbs/MMBtu/hr)  
 Q = total source heat input capacity (MMBtu/hr)  
 N = number of stacks (1)  
 a = plume rise factor (0.67)  
 h = stack height (ft)

(b) Pursuant to 326 IAC 6-2-4, particulate emissions from the following units shall not exceed the following emission rates calculated with the listed source heat input capacities:

Construction Date	Unit	Q (MMBtu/hr)	Pt (lb/MMBtu)	Emission Limit (lb/MMBtu)
1984	Boiler #1, Fab III, ID# 151563	229.7	0.27	0.27
1984	Boiler #2, Fab III, ID# 151562	229.7	0.27	0.27
1990	Boiler #3E, Plant 9, ID# 181067	250.6	0.26	0.26
1992	Boiler #3, Fab III, ID# 6012611	271.5	0.25	0.25
1995	Boiler #2, Plant 10, ID# 201182	286.15	0.25	0.25
1996	Boiler Clayton 8W1, Plant 8	335.2	0.24	0.24
1996	Boiler Clayton 8W2, Plant 8	335.2	0.24	0.24
2001	Boiler #1, Plant 10	349.7	0.24	0.24

The emission rates were calculated using the following equation:

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

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

**D.2.3 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.

**Compliance Monitoring Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]**

**D.2.4 Visible Emissions Notations**

- (a) Visible emission notations of the Boiler #1, Fab III, ID# 151563 and Boiler #2, Fab III, ID# 151562 stack exhaust shall be performed once per day during normal daylight operations when exhausting to the atmosphere when fuel oil is burned. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.

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

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

#### **D.2.5 Record Keeping Requirements**

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- (a) To document compliance with Condition D.2.4, the Permittee shall maintain records of visible emission notations of the boiler stacks exhaust once per day. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of visible emission notation (e.g. the process did not operate that day).
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### **D.2.6 Reporting Requirements**

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- (a) A semi-annual natural gas fired boiler certification shall be submitted to the address listed in Section C - General Reporting Requirements, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the six (6) month period being reported. The natural gas-fired boiler certification is required for all boilers listed in this section when firing natural gas. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

### SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

#### Emissions Unit Description [326 IAC 2-7-5(15)]:

- (c) One (1) degreasing system, referred to as EU\_DG, comprised of the following emission units:
- (1) One (1) semi-aqueous cleaner for ceramic substrates, (Plant 7, Dept. 850), ID# 6040222, constructed in 2002, with a maximum throughput of 1,500 ceramic substrates, and exhausting to stack 7-V24-1.

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

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

##### D.3.1 Volatile Organic Compounds (VOC) [326 IAC 8-3-4]

Pursuant to 326 IAC 8-3-4 (Conveyorized degreaser operation), the owner or operator of a conveyorized degreaser operation shall:

- (a) Minimize carryout emissions by racking parts for best drainage and maintaining the vertical conveyor speed at less than 3.3 meters per minute (eleven (11) feet per minute);
- (b) Store waste solvent only in covered containers and not dispose of waste solvent or transfer it to another party, in such a manner that greater than twenty percent (20%) of the waste solvent (by weight) can evaporate into the atmosphere;
- (c) Repair solvent leaks immediately, or shut down the degreaser;
- (d) Not use workplace fans near the degreaser opening; and
- (e) Provide permanent, conspicuous label summarizing the operating requirements.

##### D.3.2 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.

#### Compliance Determination Requirements

##### D.3.3 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.3.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

## SECTION D.4 EMISSIONS UNIT OPERATION CONDITIONS

### Emissions Unit Description [326 IAC 2-7-5(15)]

- (e) One (1) semiconductor system, referred to as EU\_CR, consisting of the following emission units:
- (1) One (1) acid mixing operation for nitric, phosphoric, sulfuric, and hydrofluoric acids, constructed in 1980, with an average throughput of 20,000 gallons/yr of sulfuric acid, 3,400 gallons/yr of phosphoric acid, 7,400 gallons/yr of nitric acid, 8,000 gallons/yr of hydrofluoric acid, and 4,100 gallons/yr of acetic acid, controlled by one (1) fume scrubber, also constructed in 1980, with a maximum capacity of 25,000 CFM.
  - (2) One (1) climate controlled clean room, designated as Fab V, constructed in 1981, including one (1) wet process exhausting through two (2) wet scrubbers with maximum air flow rates of 12000 CFM and 16000 CFM, and one (1) silicon wafer coating process.
  - (3) One (1) climate controlled clean room, designated as Fab III constructed in 1984 and modified in 2003, including one (1) wet process exhausting through four (4) wet scrubbers with maximum air flow rates of 40000 CFM each, and one (1) silicon wafer coating process.

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

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

#### D.4.1 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

VOC emissions from each of the climate controlled clean rooms Fab V, and Fab III shall be less than 25.0 tons per twelve (12) consecutive month period with compliance determined at the end of each month. Compliance with these limitations renders the requirements of 326 IAC 8-1-6 (BACT) not applicable.

#### D.4.2 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.

### Compliance Determination Requirements

#### D.4.3 Volatile Organic Compounds (VOC)

- (a) Compliance with the VOC content and usage limitations contained in Conditions D.4.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC data sheets. IDEM, OAQ, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.
- (b) If the amount of VOC in the waste shipped offsite for recycling or disposal is deducted from the monthly VOC input reported, the Permittee shall determine the VOC content of the waste shipped offsite using one or a combination of the following methods:
  - (1) On-Site Sampling
    - (A) VOC content shall be determined pursuant to 326 IAC 8-1-4(a)(3) by EPA Reference Method 24 and the sampling procedures in 326 IAC 8-1-4 or other methods as approved by the Commissioner.



- (B) A representative sample of the VOC containing waste to be shipped offsite shall be analyzed within ninety (90) days of the issuance of this permit 067-23927-00061.
- (C) If multiple cleanup solvent waste streams are collected and drummed separately, a sample shall be collected and analyzed from each solvent waste stream.
- (D) A new representative sample shall be collected and analyzed whenever a change or changes occur(s) that could result in a cumulative 10% or more decrease in the VOC content of the VOC containing waste. Such change could include, but is not limited to, the following:
  - (i) A change in coating selection or formulation, as supplied or as applied, or a change in solvent selection or formulation, or
  - (ii) An operational change in the coating application or cleanup operations.

The new VOC content shall be used in calculating the amount of VOC shipped offsite, starting with the date that the change occurred. The sample shall be collected and analyzed within 30 days of the change.

- (2) Certified Waste Report: The VOC reported by analysis of an offsite waste processor may be used, provided the report certifies the amount of VOC in the waste.
- (3) Minimum Assumed VOC content: The VOC content of the waste shipped offsite may be assumed to be equal to the VOC content of the material with the lowest VOC content that could be present in the waste, as determined using the "as supplied" and "as applied" VOC data sheets, for each month.
- (c) IDEM reserves the right to request a representative sample of the VOC containing waste stream and conduct an analysis for VOC content.
- (d) Compliance with the VOC emission limit contained in Condition D.4.1 shall be determined within 30 days at the end of each month. This shall be based on the total VOC used for the previous month, minus the VOC shipped off-site, and adding it to the previous 11 months total VOC usage, minus the VOC shipped off-site, so as to arrive at VOC emissions for the most recent twelve (12) consecutive month period.

The VOC emissions for a month can be arrived at using the following equation:

$$\text{VOC emitted} = \text{VOC}_U - \text{VOC}_R$$

Where

$\text{VOC}_U$  = The total amount of VOC, in tons, delivered to the clean room.

$\text{VOC}_R$  = The total amount of VOC, in tons, shipped off-site.

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

#### **D.4.4 Parametric Monitoring**

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- (a) The Permittee shall monitor and record the scrubber liquor pH, pressure drop, and recirculation flow rate of each of the scrubbers, at least once per week when the associated facilities are in operation when venting to the atmosphere. When for any one

reading, the pressure drop across the scrubbers is outside the following normal ranges:

Scrubber	Pressure Drop (inches of water)
Acid mixing scrubber	0.1 - 3
Fab V scrubber - Dept. 8327 Bump Room (VIRON) DE No. 198849 (SB104)	0.1 - 3.5
Fab V scrubber - Dept. 8327 Bump Room (Harrington) DE No. 158827	0.1 - 3
Fab III - Dept. 8294 SC-1 (Heil)	0.5 - 8
Fab III - Dept. 8294 SC-2 (Heil)	0.5 - 8
Fab III - Dept. 8294 SC-3 (Heil)	0.5 - 8
Fab III - Dept. 8294 SC-4 (Heil)	0.5 - 8

or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. When for any one reading, the recirculation flow rate of each of the scrubbers is outside the following normal ranges:

Scrubber	Recirculation Flow Rate (gpm)
Acid mixing scrubber	150 - 350
Fab V scrubber - Dept. 8327 Bump Room (VIRON) DE No. 198849 (SB104)	100 - 180
Fab V scrubber - Dept. 8327 Bump Room (Harrington) DE No. 158827	120 - 180
Fab III - Dept. 8294 SC-1 (Heil)	200 - 340
Fab III - Dept. 8294 SC-2 (Heil)	200 - 340
Fab III - Dept. 8294 SC-3 (Heil)	200 - 340
Fab III - Dept. 8294 SC-4 (Heil)	200 - 340

or a range established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. When for any one reading, the scrubber liquor pH of each of the scrubbers is outside the pH range of 5 to 9 or a scrubber liquor pH established during the latest stack test, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. A pressure drop, recirculation flow rate, or scrubber liquor pH reading that is outside of the above mentioned ranges is not 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.

The instrument used for determining the pressure shall comply with Section C - Instrument Specifications, of this permit, shall be subject to approval by IDEM, OAQ, and shall be calibrated at least once every six (6) months.

- (b) Each room shall be equipped with an alarm to indicate possible scrubber failure. In the event of an alarm, the Permittee shall take reasonable response steps in accordance with Section C - Response to Excursions or Exceedances. Failure to take response steps in accordance with Section C - Response to Excursions or Exceedances shall be considered a deviation from this permit.

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

### **D.4.5 Record Keeping Requirements**

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- (a) To document compliance with Condition D.4.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC emission limits in Condition D.4.1. Records necessary to demonstrate compliance shall be available within 30 days of the end of each compliance period.
- (1) The VOC content of each coating material and solvent used.
- (A) less water; and
- (B) including water.
- (2) The amount of coating material and solvent used on a monthly basis.
- (A) Records shall include purchase orders, invoices, usage logs or other reasonable methods and material safety data sheets (MSDS), VOC data sheets, certificate of analysis or other means necessary to verify the type and amount used.
- (B) Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents. Records of used solvent sent offsite as waste shall be maintained when such is included in a demonstration of compliance with Condition D.4.3
- (3) If the amount of VOC in the waste material is being deducted from the VOC input as allowed in paragraph (c) of Condition D.4.3, then the following records shall be maintained:
- (A) The amount of VOC containing waste shipped out to be recycled or disposed of each month. If multiple cleanup solvent waste streams are collected and drummed separately, the amount shipped out shall be recorded separately for each used solvent stream.
- (B) The VOC content of the waste and all records necessary to verify the amount and VOC content of the VOC containing waste shipped out for recycling or disposal.
- (C) The weight of VOC input, minus the weight of VOC shipped out to be recycled or disposed of, for each compliance period.
- (4) The total VOC usage for each month.
- (b) To document compliance with Condition D.4.4 the Permittee shall maintain a weekly record of the scrubber liquor pH, pressure drop, and recirculation flow rate of each of the scrubbers. The Permittee shall include in its weekly record when a reading is not taken and the reason for the lack of a reading (e.g., the process did not operate that week).
- (c) The Permittee shall maintain records of any alarms that sound and the response steps taken.
- (d) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.4.6 Reporting Requirements

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A quarterly summary of the information to document compliance with Conditions D.4.1 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

## SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS

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

- (a) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) Btu per hour:
  - (1) One (1) natural gas-fired boiler referred to as Boiler TTC, ID# 9424001, constructed in 1993, with a capacity of 1.8 MMBtu/hr [326 IAC 6-2-4];
- (b) Degreasing operations that do not exceed 145 gallons per 12 months, except if subject to 326 IAC 20-6 [326 IAC 8-3-2] [326 IAC 8-3-5];
- (c) Trimmers that do not produce fugitive emissions and that are equipped with a dust collection or trim material recovery device such as a bag filter or cyclone [326 IAC 6-3-2];
- (d) Grinding and machining operations controlled with fabric filters, scrubbers, mist collectors, wet collectors, and electrostatic precipitators with a design grain loading of less than or equal to 0.03 grains per actual cubic foot and a gas flow rate less than or equal to 4000 actual cubic feet per minute, including the following: deburring; buffing; polishing; abrasive blasting; pneumatic conveying; and woodworking operations [326 IAC 6-3-2]; and
- (e) Sources emitting less than five (5) tons per year of PM, ten (10) tons per year of VOC, one (1) ton per year of a single HAP, and two and a half (2.5) tons per year of any combination of HAPs [326 IAC 6-3-2]:
  - (1) Solvent cleaners utilizing predominantly non-photochemically reactive compounds, emitting less than 15 lb/day;
  - (2) One (1) maintenance spray booth, constructed in 2003, located in the Central Maintenance Shop, with a total maximum paint usage of 0.71 gallons per hour, controlled by dry filters;
  - (3) One (1) wave solder machine (Vitronics Delta Wave model) (Plant 7); approved for construction in 2007 identified as 9502 E78 Lead Free, ID# 6035293, exhausting to stack 7-U17-1; with a maximum capacity of 100 boards per hour.
  - (4) Two (2) wave solder machines (Pillarhouse Topaz Solder Machine model) (Plant 7); approved for construction in 2007; one (1) identified as GMT900Solder-1, ID# 6035682 exhausting to stack 7-S19-1; and one (1) identified as GMT900Solder-2, ID# 6051546, exhausting to stack 7-S19-1; with a maximum capacity of 120 boards per hour for each unit;
  - (5) Two (2) wave solder machines (Pillarhouse Topaz Solder Machine model) (Plant 7, Dept 874); approved for construction in 2008; one (1) identified as BAS+ -1 Selective solder, ID# 700018, exhausting to stack 7-S19-1; and one (1) identified as BAS+-2 Selective Solder, no ID#, exhausting to stack 7-S19-1; with a maximum capacity of 75 boards per hour for each unit; (067-26168-00061)
  - (6) Three (3) solvent washers (TREK Industries Inc. DCC model); Two (2) approved for construction in 2007; one (1) identified as TREK 3 Washer (Plant 7), ID#6040052, exhausting to stack 9-Yn20-1; and one (1) identified as TREK 4 Washer (Plant 7), ID#6113861, no exhaust; with a maximum capacity of 1706.38 gallons per year for each unit; One(1) approved for construction in 1999; identified as TREK 1 Washer (Plant 7), ID#DE208552, no exhaust; with a maximum capacity of 1706.38 gallons per year for each unit;

- (7) Three (3) coaters (PVA Conformal Coater model) (Plant 7); approved for construction in 2008; two identified as APM Coater-1, ID# 6051615 and APM Coater-2, #6051616; and one (1) identified as BAS Coater-1, ID#6035513; all coaters exhausting to stack 7-S19-1; with maximum capacity of 400 units per hour for each unit.
  - (8) One (1) wave solder machine, ID# 6041410 (Plant 7, Dept. 874), constructed in 2003, with a capacity of 600 boards per hour, 6.65 pounds of flux per hour, and 1.77 pounds of thinner per hour, and exhausting to stack 7-S19-1;
  - (9) Two (2) coaters (PVA Conformal Coater model) (Plant 7); approved for construction in 2007; one (1) identified as GMT900 Coater-1, ID# 6051554, exhausting to stack 7S19-1; and one (1) identified as GMT900 Coater-2, ID# 6035675, exhausting to stack 7-S19-1; with a maximum capacity of 400 units per hour for each unit.
- (f) Diesel generators not exceeding one thousand six hundred (1600) horsepower (emergency only).
- (The information describing the process contained in this facility description box is descriptive information and does not constitute enforceable conditions.)

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

**D.5.1 Particulate Emission Limitation [326 IAC 6-2-4]**

Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), the PM emissions from the Boiler TTC, ID# 9424001 shall not exceed 0.25 pounds per hour. This limit was established using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}} = \frac{1.09}{(271.52)^{0.26}}$$

Where Pt = emission rate limit (lbs/MMBtu)  
Q = total source heat input capacity (MMBtu/hr)  
(Q = 271.52 MMBtu/hr)

**D.5.2 Particulate Emission Limitations [326 IAC 6-3-2]**

Pursuant to 326 IAC 6-3-2, the allowable particulate emissions rate from each of the trimmers, grinding and machining operations, wave solder machines, and hand brush coating stations with a process weight rate less than 100 pounds per hour shall not exceed 0.551 pounds per hour.

**D.5.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]**

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations Control Equipment and Operating Requirements) for cold cleaning degreasers without remote solvent reservoirs constructed after July 1, 1990:

- (a) The Permittee shall ensure the following control equipment and operating requirements are met:
  - (1) Equip the degreaser with a cover.
  - (2) Equip the degreaser with a facility for draining cleaned parts.
  - (3) Close the degreaser cover whenever parts are not being handled in the degreaser.
  - (4) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.
  - (5) Provide a permanent, conspicuous label that lists the operating requirements in (a)(3), (a)(4), (a)(6), and (a)(7) of this condition.

- (6) Store waste solvent only in closed containers.
  - (7) Prohibit the disposal or transfer of waste solvent in such a manner that could allow greater than twenty percent (20%) of the waste solvent (by weight) to evaporate into the atmosphere.
- (b) The Permittee shall ensure the following additional control equipment and operating requirements are met:
- (1) Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):
    - (A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.
    - (B) A water cover when solvent used is insoluble in, and heavier than, water.
    - (C) A refrigerated chiller.
    - (D) Carbon adsorption.
    - (E) An alternative system of demonstrated equivalent or better control as those outlined in (b)(1)(A) through (D) of this condition that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.
  - (2) Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.
  - (3) If used, solvent spray:
    - (A) must be a solid, fluid stream; and
    - (B) shall be applied at a pressure that does not cause excessive splashing.

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

**D.5.4 Particulate [326 IAC 6-3-2(d)]**

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Pursuant to 326 IAC 6-3-2(d), particulate from the spray booth shall be controlled by dry filters, and the Permittee shall operate the control device in accordance with manufacturer's specifications.

**SECTION E.1 New Source Performance Standards [326 IAC 2-7-5(1)][ 326 IAC 12-1]  
[40 CFR 60, Subpart Dc]**

**Facility Description [326 IAC 2-8-4(10)]:**

- (a) One (1) natural gas fired boiler, referred to as Boiler Clayton 8W1, Plt. 8, constructed in 1996, with a capacity of 24.5 MMBtu/hr, and exhausting to stack 8-A13-7; [NSPS]
- (b) One (1) natural gas-fired boiler, referred to as Boiler Clayton 8W2, Plt. 8, constructed in 1996, with a capacity of 24.5 MMBtu/hr, and exhausting to stack 8-A13-8; [NSPS]
- (c) One (1) natural gas-fired boiler, referred to as Boiler #3E, Plt. 9, ID# 181067, constructed in 1990, with a capacity of 20.922 MMBtu/hr, and exhausting to stack 9-F10-2; [NSPS]
- (d) One (1) natural gas-fired boiler, referred to as Boiler #3, Fab III, ID# 6012611, in 1992, with a capacity of 20.9 MMBtu/hr, and exhausting to stack 3 W6-M; [NSPS]
- (e) One (1) natural gas fired Cleaver-Brooks 350 hp boiler, referred to as Boiler #1 Plt. 10, in 2001, with a capacity of 14.65 MMBtu/hr, and exhausting to stack 10-E10-1; [NSPS]
- (f) One (1) natural gas fired Cleaver-Brooks 350 hp boiler, referred to as Boiler #2 Plt. 10, # 201182, constructed in 1995, with a capacity of 14.65 MMBtu/hr, and exhausting to stack 10-E10-1; [NSPS]

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

**E.1.1 General Provision Relating to New Source Performance Standards [326 IAC 12]  
[40 CFR 60, Subpart A]**

- (a) Pursuant to 40 CFR 60.1, the Permittee shall comply with the provisions of 40 CFR Part 60 Subpart A – General Provisions, which are incorporated by reference as 326 IAC 12-1 for the natural gas fired boilers except as otherwise specified in 40 CFR Part 60, Subpart Dc.
- (b) Pursuant to 40 CFR 60.10, the Permittee shall submit all required notifications and reports 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

**E.1.2 Standard of Performance for Small Industrial-Commercial Institutional Steam Generating Units  
[326 IAC 12] [40 CFR 60, Subpart Dc]**

Pursuant to 40 CFR 60 Subpart Dc (included as Attachment A of this permit), the Permittee shall comply with the provisions of Standard of Performance for Small Industrial-Commercial Institutional Steam Generating Units for the natural gas fired boilers as specified as follows:

- (1) 40 CFR 60.40c (a)(b);
- (2) 40 CFR 60.41c; and
- (3) 40 CFR 60.48c (a)(1), (g)(i)(j).



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

Source Name: GM Components Holdings LLC  
Source Address: 2100 East Lincoln Road, Kokomo, IN 46904  
Mailing Address: PO Box 9005-MS 8121, Kokomo, IN 46904-9005  
Part 70 Permit No.: T067-23927-00061

**This certification shall be included when submitting monitoring, testing reports/results or other documents as required by this permit.**

Please check what document is being certified:

- Annual Compliance Certification Letter
- Test Result (specify)
- Report (specify)
- Notification (specify)
- Affidavit (specify)
- Other (specify)

I certify that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete.

Signature:

Printed Name:

Title/Position:

Phone:

Date:

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

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: GM Components Holdings LLC  
Source Address: 2100 East Lincoln Road, Kokomo, IN 46904  
Part 70 Permit No.: T067-23927-00061

**This form consists of 2 pages**

**Page 1 of 2**

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

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

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

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

**Page 2 of 2**

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

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

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

**PART 70 OPERATING PERMIT  
SEMI-ANNUAL NATURAL GAS FIRED BOILER CERTIFICATION**

Source Name: GM Components Holdings LLC  
Source Address: 2100 East Lincoln Road, Kokomo, IN 46904  
Part 70 Permit No.: T067-23927-00061

Natural Gas Only  
 Alternate Fuel burned  
From: \_\_\_\_\_ To: \_\_\_\_\_

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:

A certification by the responsible official as defined by 326 IAC 2-7-1(34) is required for this report.

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

**Part 70 Quarterly Report**

Source Name: GM Components Holdings LLC  
Source Address: 2100 East Lincoln Road, Kokomo, IN 46904  
Part 70 Permit No.: T067-23927-00061  
Facility: Clean Room Fab III  
Parameter: VOC Emissions  
Limit: Less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR:

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

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

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

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

### Part 70 Quarterly Report

Source Name: GM Components Holdings LLC  
Source Address: 2100 East Lincoln Road, Kokomo, IN 46904  
Part 70 Permit No.: T067-23927-00061  
Facility: Clean Room Fab V  
Parameter: VOC Emissions  
Limit: Less than 25 tons per twelve (12) consecutive month period with compliance determined at the end of each month.

YEAR:

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

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

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

## OFFICE OF AIR QUALITY COMPLIANCE AND ENFORCEMENT BRANCH

### Part 70 Quarterly Report

Source Name: GM Components Holdings LLC  
Source Address: 2100 East Lincoln Road, Kokomo, Kokomo, IN 46904  
Part 70 Permit No.: T067-23927-00061  
Facility: Tech 2000, Dept. 9502 - four (4) solder machines (ID# 208554, ID# 6040058, ID# 6033795, ID# 6044245)  
Parameter: The VOC input including flux and thinner delivered to the applicators  
Limit: Less than 25.0 tons as a group per twelve (12) consecutive month period with compliance determined at the end of each month

YEAR:

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

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

Submitted by: \_\_\_\_\_  
Title / Position: \_\_\_\_\_  
Signature: \_\_\_\_\_  
Date: \_\_\_\_\_  
Phone: \_\_\_\_\_

**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: GM Components Holdings LLC  
Source Address: 2100 East Lincoln Road, Kokomo, IN 46904  
Part 70 Permit No.: T067-23927-00061

**Months:** \_\_\_\_\_ **to** \_\_\_\_\_ **Year:** \_\_\_\_\_

Page 1 of 2

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



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

Form Completed by: \_\_\_\_\_

Title / Position: \_\_\_\_\_

Date: \_\_\_\_\_

Phone: \_\_\_\_\_

**Attachment A**  
**to Part 70 Operating Permit No. T067-23927-00061**

**Subpart Dc—Standards of Performance for Small Industrial-Commercial-Institutional Steam Generating Units**

**§ 60.40c Applicability and delegation of authority.**

(a) Except as provided in paragraphs (d), (e), (f), and (g) of this section, the affected facility to which this subpart applies is each steam generating unit for which construction, modification, or reconstruction is commenced after June 9, 1989 and that has a maximum design heat input capacity of 29 megawatts (MW) (100 million British thermal units per hour (MMBtu/h)) or less, but greater than or equal to 2.9 MW (10 MMBtu/h).

(b) In delegating implementation and enforcement authority to a State under section 111(c) of the Clean Air Act, § 60.48c(a)(4) shall be retained by the Administrator and not transferred to a State.

(c) Steam generating units that meet the applicability requirements in paragraph (a) of this section are not subject to the sulfur dioxide (SO<sub>2</sub>) or particulate matter (PM) emission limits, performance testing requirements, or monitoring requirements under this subpart (§§ 60.42c, 60.43c, 60.44c, 60.45c, 60.46c, or 60.47c) during periods of combustion research, as defined in § 60.41c.

(d) Any temporary change to an existing steam generating unit for the purpose of conducting combustion research is not considered a modification under § 60.14.

(e) Affected facilities ( i.e. heat recovery steam generators and fuel heaters) that are associated with stationary combustion turbines and meet the applicability requirements of subpart KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators, fuel heaters, and other affected facilities that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/h) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/h) heat input of fossil fuel. If the heat recovery steam generator, fuel heater, or other affected facility is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The stationary combustion turbine emissions are subject to subpart GG or KKKK, as applicable, of this part.)

(f) Any affected facility that meets the applicability requirements of and is subject to subpart AAAA or subpart CCCC of this part is not subject to this subpart.

(g) Any facility that meets the applicability requirements and is subject to an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not subject to this subpart.

(h) Affected facilities that also meet the applicability requirements under subpart J or subpart Ja of this part are subject to the PM and NO<sub>x</sub> standards under this subpart and the SO<sub>2</sub> standards under subpart J or subpart Ja of this part, as applicable.

(i) Temporary boilers are not subject to this subpart.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

### **§ 60.41c Definitions.**

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

Annual capacity factor means the ratio between the actual heat input to a steam generating unit from an individual fuel or combination of fuels during a period of 12 consecutive calendar months and the potential heat input to the steam generating unit from all fuels had the steam generating unit been operated for 8,760 hours during that 12-month period at the maximum design heat input capacity. In the case of steam generating units that are rented or leased, the actual heat input shall be determined based on the combined heat input from all operations of the affected facility during a period of 12 consecutive calendar months.

Coal means all solid fuels classified as anthracite, bituminous, subbituminous, or lignite by the American Society of Testing and Materials in ASTM D388 (incorporated by reference, see § 60.17), coal refuse, and petroleum coke. Coal-derived synthetic fuels derived from coal for the purposes of creating useful heat, including but not limited to solvent refined coal, gasified coal not meeting the definition of natural gas, coal-oil mixtures, and coal-water mixtures, are also included in this definition for the purposes of this subpart.

Coal refuse means any by-product of coal mining or coal cleaning operations with an ash content greater than 50 percent (by weight) and a heating value less than 13,900 kilojoules per kilogram (kJ/kg) (6,000 Btu per pound (Btu/lb) on a dry basis.

Combined cycle system means a system in which a separate source (such as a stationary gas turbine, internal combustion engine, or kiln) provides exhaust gas to a steam generating unit.

Combustion research means the experimental firing of any fuel or combination of fuels in a steam generating unit for the purpose of conducting research and development of more efficient combustion or more effective prevention or control of air pollutant emissions from combustion, provided that, during these periods of

research and development, the heat generated is not used for any purpose other than preheating combustion air for use by that steam generating unit ( i.e. , the heat generated is released to the atmosphere without being used for space heating, process heating, driving pumps, preheating combustion air for other units, generating electricity, or any other purpose).

Conventional technology means wet flue gas desulfurization technology, dry flue gas desulfurization technology, atmospheric fluidized bed combustion technology, and oil hydrodesulfurization technology.

Distillate oil means fuel oil that complies with the specifications for fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see § 60.17), diesel fuel oil numbers 1 or 2, as defined by the American Society for Testing and Materials in ASTM D975 (incorporated by reference, see § 60.17), kerosine, as defined by the American Society of Testing and Materials in ASTM D3699 (incorporated by reference, see § 60.17), biodiesel as defined by the American Society of Testing and Materials in ASTM D6751 (incorporated by reference, see § 60.17), or biodiesel blends as defined by the American Society of Testing and Materials in ASTM D7467 (incorporated by reference, see § 60.17).

Dry flue gas desulfurization technology means a SO<sub>2</sub> control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating unit by contacting the combustion gases with an alkaline reagent and water, whether introduced separately or as a premixed slurry or solution and forming a dry powder material. This definition includes devices where the dry powder material is subsequently converted to another form. Alkaline reagents used in dry flue gas desulfurization systems include, but are not limited to, lime and sodium compounds.

Duct burner means a device that combusts fuel and that is placed in the exhaust duct from another source (such as a stationary gas turbine, internal combustion engine, kiln, etc.) to allow the firing of additional fuel to heat the exhaust gases before the exhaust gases enter a steam generating unit.

Emerging technology means any SO<sub>2</sub> control system that is not defined as a conventional technology under this section, and for which the owner or operator of the affected facility has received approval from the Administrator to operate as an emerging technology under § 60.48c(a)(4).

Federally enforceable means all limitations and conditions that are enforceable by the Administrator, including the requirements of 40 CFR parts 60 and 61, requirements within any applicable State implementation plan, and any permit requirements established under 40 CFR 52.21 or under 40 CFR 51.18 and 51.24.

Fluidized bed combustion technology means a device wherein fuel is distributed onto a bed (or series of beds) of limestone aggregate (or other sorbent materials) for combustion; and these materials are forced upward in the device by the flow of combustion air and the gaseous products of combustion. Fluidized bed combustion technology includes, but is not limited to, bubbling bed units and circulating bed units.

Fuel pretreatment means a process that removes a portion of the sulfur in a fuel before combustion of the fuel in a steam generating unit.

Heat input means heat derived from combustion of fuel in a steam generating unit and does not include the heat derived from preheated combustion air, recirculated flue gases, or exhaust gases from other sources (such as stationary gas turbines, internal combustion engines, and kilns).

Heat transfer medium means any material that is used to transfer heat from one point to another point.

Maximum design heat input capacity means the ability of a steam generating unit to combust a stated maximum amount of fuel (or combination of fuels) on a steady state basis as determined by the physical design and characteristics of the steam generating unit.

Natural gas means:

(1) A naturally occurring mixture of hydrocarbon and nonhydrocarbon gases found in geologic formations beneath the earth's surface, of which the principal constituent is methane; or

(2) Liquefied petroleum (LP) gas, as defined by the American Society for Testing and Materials in ASTM D1835 (incorporated by reference, see § 60.17); or

(3) A mixture of hydrocarbons that maintains a gaseous state at ISO conditions. Additionally, natural gas must either be composed of at least 70 percent methane by volume or have a gross calorific value between 34 and 43 megajoules (MJ) per dry standard cubic meter (910 and 1,150 Btu per dry standard cubic foot).

Noncontinental area means the State of Hawaii, the Virgin Islands, Guam, American Samoa, the Commonwealth of Puerto Rico, or the Northern Mariana Islands.

Oil means crude oil or petroleum, or a liquid fuel derived from crude oil or petroleum, including distillate oil and residual oil.

Potential sulfur dioxide emission rate means the theoretical SO<sub>2</sub> emissions (nanograms per joule (ng/J) or lb/MMBtu heat input) that would result from

combusting fuel in an uncleaned state and without using emission control systems.

Process heater means a device that is primarily used to heat a material to initiate or promote a chemical reaction in which the material participates as a reactant or catalyst.

Residual oil means crude oil, fuel oil that does not comply with the specifications under the definition of distillate oil, and all fuel oil numbers 4, 5, and 6, as defined by the American Society for Testing and Materials in ASTM D396 (incorporated by reference, see § 60.17).

Steam generating unit means a device that combusts any fuel and produces steam or heats water or heats any heat transfer medium. This term includes any duct burner that combusts fuel and is part of a combined cycle system. This term does not include process heaters as defined in this subpart.

Steam generating unit operating day means a 24-hour period between 12:00 midnight and the following midnight during which any fuel is combusted at any time in the steam generating unit. It is not necessary for fuel to be combusted continuously for the entire 24-hour period.

Temporary boiler means a steam generating unit that combusts natural gas or distillate oil with a potential SO<sub>2</sub> emissions rate no greater than 26 ng/J (0.060 lb/MMBtu), and the unit is designed to, and is capable of, being carried or moved from one location to another by means of, for example, wheels, skids, carrying handles, dollies, trailers, or platforms. A steam generating unit is not a temporary boiler if any one of the following conditions exists:

- (1) The equipment is attached to a foundation.
- (2) The steam generating unit or a replacement remains at a location for more than 180 consecutive days. Any temporary boiler that replaces a temporary boiler at a location and performs the same or similar function will be included in calculating the consecutive time period.
- (3) The equipment is located at a seasonal facility and operates during the full annual operating period of the seasonal facility, remains at the facility for at least 2 years, and operates at that facility for at least 3 months each year.
- (4) The equipment is moved from one location to another in an attempt to circumvent the residence time requirements of this definition.

Wet flue gas desulfurization technology means an SO<sub>2</sub> control system that is located between the steam generating unit and the exhaust vent or stack, and that removes sulfur oxides from the combustion gases of the steam generating

unit by contacting the combustion gases with an alkaline slurry or solution and forming a liquid material. This definition includes devices where the liquid material is subsequently converted to another form. Alkaline reagents used in wet flue gas desulfurization systems include, but are not limited to, lime, limestone, and sodium compounds.

Wet scrubber system means any emission control device that mixes an aqueous stream or slurry with the exhaust gases from a steam generating unit to control emissions of PM or SO<sub>2</sub>.

Wood means wood, wood residue, bark, or any derivative fuel or residue thereof, in any form, including but not limited to sawdust, sanderdust, wood chips, scraps, slabs, millings, shavings, and processed pellets made from wood or other forest residues.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9461, Feb. 16, 2012]

**§ 60.42c Standard for sulfur dioxide (SO<sub>2</sub>).**

(a) Except as provided in paragraphs (b), (c), and (e) of this section, on and after the date on which the performance test is completed or required to be completed under § 60.8, whichever date comes first, the owner or operator of an affected facility that combusts only coal shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO<sub>2</sub> emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility shall neither: cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO<sub>2</sub> emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO<sub>2</sub> in excess of the emission limit is determined pursuant to paragraph (e)(2) of this section.

(b) Except as provided in paragraphs (c) and (e) of this section, on and after the date on which the performance test is completed or required to be completed under § 60.8, whichever date comes first, the owner or operator of an affected facility that:

(1) Combusts only coal refuse alone in a fluidized bed combustion steam generating unit shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO<sub>2</sub> emission rate (80 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 520 ng/J (1.2 lb/MMBtu) heat input. If coal is fired with coal refuse, the affected facility subject to paragraph (a) of this section. If oil or any other fuel (except coal) is fired with coal refuse, the affected facility is subject to the 87 ng/J (0.20 lb/MMBtu) heat input SO<sub>2</sub> emissions limit or the 90 percent SO<sub>2</sub> reduction requirement specified in paragraph (a) of this section and the emission limit is determined pursuant to paragraph (e)(2) of this section.

(2) Combusts only coal and that uses an emerging technology for the control of SO<sub>2</sub> emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 50 percent (0.50) of the potential SO<sub>2</sub> emission rate (50 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 260 ng/J (0.60 lb/MMBtu) heat input. If coal is combusted with other fuels, the affected facility is subject to the 50 percent SO<sub>2</sub> reduction requirement specified in this paragraph and the emission limit determined pursuant to paragraph (e)(2) of this section.

(c) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, alone or in combination with any other fuel, and is listed in paragraphs (c)(1), (2), (3), or (4) of this section shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of the emission limit determined pursuant to paragraph (e)(2) of this section. Percent reduction requirements are not applicable to affected facilities under paragraphs (c)(1), (2), (3), or (4).

(1) Affected facilities that have a heat input capacity of 22 MW (75 MMBtu/h) or less;

(2) Affected facilities that have an annual capacity for coal of 55 percent (0.55) or less and are subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for coal of 55 percent (0.55) or less.

(3) Affected facilities located in a noncontinental area; or



(4) Affected facilities that combust coal in a duct burner as part of a combined cycle system where 30 percent (0.30) or less of the heat entering the steam generating unit is from combustion of coal in the duct burner and 70 percent (0.70) or more of the heat entering the steam generating unit is from exhaust gases entering the duct burner.

(d) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts oil shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of 215 ng/J (0.50 lb/MMBtu) heat input from oil; or, as an alternative, no owner or operator of an affected facility that combusts oil shall combust oil in the affected facility that contains greater than 0.5 weight percent sulfur. The percent reduction requirements are not applicable to affected facilities under this paragraph.

(e) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, oil, or coal and oil with any other fuel shall cause to be discharged into the atmosphere from that affected facility any gases that contain SO<sub>2</sub> in excess of the following:

(1) The percent of potential SO<sub>2</sub> emission rate or numerical SO<sub>2</sub> emission rate required under paragraph (a) or (b)(2) of this section, as applicable, for any affected facility that

(i) Combusts coal in combination with any other fuel;

(ii) Has a heat input capacity greater than 22 MW (75 MMBtu/h); and

(iii) Has an annual capacity factor for coal greater than 55 percent (0.55); and

(2) The emission limit determined according to the following formula for any affected facility that combusts coal, oil, or coal and oil with any other fuel:

$$E_s = \frac{(K_a H_a + K_b H_b + K_c H_c)}{(H_a + H_b + H_c)}$$

Where:

E<sub>s</sub> = SO<sub>2</sub> emission limit, expressed in ng/J or lb/MMBtu heat input;

K<sub>a</sub> = 520 ng/J (1.2 lb/MMBtu);

K<sub>b</sub> = 260 ng/J (0.60 lb/MMBtu);

K<sub>c</sub> = 215 ng/J (0.50 lb/MMBtu);

$H_a$  = Heat input from the combustion of coal, except coal combusted in an affected facility subject to paragraph (b)(2) of this section, in Joules (J) [MMBtu];

$H_b$  = Heat input from the combustion of coal in an affected facility subject to paragraph (b)(2) of this section, in J (MMBtu); and

$H_c$  = Heat input from the combustion of oil, in J (MMBtu).

(f) Reduction in the potential SO<sub>2</sub> emission rate through fuel pretreatment is not credited toward the percent reduction requirement under paragraph (b)(2) of this section unless:

(1) Fuel pretreatment results in a 50 percent (0.50) or greater reduction in the potential SO<sub>2</sub> emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO<sub>2</sub> control) are equal to or less than the emission limits specified under paragraph (b)(2) of this section.

(g) Except as provided in paragraph (h) of this section, compliance with the percent reduction requirements, fuel oil sulfur limits, and emission limits of this section shall be determined on a 30-day rolling average basis.

(h) For affected facilities listed under paragraphs (h)(1), (2), (3), or (4) of this section, compliance with the emission limits or fuel oil sulfur limits under this section may be determined based on a certification from the fuel supplier, as described under § 60.48c(f), as applicable.

(1) Distillate oil-fired affected facilities with heat input capacities between 2.9 and 29 MW (10 and 100 MMBtu/hr).

(2) Residual oil-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(3) Coal-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/h).

(4) Other fuels-fired affected facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/h).

(i) The SO<sub>2</sub> emission limits, fuel oil sulfur limits, and percent reduction requirements under this section apply at all times, including periods of startup, shutdown, and malfunction.

(j) For affected facilities located in noncontinental areas and affected facilities complying with the percent reduction standard, only the heat input supplied to the

affected facility from the combustion of coal and oil is counted under this section. No credit is provided for the heat input to the affected facility from wood or other fuels or for heat derived from exhaust gases from other sources, such as stationary gas turbines, internal combustion engines, and kilns.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5090, Jan. 28, 2009; 77 FR 9462, Feb. 16, 2012]

**§ 60.43c Standard for particulate matter (PM).**

(a) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts coal or combusts mixtures of coal with other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emission limits:

(1) 22 ng/J (0.051 lb/MMBtu) heat input if the affected facility combusts only coal, or combusts coal with other fuels and has an annual capacity factor for the other fuels of 10 percent (0.10) or less.

(2) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility combusts coal with other fuels, has an annual capacity factor for the other fuels greater than 10 percent (0.10), and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor greater than 10 percent (0.10) for fuels other than coal.

(b) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commenced construction, reconstruction, or modification on or before February 28, 2005, that combusts wood or combusts mixtures of wood with other fuels (except coal) and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater, shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of the following emissions limits:

(1) 43 ng/J (0.10 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood greater than 30 percent (0.30); or

(2) 130 ng/J (0.30 lb/MMBtu) heat input if the affected facility has an annual capacity factor for wood of 30 percent (0.30) or less and is subject to a federally enforceable requirement limiting operation of the affected facility to an annual capacity factor for wood of 30 percent (0.30) or less.

(c) On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that combusts coal, wood, or oil and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that exhibit greater than 20 percent opacity (6-minute average), except for one 6-minute period per hour of not more than 27 percent opacity. Owners and operators of an affected facility that elect to install, calibrate, maintain, and operate a continuous emissions monitoring system (CEMS) for measuring PM emissions according to the requirements of this subpart and are subject to a federally enforceable PM limit of 0.030 lb/MMBtu or less are exempt from the opacity standard specified in this paragraph (c).

(d) The PM and opacity standards under this section apply at all times, except during periods of startup, shutdown, or malfunction.

(e)(1) On and after the date on which the initial performance test is completed or is required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 13 ng/J (0.030 lb/MMBtu) heat input, except as provided in paragraphs (e)(2), (e)(3), and (e)(4) of this section.

(2) As an alternative to meeting the requirements of paragraph (e)(1) of this section, the owner or operator of an affected facility for which modification commenced after February 28, 2005, may elect to meet the requirements of this paragraph. On and after the date on which the initial performance test is completed or required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28, 2005 shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of both:

(i) 22 ng/J (0.051 lb/MMBtu) heat input derived from the combustion of coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels; and

(ii) 0.2 percent of the combustion concentration (99.8 percent reduction) when combusting coal, oil, wood, a mixture of these fuels, or a mixture of these fuels with any other fuels.

(3) On and after the date on which the initial performance test is completed or is required to be completed under § 60.8, whichever date comes first, no owner or operator of an affected facility that commences modification after February 28,

2005, and that combusts over 30 percent wood (by heat input) on an annual basis and has a heat input capacity of 8.7 MW (30 MMBtu/h) or greater shall cause to be discharged into the atmosphere from that affected facility any gases that contain PM in excess of 43 ng/J (0.10 lb/MMBtu) heat input.

(4) An owner or operator of an affected facility that commences construction, reconstruction, or modification after February 28, 2005, and that combusts only oil that contains no more than 0.50 weight percent sulfur or a mixture of 0.50 weight percent sulfur oil with other fuels not subject to a PM standard under § 60.43c and not using a post-combustion technology (except a wet scrubber) to reduce PM or SO<sub>2</sub> emissions is not subject to the PM limit in this section.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 77 FR 9462, Feb. 16, 2012]

**§ 60.44c Compliance and performance test methods and procedures for sulfur dioxide.**

(a) Except as provided in paragraphs (g) and (h) of this section and § 60.8(b), performance tests required under § 60.8 shall be conducted following the procedures specified in paragraphs (b), (c), (d), (e), and (f) of this section, as applicable. Section 60.8(f) does not apply to this section. The 30-day notice required in § 60.8(d) applies only to the initial performance test unless otherwise specified by the Administrator.

(b) The initial performance test required under § 60.8 shall be conducted over 30 consecutive operating days of the steam generating unit. Compliance with the percent reduction requirements and SO<sub>2</sub> emission limits under § 60.42c shall be determined using a 30-day average. The first operating day included in the initial performance test shall be scheduled within 30 days after achieving the maximum production rate at which the affect facility will be operated, but not later than 180 days after the initial startup of the facility. The steam generating unit load during the 30-day period does not have to be the maximum design heat input capacity, but must be representative of future operating conditions.

(c) After the initial performance test required under paragraph (b) of this section and § 60.8, compliance with the percent reduction requirements and SO<sub>2</sub> emission limits under § 60.42c is based on the average percent reduction and the average SO<sub>2</sub> emission rates for 30 consecutive steam generating unit operating days. A separate performance test is completed at the end of each steam generating unit operating day, and a new 30-day average percent reduction and SO<sub>2</sub> emission rate are calculated to show compliance with the standard.

(d) If only coal, only oil, or a mixture of coal and oil is combusted in an affected facility, the procedures in Method 19 of appendix A of this part are used to

determine the hourly SO<sub>2</sub> emission rate (E<sub>ho</sub>) and the 30-day average SO<sub>2</sub> emission rate (E<sub>ao</sub>). The hourly averages used to compute the 30-day averages are obtained from the CEMS. Method 19 of appendix A of this part shall be used to calculate E<sub>ao</sub> when using daily fuel sampling or Method 6B of appendix A of this part.

(e) If coal, oil, or coal and oil are combusted with other fuels:

(1) An adjusted E<sub>ho</sub> (E<sub>ho o</sub>) is used in Equation 19-19 of Method 19 of appendix A of this part to compute the adjusted E<sub>ao</sub> (E<sub>ao o</sub>). The E<sub>ho o</sub> is computed using the following formula:

$$E_{ho\ o} = \frac{E_{ho} - E_w(1 - X_k)}{X_k}$$

Where:

E<sub>ho o</sub> = Adjusted E<sub>ho</sub>, ng/J (lb/MMBtu);

E<sub>ho</sub> = Hourly SO<sub>2</sub> emission rate, ng/J (lb/MMBtu);

E<sub>w</sub> = SO<sub>2</sub> concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 9 of appendix A of this part, ng/J (lb/MMBtu). The value E<sub>w</sub> for each fuel lot is used for each hourly average during the time that the lot is being combusted. The owner or operator does not have to measure E<sub>w</sub> if the owner or operator elects to assume E<sub>w</sub> = 0.

X<sub>k</sub> = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(2) The owner or operator of an affected facility that qualifies under the provisions of § 60.42c(c) or (d) (where percent reduction is not required) does not have to measure the parameters E<sub>w</sub> or X<sub>k</sub> if the owner or operator of the affected facility elects to measure emission rates of the coal or oil using the fuel sampling and analysis procedures under Method 19 of appendix A of this part.

(f) Affected facilities subject to the percent reduction requirements under § 60.42c(a) or (b) shall determine compliance with the SO<sub>2</sub> emission limits under § 60.42c pursuant to paragraphs (d) or (e) of this section, and shall determine compliance with the percent reduction requirements using the following procedures:

(1) If only coal is combusted, the percent of potential SO<sub>2</sub> emission rate is computed using the following formula:

$$\%P_s = 100 \left( 1 - \frac{\%R_g}{100} \right) \left( 1 - \frac{\%R_f}{100} \right)$$

Where:

$\%P_s$  = Potential SO<sub>2</sub> emission rate, in percent;

$\%R_g$  = SO<sub>2</sub> removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

$\%R_f$  = SO<sub>2</sub> removal efficiency of fuel pretreatment as determined by Method 19 of appendix A of this part, in percent.

(2) If coal, oil, or coal and oil are combusted with other fuels, the same procedures required in paragraph (f)(1) of this section are used, except as provided for in the following:

(i) To compute the  $\%P_s$ , an adjusted  $\%R_g$  ( $\%R_{g\ o}$ ) is computed from  $E_{a\ o}$  or from paragraph (e)(1) of this section and an adjusted average SO<sub>2</sub> inlet rate ( $E_{a\ i\ o}$ ) using the following formula:

$$\%R_{g\ o} = 100 \left( 1 - \frac{E_{a\ o}}{E_{a\ i\ o}} \right)$$

Where:

$\%R_{g\ o}$  = Adjusted  $\%R_g$ , in percent;

$E_{a\ o}$  = Adjusted  $E_{a\ o}$ , ng/J (lb/MMBtu); and

$E_{a\ i\ o}$  = Adjusted average SO<sub>2</sub> inlet rate, ng/J (lb/MMBtu).

(ii) To compute  $E_{a\ i\ o}$ , an adjusted hourly SO<sub>2</sub> inlet rate ( $E_{h\ i\ o}$ ) is used. The  $E_{h\ i\ o}$  is computed using the following formula:

$$E_{h\ i\ o} = \frac{E_{h\ i} - E_w(1 - X_1)}{X_1}$$

Where:

$E_{h\ i\ o}$  = Adjusted  $E_{h\ i}$ , ng/J (lb/MMBtu);

$E_{h\ i}$  = Hourly SO<sub>2</sub> inlet rate, ng/J (lb/MMBtu);

$E_w$  = SO<sub>2</sub> concentration in fuels other than coal and oil combusted in the affected facility, as determined by fuel sampling and analysis procedures in Method 19 of appendix A of this part, ng/J (lb/MMBtu). The value  $E_w$  for each fuel lot is used for each hourly average during the time that the lot

is being combusted. The owner or operator does not have to measure  $E_w$  if the owner or operator elects to assume  $E_w = 0$ ; and

$X_k$  = Fraction of the total heat input from fuel combustion derived from coal and oil, as determined by applicable procedures in Method 19 of appendix A of this part.

(g) For oil-fired affected facilities where the owner or operator seeks to demonstrate compliance with the fuel oil sulfur limits under § 60.42c based on shipment fuel sampling, the initial performance test shall consist of sampling and analyzing the oil in the initial tank of oil to be fired in the steam generating unit to demonstrate that the oil contains 0.5 weight percent sulfur or less. Thereafter, the owner or operator of the affected facility shall sample the oil in the fuel tank after each new shipment of oil is received, as described under § 60.46c(d)(2).

(h) For affected facilities subject to § 60.42c(h)(1), (2), or (3) where the owner or operator seeks to demonstrate compliance with the  $SO_2$  standards based on fuel supplier certification, the performance test shall consist of the certification from the fuel supplier, as described in § 60.48c(f), as applicable.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the  $SO_2$  standards under § 60.42c(c)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(j) The owner or operator of an affected facility shall use all valid  $SO_2$  emissions data in calculating  $\%P_s$  and  $E_{ho}$  under paragraphs (d), (e), or (f) of this section, as applicable, whether or not the minimum emissions data requirements under § 60.46c(f) are achieved. All valid emissions data, including valid data collected during periods of startup, shutdown, and malfunction, shall be used in calculating  $\%P_s$  or  $E_{ho}$  pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

**§ 60.45c Compliance and performance test methods and procedures for particulate matter.**

(a) The owner or operator of an affected facility subject to the PM and/or opacity standards under § 60.43c shall conduct an initial performance test as required under § 60.8, and shall conduct subsequent performance tests as requested by



the Administrator, to determine compliance with the standards using the following procedures and reference methods, except as specified in paragraph (c) of this section.

(1) Method 1 of appendix A of this part shall be used to select the sampling site and the number of traverse sampling points.

(2) Method 3A or 3B of appendix A-2 of this part shall be used for gas analysis when applying Method 5 or 5B of appendix A-3 of this part or 17 of appendix A-6 of this part.

(3) Method 5, 5B, or 17 of appendix A of this part shall be used to measure the concentration of PM as follows:

(i) Method 5 of appendix A of this part may be used only at affected facilities without wet scrubber systems.

(ii) Method 17 of appendix A of this part may be used at affected facilities with or without wet scrubber systems provided the stack gas temperature does not exceed a temperature of 160 °C (320 °F). The procedures of Sections 8.1 and 11.1 of Method 5B of appendix A of this part may be used in Method 17 of appendix A of this part only if Method 17 of appendix A of this part is used in conjunction with a wet scrubber system. Method 17 of appendix A of this part shall not be used in conjunction with a wet scrubber system if the effluent is saturated or laden with water droplets.

(iii) Method 5B of appendix A of this part may be used in conjunction with a wet scrubber system.

(4) The sampling time for each run shall be at least 120 minutes and the minimum sampling volume shall be 1.7 dry standard cubic meters (dscm) [60 dry standard cubic feet (dscf)] except that smaller sampling times or volumes may be approved by the Administrator when necessitated by process variables or other factors.

(5) For Method 5 or 5B of appendix A of this part, the temperature of the sample gas in the probe and filter holder shall be monitored and maintained at  $160 \pm 14$  °C ( $320 \pm 25$  °F).

(6) For determination of PM emissions, an oxygen (O<sub>2</sub>) or carbon dioxide (CO<sub>2</sub>) measurement shall be obtained simultaneously with each run of Method 5, 5B, or 17 of appendix A of this part by traversing the duct at the same sampling location.

(7) For each run using Method 5, 5B, or 17 of appendix A of this part, the emission rates expressed in ng/J (lb/MMBtu) heat input shall be determined using:

(i) The O<sub>2</sub> or CO<sub>2</sub> measurements and PM measurements obtained under this section, (ii) The dry basis F factor, and

(iii) The dry basis emission rate calculation procedure contained in Method 19 of appendix A of this part.

(8) Method 9 of appendix A-4 of this part shall be used for determining the opacity of stack emissions.

(b) The owner or operator of an affected facility seeking to demonstrate compliance with the PM standards under § 60.43c(b)(2) shall demonstrate the maximum design heat input capacity of the steam generating unit by operating the steam generating unit at this capacity for 24 hours. This demonstration shall be made during the initial performance test, and a subsequent demonstration may be requested at any other time. If the demonstrated 24-hour average firing rate for the affected facility is less than the maximum design heat input capacity stated by the manufacturer of the affected facility, the demonstrated 24-hour average firing rate shall be used to determine the annual capacity factor for the affected facility; otherwise, the maximum design heat input capacity provided by the manufacturer shall be used.

(c) In place of PM testing with Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part, an owner or operator may elect to install, calibrate, maintain, and operate a CEMS for monitoring PM emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility who elects to continuously monitor PM emissions instead of conducting performance testing using Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part shall install, calibrate, maintain, and operate a CEMS and shall comply with the requirements specified in paragraphs (c)(1) through (c)(14) of this section.

(1) Notify the Administrator 1 month before starting use of the system.

(2) Notify the Administrator 1 month before stopping use of the system.

(3) The monitor shall be installed, evaluated, and operated in accordance with § 60.13 of subpart A of this part.

(4) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under § 60.8 of subpart A of this part or within 180 days of notification to the Administrator of use of CEMS if the owner or operator was previously determining compliance by

Method 5, 5B, or 17 of appendix A of this part performance tests, whichever is later.

(5) The owner or operator of an affected facility shall conduct an initial performance test for PM emissions as required under § 60.8 of subpart A of this part. Compliance with the PM emission limit shall be determined by using the CEMS specified in paragraph (d) of this section to measure PM and calculating a 24-hour block arithmetic average emission concentration using EPA Reference Method 19 of appendix A of this part, section 4.1.

(6) Compliance with the PM emission limit shall be determined based on the 24-hour daily (block) average of the hourly arithmetic average emission concentrations using CEMS outlet data.

(7) At a minimum, valid CEMS hourly averages shall be obtained as specified in paragraph (c)(7)(i) of this section for 75 percent of the total operating hours per 30-day rolling average.

(i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) [Reserved]

(8) The 1-hour arithmetic averages required under paragraph (c)(7) of this section shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the boiler operating day daily arithmetic average emission concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under § 60.13(e)(2) of subpart A of this part.

(9) All valid CEMS data shall be used in calculating average emission concentrations even if the minimum CEMS data requirements of paragraph (c)(7) of this section are not met.

(10) The CEMS shall be operated according to Performance Specification 11 in appendix B of this part.

(11) During the correlation testing runs of the CEMS required by Performance Specification 11 in appendix B of this part, PM and O<sub>2</sub> (or CO<sub>2</sub>) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and performance tests conducted using the following test methods.

(i) For PM, Method 5 or 5B of appendix A-3 of this part or Method 17 of appendix A-6 of this part shall be used; and

(ii) For O<sub>2</sub> (or CO<sub>2</sub>), Method 3A or 3B of appendix A-2 of this part, as applicable shall be used.

(12) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 2 in appendix F of this part. Relative Response Audit's must be performed annually and Response Correlation Audits must be performed every 3 years.

(13) When PM emissions data are not obtained because of CEMS breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 of appendix A of this part to provide, as necessary, valid emissions data for a minimum of 75 percent of total operating hours on a 30-day rolling average.

(14) As of January 1, 2012, and within 90 days after the date of completing each performance test, as defined in § 60.8, conducted to demonstrate compliance with this subpart, you must submit relative accuracy test audit ( i.e., reference method) data and performance test ( i.e., compliance test) data, except opacity data, electronically to EPA's Central Data Exchange (CDX) by using the Electronic Reporting Tool (ERT) (see [http://www.epa.gov/ttn/chief/ert/ert\\_tool.html/](http://www.epa.gov/ttn/chief/ert/ert_tool.html/) ) or other compatible electronic spreadsheet. Only data collected using test methods compatible with ERT are subject to this requirement to be submitted electronically into EPA's WebFIRE database.

(d) The owner or operator of an affected facility seeking to demonstrate compliance under § 60.43c(e)(4) shall follow the applicable procedures under § 60.48c(f). For residual oil-fired affected facilities, fuel supplier certifications are only allowed for facilities with heat input capacities between 2.9 and 8.7 MW (10 to 30 MMBtu/h).

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9463, Feb. 16, 2012]

#### **§ 60.46c Emission monitoring for sulfur dioxide.**

(a) Except as provided in paragraphs (d) and (e) of this section, the owner or operator of an affected facility subject to the SO<sub>2</sub> emission limits under § 60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO<sub>2</sub> concentrations and either O<sub>2</sub> or CO<sub>2</sub> concentrations at the outlet of the SO<sub>2</sub> control device (or the outlet of the steam generating unit if no SO<sub>2</sub> control device is used), and shall record the output of the system. The owner or operator of an affected facility subject to the percent reduction requirements under § 60.42c shall measure SO<sub>2</sub> concentrations and either O<sub>2</sub> or CO<sub>2</sub> concentrations at both the inlet and outlet of the SO<sub>2</sub> control device.

(b) The 1-hour average SO<sub>2</sub> emission rates measured by a CEMS shall be expressed in ng/J or lb/MMBtu heat input and shall be used to calculate the average emission rates under § 60.42c. Each 1-hour average SO<sub>2</sub> emission rate must be based on at least 30 minutes of operation, and shall be calculated using the data points required under § 60.13(h)(2). Hourly SO<sub>2</sub> emission rates are not calculated if the affected facility is operated less than 30 minutes in a 1-hour period and are not counted toward determination of a steam generating unit operating day.

(c) The procedures under § 60.13 shall be followed for installation, evaluation, and operation of the CEMS.

(1) All CEMS shall be operated in accordance with the applicable procedures under Performance Specifications 1, 2, and 3 of appendix B of this part.

(2) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of this part.

(3) For affected facilities subject to the percent reduction requirements under § 60.42c, the span value of the SO<sub>2</sub> CEMS at the inlet to the SO<sub>2</sub> control device shall be 125 percent of the maximum estimated hourly potential SO<sub>2</sub> emission rate of the fuel combusted, and the span value of the SO<sub>2</sub> CEMS at the outlet from the SO<sub>2</sub> control device shall be 50 percent of the maximum estimated hourly potential SO<sub>2</sub> emission rate of the fuel combusted.

(4) For affected facilities that are not subject to the percent reduction requirements of § 60.42c, the span value of the SO<sub>2</sub> CEMS at the outlet from the SO<sub>2</sub> control device (or outlet of the steam generating unit if no SO<sub>2</sub> control device is used) shall be 125 percent of the maximum estimated hourly potential SO<sub>2</sub> emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO<sub>2</sub> control device (or outlet of the steam generating unit if no SO<sub>2</sub> control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO<sub>2</sub> emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO<sub>2</sub> control device (or outlet of the steam generating unit if no SO<sub>2</sub> control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO<sub>2</sub> emission rate by using Method 6B of appendix A of this part. Fuel sampling shall be conducted pursuant to either paragraph (d)(1) or (d)(2) of this section. Method 6B of appendix A of this part shall be conducted pursuant to paragraph (d)(3) of this section.

(1) For affected facilities combusting coal or oil, coal or oil samples shall be collected daily in an as-fired condition at the inlet to the steam generating unit and analyzed for sulfur content and heat content according the Method 19 of

appendix A of this part. Method 19 of appendix A of this part provides procedures for converting these measurements into the format to be used in calculating the average SO<sub>2</sub> input rate.

(2) As an alternative fuel sampling procedure for affected facilities combusting oil, oil samples may be collected from the fuel tank for each steam generating unit immediately after the fuel tank is filled and before any oil is combusted. The owner or operator of the affected facility shall analyze the oil sample to determine the sulfur content of the oil. If a partially empty fuel tank is refilled, a new sample and analysis of the fuel in the tank would be required upon filling. Results of the fuel analysis taken after each new shipment of oil is received shall be used as the daily value when calculating the 30-day rolling average until the next shipment is received. If the fuel analysis shows that the sulfur content in the fuel tank is greater than 0.5 weight percent sulfur, the owner or operator shall ensure that the sulfur content of subsequent oil shipments is low enough to cause the 30-day rolling average sulfur content to be 0.5 weight percent sulfur or less.

(3) Method 6B of appendix A of this part may be used in lieu of CEMS to measure SO<sub>2</sub> at the inlet or outlet of the SO<sub>2</sub> control system. An initial stratification test is required to verify the adequacy of the Method 6B of appendix A of this part sampling location. The stratification test shall consist of three paired runs of a suitable SO<sub>2</sub> and CO<sub>2</sub> measurement train operated at the candidate location and a second similar train operated according to the procedures in § 3.2 and the applicable procedures in section 7 of Performance Specification 2 of appendix B of this part. Method 6B of appendix A of this part, Method 6A of appendix A of this part, or a combination of Methods 6 and 3 of appendix A of this part or Methods 6C and 3A of appendix A of this part are suitable measurement techniques. If Method 6B of appendix A of this part is used for the second train, sampling time and timer operation may be adjusted for the stratification test as long as an adequate sample volume is collected; however, both sampling trains are to be operated similarly. For the location to be adequate for Method 6B of appendix A of this part 24-hour tests, the mean of the absolute difference between the three paired runs must be less than 10 percent (0.10).

(e) The monitoring requirements of paragraphs (a) and (d) of this section shall not apply to affected facilities subject to § 60.42c(h) (1), (2), or (3) where the owner or operator of the affected facility seeks to demonstrate compliance with the SO<sub>2</sub> standards based on fuel supplier certification, as described under § 60.48c(f), as applicable.

(f) The owner or operator of an affected facility operating a CEMS pursuant to paragraph (a) of this section, or conducting as-fired fuel sampling pursuant to paragraph (d)(1) of this section, shall obtain emission data for at least 75 percent of the operating hours in at least 22 out of 30 successive steam generating unit operating days. If this minimum data requirement is not met with a single monitoring system, the owner or operator of the affected facility shall supplement

the emission data with data collected with other monitoring systems as approved by the Administrator.

**§ 60.47c Emission monitoring for particulate matter.**

(a) Except as provided in paragraphs (c), (d), (e), and (f) of this section, the owner or operator of an affected facility combusting coal, oil, or wood that is subject to the opacity standards under § 60.43c shall install, calibrate, maintain, and operate a continuous opacity monitoring system (COMS) for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system. The owner or operator of an affected facility subject to an opacity standard in § 60.43c(c) that is not required to use a COMS due to paragraphs (c), (d), (e), or (f) of this section that elects not to use a COMS shall conduct a performance test using Method 9 of appendix A-4 of this part and the procedures in § 60.11 to demonstrate compliance with the applicable limit in § 60.43c by April 29, 2011, within 45 days of stopping use of an existing COMS, or within 180 days after initial startup of the facility, whichever is later, and shall comply with either paragraphs (a)(1), (a)(2), or (a)(3) of this section. The observation period for Method 9 of appendix A-4 of this part performance tests may be reduced from 3 hours to 60 minutes if all 6-minute averages are less than 10 percent and all individual 15-second observations are less than or equal to 20 percent during the initial 60 minutes of observation.

(1) Except as provided in paragraph (a)(2) and (a)(3) of this section, the owner or operator shall conduct subsequent Method 9 of appendix A-4 of this part performance tests using the procedures in paragraph (a) of this section according to the applicable schedule in paragraphs (a)(1)(i) through (a)(1)(iv) of this section, as determined by the most recent Method 9 of appendix A-4 of this part performance test results.

(i) If no visible emissions are observed, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 12 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;

(ii) If visible emissions are observed but the maximum 6-minute average opacity is less than or equal to 5 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 6 calendar months from the date that the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later;

(iii) If the maximum 6-minute average opacity is greater than 5 percent but less than or equal to 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 3 calendar months from the date that

the most recent performance test was conducted or within 45 days of the next day that fuel with an opacity standard is combusted, whichever is later; or

(iv) If the maximum 6-minute average opacity is greater than 10 percent, a subsequent Method 9 of appendix A-4 of this part performance test must be completed within 45 calendar days from the date that the most recent performance test was conducted.

(2) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 of this part performance tests, elect to perform subsequent monitoring using Method 22 of appendix A-7 of this part according to the procedures specified in paragraphs (a)(2)(i) and (ii) of this section.

(i) The owner or operator shall conduct 10 minute observations (during normal operation) each operating day the affected facility fires fuel for which an opacity standard is applicable using Method 22 of appendix A-7 of this part and demonstrate that the sum of the occurrences of any visible emissions is not in excess of 5 percent of the observation period ( i.e. , 30 seconds per 10 minute period). If the sum of the occurrence of any visible emissions is greater than 30 seconds during the initial 10 minute observation, immediately conduct a 30 minute observation. If the sum of the occurrence of visible emissions is greater than 5 percent of the observation period ( i.e., 90 seconds per 30 minute period), the owner or operator shall either document and adjust the operation of the facility and demonstrate within 24 hours that the sum of the occurrence of visible emissions is equal to or less than 5 percent during a 30 minute observation ( i.e., 90 seconds) or conduct a new Method 9 of appendix A-4 of this part performance test using the procedures in paragraph (a) of this section within 45 calendar days according to the requirements in § 60.45c(a)(8).

(ii) If no visible emissions are observed for 10 operating days during which an opacity standard is applicable, observations can be reduced to once every 7 operating days during which an opacity standard is applicable. If any visible emissions are observed, daily observations shall be resumed.

(3) If the maximum 6-minute opacity is less than 10 percent during the most recent Method 9 of appendix A-4 of this part performance test, the owner or operator may, as an alternative to performing subsequent Method 9 of appendix A-4 performance tests, elect to perform subsequent monitoring using a digital opacity compliance system according to a site-specific monitoring plan approved by the Administrator. The observations shall be similar, but not necessarily identical, to the requirements in paragraph (a)(2) of this section. For reference purposes in preparing the monitoring plan, see OAQPS "Determination of Visible Emission Opacity from Stationary Sources Using Computer-Based Photographic Analysis Systems." This document is available from the U.S. Environmental



Protection Agency (U.S. EPA); Office of Air Quality and Planning Standards; Sector Policies and Programs Division; Measurement Policy Group (D243-02), Research Triangle Park, NC 27711. This document is also available on the Technology Transfer Network (TTN) under Emission Measurement Center Preliminary Methods.

(b) All COMS shall be operated in accordance with the applicable procedures under Performance Specification 1 of appendix B of this part. The span value of the opacity COMS shall be between 60 and 80 percent.

(c) Owners and operators of an affected facilities that burn only distillate oil that contains no more than 0.5 weight percent sulfur and/or liquid or gaseous fuels with potential sulfur dioxide emission rates of 26 ng/J (0.060 lb/MMBtu) heat input or less and that do not use a post-combustion technology to reduce SO<sub>2</sub> or PM emissions and that are subject to an opacity standard in § 60.43c(c) are not required to operate a COMS if they follow the applicable procedures in § 60.48c(f).

(d) Owners or operators complying with the PM emission limit by using a PM CEMS must calibrate, maintain, operate, and record the output of the system for PM emissions discharged to the atmosphere as specified in § 60.45c(c). The CEMS specified in paragraph § 60.45c(c) shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.

(e) Owners and operators of an affected facility that is subject to an opacity standard in § 60.43c(c) and that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO<sub>2</sub>, or carbon monoxide (CO) emissions, burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur, and is operated such that emissions of CO discharged to the atmosphere from the affected facility are maintained at levels less than or equal to 0.15 lb/MMBtu on a boiler operating day average basis is not required to operate a COMS. Owners and operators of affected facilities electing to comply with this paragraph must demonstrate compliance according to the procedures specified in paragraphs (e)(1) through (4) of this section; or

(1) You must monitor CO emissions using a CEMS according to the procedures specified in paragraphs (e)(1)(i) through (iv) of this section.

(i) The CO CEMS must be installed, certified, maintained, and operated according to the provisions in § 60.58b(i)(3) of subpart Eb of this part.

(ii) Each 1-hour CO emissions average is calculated using the data points generated by the CO CEMS expressed in parts per million by volume corrected to 3 percent oxygen (dry basis).

(iii) At a minimum, valid 1-hour CO emissions averages must be obtained for at least 90 percent of the operating hours on a 30-day rolling average basis. The 1-hour averages are calculated using the data points required in § 60.13(h)(2).

(iv) Quarterly accuracy determinations and daily calibration drift tests for the CO CEMS must be performed in accordance with procedure 1 in appendix F of this part.

(2) You must calculate the 1-hour average CO emissions levels for each steam generating unit operating day by multiplying the average hourly CO output concentration measured by the CO CEMS times the corresponding average hourly flue gas flow rate and divided by the corresponding average hourly heat input to the affected source. The 24-hour average CO emission level is determined by calculating the arithmetic average of the hourly CO emission levels computed for each steam generating unit operating day.

(3) You must evaluate the preceding 24-hour average CO emission level each steam generating unit operating day excluding periods of affected source startup, shutdown, or malfunction. If the 24-hour average CO emission level is greater than 0.15 lb/MMBtu, you must initiate investigation of the relevant equipment and control systems within 24 hours of the first discovery of the high emission incident and, take the appropriate corrective action as soon as practicable to adjust control settings or repair equipment to reduce the 24-hour average CO emission level to 0.15 lb/MMBtu or less.

(4) You must record the CO measurements and calculations performed according to paragraph (e) of this section and any corrective actions taken. The record of corrective action taken must include the date and time during which the 24-hour average CO emission level was greater than 0.15 lb/MMBtu, and the date, time, and description of the corrective action.

(f) An owner or operator of an affected facility that is subject to an opacity standard in § 60.43c(c) is not required to operate a COMS provided that the affected facility meets the conditions in either paragraphs (f)(1), (2), or (3) of this section.

(1) The affected facility uses a fabric filter (baghouse) as the primary PM control device and, the owner or operator operates a bag leak detection system to monitor the performance of the fabric filter according to the requirements in section § 60.48Da of this part.

(2) The affected facility uses an ESP as the primary PM control device, and the owner or operator uses an ESP predictive model to monitor the performance of the ESP developed in accordance and operated according to the requirements in section § 60.48Da of this part.

(3) The affected facility burns only gaseous fuels and/or fuel oils that contain no greater than 0.5 weight percent sulfur, and the owner or operator operates the unit according to a written site-specific monitoring plan approved by the permitting authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard. For testing performed as part of this site-specific monitoring plan, the permitting authority may require as an alternative to the notification and reporting requirements specified in §§ 60.8 and 60.11 that the owner or operator submit any deviations with the excess emissions report required under § 60.48c(c).

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009; 76 FR 3523, Jan. 20, 2011; 77 FR 9463, Feb. 16, 2012]

**§ 60.48c Reporting and recordkeeping requirements.**

(a) The owner or operator of each affected facility shall submit notification of the date of construction or reconstruction and actual startup, as provided by § 60.7 of this part. This notification shall include:

(1) The design heat input capacity of the affected facility and identification of fuels to be combusted in the affected facility.

(2) If applicable, a copy of any federally enforceable requirement that limits the annual capacity factor for any fuel or mixture of fuels under § 60.42c, or § 60.43c.

(3) The annual capacity factor at which the owner or operator anticipates operating the affected facility based on all fuels fired and based on each individual fuel fired.

(4) Notification if an emerging technology will be used for controlling SO<sub>2</sub> emissions. The Administrator will examine the description of the control device and will determine whether the technology qualifies as an emerging technology. In making this determination, the Administrator may require the owner or operator of the affected facility to submit additional information concerning the control device. The affected facility is subject to the provisions of § 60.42c(a) or (b)(1), unless and until this determination is made by the Administrator.

(b) The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits of § 60.42c, or the PM or opacity limits of § 60.43c, shall submit to the Administrator the performance test data from the initial and any subsequent performance tests and, if applicable, the performance evaluation of the CEMS and/or COMS using the applicable performance specifications in appendix B of this part.

(c) In addition to the applicable requirements in § 60.7, the owner or operator of an affected facility subject to the opacity limits in § 60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period and maintain records according to the requirements specified in paragraphs (c)(1) through (3) of this section, as applicable to the visible emissions monitoring method used.

(1) For each performance test conducted using Method 9 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(1)(i) through (iii) of this section.

(i) Dates and time intervals of all opacity observation periods;

(ii) Name, affiliation, and copy of current visible emission reading certification for each visible emission observer participating in the performance test; and

(iii) Copies of all visible emission observer opacity field data sheets;

(2) For each performance test conducted using Method 22 of appendix A-4 of this part, the owner or operator shall keep the records including the information specified in paragraphs (c)(2)(i) through (iv) of this section.

(i) Dates and time intervals of all visible emissions observation periods;

(ii) Name and affiliation for each visible emission observer participating in the performance test;

(iii) Copies of all visible emission observer opacity field data sheets; and

(iv) Documentation of any adjustments made and the time the adjustments were completed to the affected facility operation by the owner or operator to demonstrate compliance with the applicable monitoring requirements.

(3) For each digital opacity compliance system, the owner or operator shall maintain records and submit reports according to the requirements specified in the site-specific monitoring plan approved by the Administrator

(d) The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits, fuel oil sulfur limits, or percent reduction requirements under § 60.42c shall submit reports to the Administrator.

(e) The owner or operator of each affected facility subject to the SO<sub>2</sub> emission limits, fuel oil sulfur limits, or percent reduction requirements under § 60.42c shall keep records and submit reports as required under paragraph (d) of this section, including the following information, as applicable.

- (1) Calendar dates covered in the reporting period.
- (2) Each 30-day average SO<sub>2</sub> emission rate (ng/J or lb/MMBtu), or 30-day average sulfur content (weight percent), calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of corrective actions taken.
- (3) Each 30-day average percent of potential SO<sub>2</sub> emission rate calculated during the reporting period, ending with the last 30-day period; reasons for any noncompliance with the emission standards; and a description of the corrective actions taken.
- (4) Identification of any steam generating unit operating days for which SO<sub>2</sub> or diluent (O<sub>2</sub> or CO<sub>2</sub>) data have not been obtained by an approved method for at least 75 percent of the operating hours; justification for not obtaining sufficient data; and a description of corrective actions taken.
- (5) Identification of any times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and a description of corrective actions taken if data have been excluded for periods other than those during which coal or oil were not combusted in the steam generating unit.
- (6) Identification of the F factor used in calculations, method of determination, and type of fuel combusted.
- (7) Identification of whether averages have been obtained based on CEMS rather than manual sampling methods.
- (8) If a CEMS is used, identification of any times when the pollutant concentration exceeded the full span of the CEMS.
- (9) If a CEMS is used, description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specifications 2 or 3 of appendix B of this part.
- (10) If a CEMS is used, results of daily CEMS drift tests and quarterly accuracy assessments as required under appendix F, Procedure 1 of this part.
- (11) If fuel supplier certification is used to demonstrate compliance, records of fuel supplier certification as described under paragraph (f)(1), (2), (3), or (4) of this section, as applicable. In addition to records of fuel supplier certifications, the report shall include a certified statement signed by the owner or operator of the affected facility that the records of fuel supplier certifications submitted represent all of the fuel combusted during the reporting period.

(f) Fuel supplier certification shall include the following information:

(1) For distillate oil:

(i) The name of the oil supplier;

(ii) A statement from the oil supplier that the oil complies with the specifications under the definition of distillate oil in § 60.41c; and

(iii) The sulfur content or maximum sulfur content of the oil.

(2) For residual oil:

(i) The name of the oil supplier;

(ii) The location of the oil when the sample was drawn for analysis to determine the sulfur content of the oil, specifically including whether the oil was sampled as delivered to the affected facility, or whether the sample was drawn from oil in storage at the oil supplier's or oil refiner's facility, or other location;

(iii) The sulfur content of the oil from which the shipment came (or of the shipment itself); and

(iv) The method used to determine the sulfur content of the oil.

(3) For coal:

(i) The name of the coal supplier;

(ii) The location of the coal when the sample was collected for analysis to determine the properties of the coal, specifically including whether the coal was sampled as delivered to the affected facility or whether the sample was collected from coal in storage at the mine, at a coal preparation plant, at a coal supplier's facility, or at another location. The certification shall include the name of the coal mine (and coal seam), coal storage facility, or coal preparation plant (where the sample was collected);

(iii) The results of the analysis of the coal from which the shipment came (or of the shipment itself) including the sulfur content, moisture content, ash content, and heat content; and

(iv) The methods used to determine the properties of the coal.

(4) For other fuels:

(i) The name of the supplier of the fuel;

(ii) The potential sulfur emissions rate or maximum potential sulfur emissions rate of the fuel in ng/J heat input; and

(iii) The method used to determine the potential sulfur emissions rate of the fuel.

(g)(1) Except as provided under paragraphs (g)(2) and (g)(3) of this section, the owner or operator of each affected facility shall record and maintain records of the amount of each fuel combusted during each operating day.

(2) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility that combusts only natural gas, wood, fuels using fuel certification in § 60.48c(f) to demonstrate compliance with the SO<sub>2</sub> standard, fuels not subject to an emissions standard (excluding opacity), or a mixture of these fuels may elect to record and maintain records of the amount of each fuel combusted during each calendar month.

(3) As an alternative to meeting the requirements of paragraph (g)(1) of this section, the owner or operator of an affected facility or multiple affected facilities located on a contiguous property unit where the only fuels combusted in any steam generating unit (including steam generating units not subject to this subpart) at that property are natural gas, wood, distillate oil meeting the most current requirements in § 60.42C to use fuel certification to demonstrate compliance with the SO<sub>2</sub> standard, and/or fuels, excluding coal and residual oil, not subject to an emissions standard (excluding opacity) may elect to record and maintain records of the total amount of each steam generating unit fuel delivered to that property during each calendar month.

(h) The owner or operator of each affected facility subject to a federally enforceable requirement limiting the annual capacity factor for any fuel or mixture of fuels under § 60.42c or § 60.43c shall calculate the annual capacity factor individually for each fuel combusted. The annual capacity factor is determined on a 12-month rolling average basis with a new annual capacity factor calculated at the end of the calendar month.

(i) All records required under this section shall be maintained by the owner or operator of the affected facility for a period of two years following the date of such record.

(j) The reporting period for the reports required under this subpart is each six-month period. All reports shall be submitted to the Administrator and shall be postmarked by the 30th day following the end of the reporting period.

[72 FR 32759, June 13, 2007, as amended at 74 FR 5091, Jan. 28, 2009]

**Indiana Department of Environmental Management  
Office of Air Quality**

**Technical Support Document (TSD) for a Part 70 Minor Source and Minor  
Permit Modification**

**Source Description and Location**

Source Name:	GM Components Holdings
Source Location:	2100 E Lincoln Rd, Kokomo, IN 46904
County:	Howard
SIC Code:	3679, 3672
Operation Permit No.:	T067-23927-00061
Operation Permit Issuance Date:	December 22, 2008
Minor Source Modification No.:	067-33000-00061
Minor Permit Modification No.:	067- 33053-00061
Permit Reviewer:	Julie Alexander

**Source Definition**

This source, which produces electronic components principally for the automotive industry, consists of the following plants:

- (a) Plants 6, 7, and 9 (Plant ID 067-00022), located at 1800 - 2100 East Lincoln Road, Kokomo, Indiana;
- (b) Plants 8, and 10 (Plant ID 067-00023), located at 2150 East Lincoln Road, Kokomo, Indiana; and
- (c) Fab III (Plant ID 067-00051), located at 2033 East Boulevard Avenue, Kokomo, Indiana.

Since these plants are located on contiguous or adjacent properties, belong to the same industrial grouping, and are under common control of the same entity, IDEM, OAQ has determined that these plants are considered one (1) single source.

**Existing Approvals**

The source was issued Part 70 Operating Permit No. T067-23927-00061 on December 22, 2008. The source has since received the following approvals:

- (a) Administrative Amendment No. 067-28570-00061, issued on October 26, 2009
- (b) Significant Permit Modification No. 067-30666-00061, issued on November 21, 2011

**County Attainment Status**

The source is located in Howard County.



Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.
<sup>1</sup> Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM <sub>2.5</sub> .	

- (a) **Ozone Standards**  
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. Howard County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
  
- (b) **PM<sub>2.5</sub>**  
 Howard County has been classified as attainment for PM<sub>2.5</sub>. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM<sub>2.5</sub> emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM<sub>2.5</sub> significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.
  
- (c) **Other Criteria Pollutants**  
 Howard 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.

<b>Fugitive Emissions</b>
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Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

**Source Status**

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

<b>Pollutant</b>	<b>Emissions (ton/yr)</b>
PM	Less than 100
PM <sub>10</sub>	Less than 100
PM <sub>2.5</sub>	Less than 100
SO <sub>2</sub>	less than 100
VOC	Greater than 250
CO	Greater than 100, Less than 250
NO <sub>x</sub>	Greater than 100, Less than 250
GHGs	Greater than 100,000
Single Worst HAP (Hexane)	Less than 10
Total HAPs	Less than 25

- (a) This existing source is a major stationary source, under PSD (326 IAC 2-2), because a regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) This existing source is not a major source of HAPs, as defined in 40 CFR 63.2, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).
- (c) These emissions are based upon Part 70 Renewal T067-23927-00061 and Significant Permit Modification 067-30666-00061.

**Description of Proposed Modification**

The Office of Air Quality (OAQ) has reviewed a modification application, submitted by GM Components Holdings on January 29, 2013, relating to increasing the amount of solvent used in the three (3) existing TREK open-top vapor degreasers. Specifically, the maximum capacity of each of the TREK open-top vapor degreasers will increase from 275 gallons of solvent per year to 1706.38 gallons per year. The following is a list of the modified emission units:

- (e) Sources emitting less than five (5) tons per year of PM, ten (10) tons per year of VOC, one (1) ton per year of a single HAP, and two and a half (2.5) tons per year of any combination of HAPs:
  - (6) Three (3) solvent washers (TREK Industries Inc. DCC model); Two (2) approved for construction in 2007; one (1) identified as TREK 3 Washer (Plant 7), ID#6040052, exhausting to stack 9-Yn20-1; and one (1) identified as TREK 4 Washer (Plant 7), ID#6113861, no exhaust; with a maximum capacity of 1706.38 gallons per year for each unit; One(1) approved for construction in 1999; identified as TREK 1 Washer (Plant 7), ID#DE208552, no exhaust; with a maximum capacity of 1706.38 gallons per year;

**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.

**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.

<b>PTE Change of the Modified Process</b>			
<b>Pollutant</b>	<b>PTE Before Modification (ton/yr)</b>	<b>PTE After Modification (ton/yr)</b>	<b>Increase from Modification (ton/yr)</b>
PM	-	-	-
PM <sub>10</sub>	-	-	-
PM <sub>2.5</sub>	-	-	-
SO <sub>2</sub>	-	-	-
VOC	4.38	18.76	14.38
CO	-	-	-
NO <sub>x</sub>	-	-	-
Total HAPs	0.22	1.36	1.14

This source modification is subject to 326 IAC 2-7-10.5(e)(3)(B)(iii), because the modification that has a potential to emit "greater than ten (10) tons per year" but "less than twenty-five (25) tons per year". Additionally, the modification will be incorporated into the Part 70 Operating Permit through a minor permit modification issued pursuant to 326 IAC 2-7-12(b)(1)(B) because the modification does not require a "significant change to existing monitoring, reporting, or record keeping requirements in the Part 70 permit."

**Permit Level Determination – PSD and Emission Offset**

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 Minor Source and Minor Permit Modification, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process / Emission Unit	Potential to Emit (ton/yr)								
	PM	PM <sub>10</sub>	PM <sub>2.5</sub> *	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	GHGs	Total HAPs
Solvent Washer (TREK 3 Washer, ID# 6040052)	-	-	-	-	6.25	-	-	-	0.45
Solvent Washer (TREK 4 Washer, ID# 6113861)	-	-	-	-	6.25	-	-	-	0.45
Solvent Washer (TREK 1 Washer, ID# DE208552)	-	-	-	-	6.25	-	-	-	0.45
<b>Total for Modification</b>	-	-	-	-	<b>18.76</b>	-	-	-	<b>1.36</b>
Significant Level	25	15	10	40	40	100	40	75,000 CO <sub>2e</sub>	25

\*PM<sub>2.5</sub> listed is direct PM<sub>2.5</sub>.

The solvent washers clean circuit boards after soldering occurs. The solder machines are capable of producing a mix of circuit boards that need cleaning and do not require cleaning. Therefore, the modification does not debottleneck upstream or downstream processes. Additionally, the production of circuit boards is not expected to change as a result of this project; simply the mix of circuit board products, therefore an Actual to Projected Actual test was not conducted.

This modification to an existing major stationary source is not major because the emissions increase is less than the PSD significant levels. 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 new control equipment is considered federally enforceable only after issuance of this Part 70 permit renewal, and only to the extent that the effect of the control equipment is made practically enforceable in the permit.

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
	PM	PM <sub>10</sub> *	PM <sub>2.5</sub> **	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	GHGs	Worst Single HAP	Total HAPs
Wave Solder Machine (MW TECH 2000 HV, ID# 208554)	-	-	-	-	5.26	-	-	-	-	-
Wave Solder Machine (MW TECH 2000-1, ID# 6040058)	-	-	-	-	1.91	-	-	-	-	-
Wave Solder Machine (MW TECH 2000-2, ID# 6033795)	-	-	-	-	1.91	-	-	-	-	-
Wave Solder Machine (MW TECH 2000-3, ID# 6044245)	-	-	-	-	1.91	-	-	-	-	-

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
	PM	PM <sub>10</sub> *	PM <sub>2.5</sub> **	SO <sub>2</sub>	VOC	CO	NOx	GHGs	Worst Single HAP	Total HAPs
Wave Solder Machines ID#6049632 (Plt. 7, Dept. 7643)	-	-	-	-	161.97	-	-	-	-	-
Natural Gas Combustion	2.58	10.31	10.31	0.81	7.46	113.99	135.70	163,833	2.44	2.56
Fuel Oil Combustion	2.62	3.01	2.03	2.79	0.73	6.54	26.15	28,228	-	0.01
Semi-aqueous cleaner (Plt. 7, Dept. 850)	-	-	-	-	24.81	-	-	-	-	-
Acid mixing operations controlled by a fume scrubber	-	-	-	-	0.02	-	-	-	-	0.02
Clean Room Fab V	-	-	-	-	46.62	-	-	-	-	0.38
Clean Room Fab III	-	-	-	-	-	-	-	-	-	-
Insignificant Degreasing	-	-	-	-	0.49	-	-	-	-	9.72E-04
Insignificant Grinding, machining and trimming	9.01	9.01	9.01	-	-	-	-	-	-	-
Solvent Cleaners utilizing predominantly non- photochemically reactive compounds	-	-	-	-	< 65.7	-	-	-	-	< 2.5
Central Maintenance Shop Spray Booth	< 5	< 5	< 5	-	< 10	-	-	-	-	< 2.5
Wave solder machine (9502 E78 Lead Free, ID# 6035293)	-	-	-	-	< 10	-	-	-	-	< 2.5
Wave Solder Machine (GMT900Solder- 1, ID# 6035682)	-	-	-	-	0.26	-	-	-	-	-
Wave Solder Machine (GMT900Solder- 2, ID# 6051546)	-	-	-	-	0.26	-	-	-	-	-

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Renewal (tons/year)									
	PM	PM <sub>10</sub> *	PM <sub>2.5</sub> **	SO <sub>2</sub>	VOC	CO	NOx	GHGs	Worst Single HAP	Total HAPs
BAS + -1 Selective Solder ID#700018	12.38	12.38	12.38	-	12.38	-	-	-	-	4.34E-04
BAS + -2 Selective Solder (No ID#)										
Wave Solder Machine #6041410 (Plt 7, Dept. 874)										
Point Solder										
Solvent Washer (TREK 3 Washer, ID# 6040052)	-	-	-	-	6.25	-	-	-	-	0.45
Solvent Washer (TREK 4 Washer, ID# 6113861)	-	-	-	-	6.25	-	-	-	-	0.45
Solvent Washer (TREK 1 Washer, ID# DE208552)	-	-	-	-	6.25	-	-	-	-	0.45
APM Coater-1, ID# 6051615	-	-	-	-	0.56	-	-	-	-	-
APM Coater-2, #6051616										
BAS Coater-1, ID#6035513										
Coater (GMT900 Coater-1, ID# 6051554)	-	-	-	-	0.88	-	-	-	-	-
Coater (GMT900 Coater-2, ID# 6035675)	-	-	-	-	0.88	-	-	-	-	-
Diesel Emergency Generator	0.28	0.16	0.16	0.05	0.28	2.20	9.60	466	-	4.41E-03
Four dynamometer testing cells	0.09	0.09	0.09	-	2.43	64.7	1.68	-	-	-
Automotive Ignition Module Production Line	-	-	-	-	9.71	-	-	-	-	1.01
<b>Total PTE of Entire Source</b>	<b>31.95</b>	<b>39.96</b>	<b>38.98</b>	<b>3.65</b>	<b>385.19</b>	<b>187.43</b>	<b>173.14</b>	<b>192,527</b>	<b>2.44</b>	<b>12.84</b>
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000 CO <sub>2</sub> e	NA	NA

negl. = negligible

\*Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".

\*\*PM<sub>2.5</sub> listed is direct PM<sub>2.5</sub>.

Note: Source wide emissions are based upon the Technical Support Document for Part 70 Renewal No. T067-23927-00061 and Significant Permit Modification 067-30666-00061

### Federal Rule Applicability Determination

There are no new federal rules applicable to the source due to this modification:

**NSPS:**

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) applicable to this proposed modification.

**NESHAP:**

- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) applicable to this proposed modification.

### State Rule Applicability Determination

There are no new state rules applicable to the source due to the modification:

**326 IAC 2-1.1-5 (Nonattainment New Source Review)**

Nonattainment New Source Review applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

**326 IAC 2-2 and 2-3 (PSD and Emission Offset)**

PSD and Emission Offset applicability is discussed under the Permit Level Determination – PSD and Emission Offset section.

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

The operation of the three (3) TREK open-top vapor degreasers will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

### 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.

There are no new compliance determination and monitoring requirements applicable to the source due to this modification. Changes to the compliance determination and monitoring requirements resulting from updates to 326 IAC 8-3 are detailed in the Proposed Changes section of this document.

### Proposed Changes

While there are model updates applicable to this source, they are not being made as part of this Minor Source and Minor Permit Modification. A Part 70 Operating Permit Renewal was issued to

GM Components Holding LLC on December 22, 2008. Pursuant to 326 IAC 2-7, in order for a Part 70 operating permit renewal to be considered timely, and provide a permit shield, the application must be submitted nine (9) months before the expiration of the current permit. Therefore, the second operating permit renewal application for GM Components Holding LLC is in house and model updates will be made in the second Part 70 Operating Permit Renewal.

The changes listed below have been made to Part 70 Significant Permit Modification No. 067-30666-00061. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**:

**Changes Affecting Conditions Throughout the Permit**

- (a) The capacity of three (3) solvent washers (TREK Industries Inc. DCC model), identified in the permit as A.3(e)(6), has been updated to 1706.38 gallons per year from 275 gallons per year.

SECTION A

SOURCE SUMMARY

A.4 Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)][326 IAC 2-7-4(c)]  
[326 IAC 2-7-5(~~1415~~)]

---

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

- (a) \*\*\*
- (b) \*\*\*
- (c) \*\*\*
- (d) \*\*\*
- (e) Sources emitting less than five (5) tons per year of PM, ten (10) tons per year of VOC, one (1) ton per year of a single HAP, and two and a half (2.5) tons per year of any combination of HAPs [326 IAC 6-3-2]:
  - (1) \*\*\*
  - (2) \*\*\*
  - (3) \*\*\*
  - (4) \*\*\*
  - (5) \*\*\*
  - (6) Three (3) solvent washers (TREK Industries Inc. DCC model); Two (2) approved for construction in 2007; one (1) identified as TREK 3 Washer (Plant 7), ID#6040052, exhausting to stack 9-Yn20-1; and one (1) identified as TREK 4 Washer (Plant 7), ID#6113861, no exhaust; with a maximum capacity of **1706.38** ~~275~~-gallons per year for each unit; One(1) approved for construction in 1999; identified as TREK 1 Washer (Plant 7), ID#DE208552, no exhaust; with a maximum capacity of **1706.38** ~~275~~ gallons per year;
  - (7) \*\*\*
  - (8) \*\*\*
  - (9) \*\*\*



(f) \*\*\*

**Changes Specific to Section D:**

- (a) On March 1, 2013, 326 IAC 8-3, The Organic Solvent Degreasing Operations, was updated. Section D.5 has been updated to reflect these changes.

**SECTION D.5 EMISSIONS UNIT OPERATION CONDITIONS**

***	
(a)	***
(b)	***
(c)	***
(d)	***
(e)	Sources emitting less than five (5) tons per year of PM, ten (10) tons per year of VOC, one (1) ton per year of a single HAP, and two and a half (2.5) tons per year of any combination of HAPs [326 IAC 6-3-2]:
(1)	***
(2)	***
(3)	***
(4)	***
(5)	***
(6)	Three (3) solvent washers (TREK Industries Inc. DCC model); Two (2) approved for construction in 2007; one (1) identified as TREK 3 Washer (Plant 7), ID#6040052, exhausting to stack 9-Yn20-1; and one (1) identified as TREK 4 Washer (Plant 7), ID#6113861, no exhaust; with a maximum capacity of <del>275</del> <b>1706.38</b> gallons per year for each unit; One(1) approved for construction in 1999; identified as TREK 1 Washer (Plant 7), ID#DE208552, no exhaust; with a maximum capacity of <b>1706.38</b> <del>275</del> gallons per year for each unit;
(7)	***
(8)	***
(9)	***
(f)	***
***	

**D.5.3 Volatile Organic Compounds (VOC) [326 IAC 8-3-2]**

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations **Control Equipment and Operating Requirements**) for cold cleaning **degreasers without remote solvent reservoirs constructed after July 1, 1990:** ~~operations constructed after January 1, 1980, the owner or operator shall:~~

- (a) **The Permittee shall ensure the following control equipment and operating requirements are met:**

- (1a) Equip the ~~degreaser cleaner~~ with a cover.
  - (2b) Equip the ~~degreaser cleaner~~ with a facility for draining cleaned parts.
  - (3e) Close the degreaser cover whenever parts are not being handled in the ~~degreaser cleaner~~.
  - (4d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases.
  - (5e) Provide a permanent, conspicuous label **that lists the operating requirements in (a)(3), (a)(4), (a)(6), and (a)(7) of this condition** ~~summarizing the operation requirements.~~
  - (6) **Store waste solvent only in closed containers.**
  - (7f) ~~Store waste solvent only in covered containers and not dispose~~ **Prohibit the disposal or transfer** of waste solvent ~~or transfer it to another party~~, in such a manner that **could allow** greater than twenty percent (20%) of the waste solvent (by weight) ~~can~~ **to** evaporate into the atmosphere.
- (b) **The Permittee shall ensure the following additional control equipment and operating requirements are met:**
- (1) **Equip the degreaser with one (1) of the following control devices if the solvent is heated to a temperature of greater than forty-eight and nine-tenths (48.9) degrees Celsius (one hundred twenty (120) degrees Fahrenheit):**
    - (A) **A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.**
    - (B) **A water cover when solvent used is insoluble in, and heavier than, water.**
    - (C) **A refrigerated chiller.**
    - (D) **Carbon adsorption.**
    - (E) **An alternative system of demonstrated equivalent or better control as those outlined in (b)(1)(A) through (D) of this condition that is approved by the department. An alternative system shall be submitted to the U.S. EPA as a SIP revision.**
  - (2) **Ensure the degreaser cover is designed so that it can be easily operated with one (1) hand if the solvent is agitated or heated.**
  - (3) **If used, solvent spray:**
    - (A) **must be a solid, fluid stream; and**
    - (B) **shall be applied at a pressure that does not cause excessive splashing.**

~~D.5.4 Volatile Organic Compounds (VOC) [326 IAC 8-3-5]~~

~~Pursuant to 326 IAC 8-3-5 (Cold-Cleaner Degreaser Operation and Control) for cold-cleaning operations constructed after July 1, 1990:~~

- ~~(a) The owner or operator of a cold-cleaner degreaser facility shall ensure that the following control equipment requirements are met:~~

- ~~(1) Equip the degreaser with a cover. The cover must be designed so that it can be easily operated with one (1) hand if:
    - ~~(A) The solvent volatility is greater than two (2) kiloPascals (fifteen (15) millimeters of mercury or three tenths (0.3) pounds per square inch) measure at thirty eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F));~~
    - ~~(B) The solvent is agitated; or~~
    - ~~(C) The solvent is heated.~~~~
  - ~~(2) Equip the degreaser with a facility for draining cleaned articles. If the solvent volatility is greater than four and three tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six tenths (0.6) pounds per square inch) measured at thirty-eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), then the drainage facility must be internal such that articles are enclosed under the cover while draining. The drainage facility may be external for applications where an internal type cannot fit into the cleaning system.~~
  - ~~(3) Provide a permanent, conspicuous label which lists the operating requirements outlined in subsection (b).~~
  - ~~(4) The solvent spray, if used, must be a solid, fluid stream and shall be applied at a pressure which does not cause excessive splashing.~~
  - ~~(5) Equip the degreaser with one (1) of the following control devices if the solvent volatility is greater than four and three tenths (4.3) kiloPascals (thirty-two (32) millimeters of mercury or six tenths (0.6) pounds per square inch) measured at thirty eight degrees Celsius (38°C) (one hundred degrees Fahrenheit (100°F)), or if the solvent is heated to a temperature greater than forty-eight and nine-tenths degrees Celsius (48.9°C) (one hundred twenty degrees Fahrenheit (120°F)):
    - ~~(A) A freeboard that attains a freeboard ratio of seventy-five hundredths (0.75) or greater.~~
    - ~~(B) A water cover when solvent used is insoluble in, and heavier than, water.~~
    - ~~(C) Other systems of demonstrated equivalent control such as a refrigerated chiller or carbon adsorption. Such systems shall be submitted to the U.S. EPA as a SIP revision.~~~~
- ~~(b) The owner or operator of a cold cleaning facility shall ensure that the following operating requirements are met:~~
- ~~(1) Close the cover whenever articles are not being handled in the degreaser.~~
  - ~~(2) Drain cleaned articles for at least fifteen (15) seconds or until dripping ceases.~~
  - ~~(3) Store waste solvent only in covered containers and prohibit the disposal or transfer of waste solvent in any manner in which greater than twenty percent (20%) of the waste solvent by weight could evaporate.~~

### Conclusion and Recommendation

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. 067-33000-00061 and Minor Permit Modification No. 067-33053-00061. The staff recommend to the Commissioner that this Part 70 Minor Source and Minor Permit Modification be approved.

### IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Julie Alexander at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCM 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317)233-1782 or toll free at 1-800-451-6027 extension 3-1782.
- (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](http://www.idem.in.gov)

Appendix A: Emission Calculations

Potential to Emit After Issuance of Permit

Company Name: GM Components Holdings LLC

Address City IN Zip: 2033 East Boulevard Street

Minor Source Modification No.: 067-33000-00061

Minor Permit Modification No.: 067-33053-00061

Reviewer: Julie Alexander

Date: February 01, 2013

Process/Emission Unit	PM	PM10	PM2.5	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	GHGs	Hexane	HAPs
Wave Solder Machine (MW TECH 2000 HV, ID# 208554)	-	-	-	-	5.26	-	-	-	-	-
Wave Solder Machine (MW TECH 2000-1, ID# 6040058)	-	-	-	-	1.91	-	-	-	-	-
Wave Solder Machine (MW TECH 2000-2, ID# 6033795)	-	-	-	-	1.91	-	-	-	-	-
Wave Solder Machine (MW TECH 2000-3, ID# 6044245)	-	-	-	-	1.91	-	-	-	-	-
Wave Solder Machines ID#6049632 (Plt. 7, Dept. 7643)	-	-	-	-	161.97	-	-	-	-	-
Natural Gas Combustion	2.58	10.31	10.31	0.81	7.46	113.99	135.70	163,833	2.44	2.56
Fuel Oil Combustion	2.62	3.01	2.03	2.79	0.73	6.54	26.15	28,228	-	0.01
Semi-aqueous cleaner (Plt. 7, Dept. 850)	-	-	-	-	24.81	-	-	-	-	-
Acid mixing operations controlled by a fume scrubber	-	-	-	-	0.02	-	-	-	-	0.02
Clean Room Fab V	-	-	-	-	46.62	-	-	-	-	0.38
Clean Room Fab III	-	-	-	-	0.49	-	-	-	-	9.72E-04
Insignificant Degreasing	-	-	-	-	-	-	-	-	-	-
Insignificant Grinding, machining and trimming	9.01	9.01	9.01	-	-	-	-	-	-	-
Solvent Cleaners utilizing predominantly non-photochemically reactive compounds	-	-	-	-	< 65.7	-	-	-	-	< 2.5
Central Maintenance Shop Spray Booth	< 5	< 5	< 5	-	< 10	-	-	-	-	< 2.5
Wave solder machine (9502 E78 Lead Free, ID# 6035293)	-	-	-	-	< 10	-	-	-	-	< 2.5
Wave Solder Machine (GMT900Solder-1, ID# 6035682)	-	-	-	-	0.26	-	-	-	-	-
Wave Solder Machine (GMT900Solder-2, ID# 6051546)	-	-	-	-	0.26	-	-	-	-	-
BAS + -1 Selective Solder ID#700018	12.38	12.38	12.38	-	12.38	-	-	-	-	4.34E-04
BAS + -2 Selective Solder (No ID#)										
Wave Solder Machine #6041410 (Plt 7, Dept. 874)										
Point Solder	-	-	-	-	6.25	-	-	-	-	0.45
Solvent Washer (TREK 3 Washer, ID# 6040052)	-	-	-	-	6.25	-	-	-	-	0.45
Solvent Washer (TREK 4 Washer, ID# 6113861)	-	-	-	-	6.25	-	-	-	-	0.45
Solvent Washer (TREK 1 Washer, ID# DE208552)	-	-	-	-	6.25	-	-	-	-	0.45
APM Coater-1, ID# 6051615	-	-	-	-	0.56	-	-	-	-	-
APM Coater-2, #6051616										
BAS Coater-1, ID#6035513										
Coater (GMT900 Coater-1, ID# 6051554)	-	-	-	-	0.88	-	-	-	-	-
Coater (GMT900 Coater-2, ID# 6035675)	-	-	-	-	0.88	-	-	-	-	-
Diesel Emergency Generator	0.28	0.16	0.16	0.05	0.28	2.20	9.60	466	-	4.41E-03
Four dynamometer testing cells	0.087	0.087	0.087	-	2.43	64.7	1.68	-	-	-
Automotive Ignition Module Production Line	-	-	-	-	9.71	-	-	-	-	1.01
<b>Total</b>	<b>31.95</b>	<b>39.96</b>	<b>38.98</b>	<b>3.65</b>	<b>385.19</b>	<b>187.43</b>	<b>173.14</b>	<b>192,527</b>	<b>2.44</b>	<b>12.84</b>

Note: Source wide emissions are based upon the Technical Support Document for Part 70 Renewal No. T067-23927-00061 and Significant Permit Modification 067-30666-00061

**2 TREK Solvent Washers**  
**Company Name: GM Components Holdings LLC**  
**Address City IN Zip: 2033 East Boulevard Street**  
**Minor Source Modification No.: 067-33000-00061**  
**Minor Permit Modification No.: 067-33053-00061**  
**Reviewer: Julie Alexander**  
**Date: February 01, 2013**

**1. Before Modification**

Emission Unit	Density (lbs/gal)	Weight % Organics	Maximum Usage (gal/yr)	Pounds VOC per gallon of Material (lbs/gal)	PTE of VOC (lbs/yr)	PTE of VOC (tons/yr)	PTE of VOC (lbs/day)	Pounds HAPs per gallon of Material (lbs/gal)	PTE of HAPs (lbs/yr)	PTE of HAPs (tons/yr)	PTE of HAPs (lbs/day)
3 TREK Solvent Washers											
<b>TREK 3 (ID# 6040052)</b>	10.63	100%	<b>275.00</b>	10.63	2923.25	<b>1.46</b>	8.01	0.53	145.75	<b>0.07</b>	0.40
<b>TREK 4 (ID# 6113861)</b>	10.63	100%	<b>275.00</b>	10.63	2923.25	<b>1.46</b>	8.01	0.53	145.75	<b>0.07</b>	0.40
<b>TREK 1 Washer, ID# DE208552</b>	10.63	100%	<b>275.00</b>	10.63	2923.25	<b>1.46</b>	8.01	0.53	145.75	<b>0.07</b>	0.40
Pounds of VOC per Gallon of Material = Density (lbs/gal) x Weight % Organics											
PTE of VOC (lbs/yr) = Pounds of VOC per Gallon of Material (lbs/gal) x Max. Usage (gal/yr)											

**2. After Modification**

Emission Unit	Density (lbs/gal)	Weight % Organics	Maximum Usage (gal/day)	Maximum Usage (gal/yr)	Pounds VOC per gallon of Material (lbs/gal)	PTE of VOC (lbs/yr)	PTE of VOC (tons/yr)	PTE of VOC (lbs/day)	Pounds HAPs per gallon of Material (lbs/gal)	PTE of HAPs (lbs/yr)	PTE of HAPs (tons/yr)	PTE of HAPs (lbs/day)
3 TREK Solvent Washers												
<b>TREK 3 (ID# 6040052)</b>	10.63	100%	4.68	<b>1706.38</b>	7.33	12507.73	<b>6.25</b>	34.27	0.53	904.38	<b>0.45</b>	2.48
<b>TREK 4 (ID# 6113861)</b>	10.63	100%	4.68	<b>1706.38</b>	7.33	12507.73	<b>6.25</b>	34.27	0.53	904.38	<b>0.45</b>	2.48
<b>TREK 1 Washer, ID# DE208552</b>	10.63	100%	4.68	<b>1706.38</b>	7.33	12507.73	<b>6.25</b>	34.27	0.53	904.38	<b>0.45</b>	2.48
Pounds of VOC per Gallon of Material = Density (lbs/gal) x Weight % Organics												
PTE of VOC (lbs/yr) = Pounds of VOC per Gallon of Material (lbs/gal) x Max. Usage (gal/yr)												

**3. Change in PTE**

Pollutant	PTE Before Modification (ton/yr)	PTE After Modification (ton/yr)	Increase from Modification (ton/yr)
VOC	4.38	18.76	14.38
Total HAPs	0.22	1.36	1.14

Appendix A: Emission Calculations

**4 TECH 2000 Wave Solder Machines and 1 TBC Wave Solder Machine**  
**GMT Wave Solders and Coaters**  
**Company Name: GM Components Holdings LLC**  
**Address City IN Zip: 2033 East Boulevard Street**  
**Minor Source Modification No.: 067-33000-00061**  
**Minor Permit Modification No.: 067-33053-00061**  
**Reviewer: Julie Alexander**  
**Date: February 01, 2013**

	Number of Units per hour	lb Flux/Unit	lb VOC/lb Flux	PTE of VOC (lbs/hr)	PTE of VOC (lbs/yr)	PTE of VOC (tons/yr)	PTE of VOC (lbs/day)
4 TECH 2000 Wave Solder Machines and 1 TBC Wave Solder Machine							
MW TECH 2000 HV (ID# 208554)	275	0.0045	0.9697	1.20	10512.03	5.26	28.80
MW TECH 2001-1 (ID# 6040058)	100	0.0045	0.9697	0.44	3822.56	1.91	10.47
MW TECH 2001-2 (ID# 6033795)	100	0.0045	0.9697	0.44	3822.56	1.91	10.47
MW TECH 2001-3 (ID# 6044245)	100	0.0045	0.9697	0.44	3822.56	1.91	10.47
PTE of VOC (lbs/hr) = Number of Units per Hour x Pounds of Flux per Unit x Pounds VOC per Pounds of Flux							

Emission Unit	Number of Boards per Hour	lb VOC/Board	PTE of VOC (lbs/hr)	PTE of VOC (lbs/yr)	PTE of VOC (tons/yr)	PTE of VOC (lbs/day)
GMT Wave Solders and Coaters						
GMT900Solder-1 (ID# 6035682)	120	0.0005	0.06	525.6	0.26	1.44
GMT900Solder-2 (ID# 6051546)	120	0.0005	0.06	525.6	0.26	1.44
GMT900 Coater-1 (ID# 6051554)	400	0.0005	0.2	1752	0.88	4.80
GMT900 Coater-2 (ID# 6035675)	400	0.0005	0.2	1752	0.88	4.80
PTE of VOC (lbs/hr) = Number of Boards per Hour x Pounds of VOC per Board						

	PTE of VOC (lbs/yr)	PTE of VOC (tons/yr)
Total VOC Emissions	51550.36	25.78

\* The TECH 2000 factors (both high volume and low volume) are based on historic mass balance calculations of existing TECH 2000 units at the Kokomo plant. These factors were computed by dividing the quantity of solvent lost (determined by mass balance) by actual production over than time.

\* The VOC emission factors for the GMT Wave Solder Machines and GMT 900 Coaters were derived in a similar manner at the Delphi facility in Milwaukee, WI. The GMT units that will be installed at the Delphi Kokomo plant are being moved from the Milwaukee plant.

Note: Emissions are based upon the Technical Support Document for Part 70 Renewal No. T067-23927-00061

**Appendix A: Emission Calculations**

4 of 13 TSD App A

**VOC Emissions**

**Wave Solder Machine ID# 6049632**

**Company Name: GM Components Holdings LLC**

**Address City IN Zip: 2033 East Boulevard Street**

**Minor Source Modification No.: 067-33000-00061**

**Minor Permit Modification No.: 067-33053-00061**

**Reviewer: Julie Alexander**

**Date: February 01, 2013**

*Material	Density (lbs/gal)	Weight % Volatile (H <sub>2</sub> O & Organics)	Weight % Water	Weight % Organics	Maximum Throughput (unit/hr)	Maximum Usage (gal/unit)	Pounds VOC per gallon of Material	PTE of VOC (lbs/hr)	PTE of VOC (lbs/day)	PTE of VOC (tons/yr)
Thinner - Isopropyl Alcohol	6.59	100.00%	0.0%	100.0%	500	0.00044	6.59	1.45	34.80	6.35
Flux - Kester 958	6.72	91.16%	0.0%	91.2%	500	0.0116	6.13	35.53	852.73	155.6
<b>Total</b>								<b>36.98</b>		<b>162.0</b>

\* The thinner or flux applied does not contain any HAP.

**METHODOLOGY**

Pounds of VOC per Gallon of Material = Density (lbs/gal) x Weight % Organics

PTE of VOC (lbs/hr) = Pounds of VOC per Gallon of Material (lb/gal) x Max. Throughput (unit/hr) x Max. Usage (gal/unit)

PTE of VOC (lbs/day) = Pounds of VOC per Gallon of Material (lb/gal) x Max. Throughput (unit/hr) x Max. Usage (gal/unit) x 24 hr/day

PTE of VOC (tons/yr) = Pounds of VOC per Gallon of Material (lb/gal) x Max. Throughput (unit/hr) x Max. Usage (gal/unit) x 8760 hr/yr x 1 ton/2000 lbs

Note: Emissions are based upon the Technical Support Document for Part 70 Renewal No. T067-23927-00061



Appendix A: Emission Calculations

HAPs Emissions

Acid Mixing

Company Name: GM Components Holdings LLC

Address City IN Zip: 2033 East Boulevard Street

Minor Source Modification No.: 067-33000-00061

Minor Permit Modification No.: 067-33053-00061

Reviewer: Julie Alexander

Date: February 01, 2013

Major emission events will be each filling of overhead 7000 gallon tanks which will displace about equivalent volumes of chemical vapor  
 Calculate chemical loss to scrubber from tank vapor displacements  
 Use a 95% efficiency for vapor absorption by the scrubber

Compound	Vapor Density*	Vapor Pressure	Sp. Gr.
Hydrofluoric Acid	2.21		25
Nitric Acid	2		57 1.51
Phosphoric Acid	3.4		0.03 1.58
Sulfuric Acid	3.4		1 1.84

\*compared to vapor density of air

PV=nRT P=1 atm; V=15140 lit; T=398°K; R=0.082 n=pound-moles of chemical in vapor

MAYS Data for delivered volumes of material in 2010									
	gallons delivered*	liters (V)	n=Pv/RT	Molec Wgt	grams vapor	pounds vapor	Scrubbed Factor (1 - 0.95)	Annual Pounds	Annual Tons
HF	4221	15976	490	20	9791	22	0.05	1.1	0.0005
HNO3	3672	13899	426	63	26829	59	0.05	3.0	0.0015
Acetic	2416	9145	280	60	16812	37	0.05	1.9	0.0009
H3PO4	0	0	0	98	0	0	0.05	0.0	0.0000
H2SO4	13805	52252	1601	98	156903	346	0.05	17.3	0.0086
* = assumed to be equivalent to volume of vapor displaced from inside large tanks during fill									0.0116

Wet scrubber controlling acid mixing tanks and mix hoods is a 25,000 CFM unit (1.314 x 10<sup>10</sup> CF per year)

Data from GMCH Title V Permit for Acid Mixing Facility										annual grains vapor fed to scrubber	annual grains vapor divided by annual flow to scrubber (gr/cf)
	gallons throughput*	liters (V)	n=Pv/RT	Molec Wgt	grams vapor	pounds vapor	Scrubbed Factor (1 - 0.95)	Annual Pounds	Annual Tons		
HF	8000	30280	928	20	18556	41	0.05	2.0	0.0010	286109	2.17739E-05
HNO3	7400	28009	858	63	54068	119	0.05	6.0	0.0030	833649	6.34436E-05
Acetic	4100	15519	476	60	28530	63	0.05	3.1	0.0016	439892	3.34773E-05
H3PO4	3400	12869	394	98	38643	85	0.05	4.3	0.0021	595821	4.53441E-05
H2SO4	20000	75700	2320	98	227313	501	0.05	25.0	0.0125	3504832	0.00026673
* = assumed to be equivalent to volume of vapor displaced from inside large tanks during fill						809			0.0202	5660304	0.000430769

Note: Emissions are based upon the Technical Support Document for Significant Permit Modification 067-30666-00061

**Appendix A: Emission Calculations**  
**VOC and HAPs Emissions**  
**Semi-Aqueous Cleaner ID# 6040222**  
**Degreasing system EU\_DG**  
**Company Name: GM Components Holdings LLC**  
**Address City IN Zip: 2033 East Boulevard Street**  
**Minor Source Modification No.: 067-33000-00061**  
**Minor Permit Modification No.: 067-33053-00061**  
**Reviewer: Julie Alexander**  
**Date: February 01, 2013**

**1. Type of degreaser: Conveyorized Degreaser**

**2. Potential Uncontrolled Emissions (worst-case scenario: assume all the VOC used in this process is emitted):**

Solvent Used	Density (Lb/Gal)	Weight % Volatile (H <sub>2</sub> O & Organics)	Weight % Water	Weight % VOC	Maximum Usage (gal/hour)	Pounds VOC per Gallon of Solvent	Potential VOC (lbs/hr)	Potential VOC (tons/yr)	Weight % HAPs	Potential HAPs (lbs/hr)	Potential HAPs (ton/yr)
BIO ACT EC 7R	7.08	100.00%	0.0%	100.0%	0.8	7.08	5.66	24.81	0.00	0.00	0.00
<b>Total</b>								<b>24.81</b>			<b>0.00</b>

Source has indicated that 30% of the solvent will be caught by the build-in decanter for reuse and 20% of solvent will be carried to the waste water treatment plant. Therefore, the emission calculations here only represent the worst case scenario.

**METHODOLOGY**

Weight % VOC = Weight % Volatile - Weight % Water

Pounds of VOC per Gallon Coating = Density (lb/gal) \* Weight % VOC

Potential VOC (lbs/hr) = Pounds VOC per Gallon of Solvent (lb/gal) \* Maximum Usage (gals/hr)

Potential VOC (tons/yr) = Pounds VOC per Gallon of Solvent (lb/gal) \* Maximum Usage (gal/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

Potential HAPs (lbs/hr) = Max. Usage (gal/hr) \* Density (lbs/gal) \* (Weight % HAPs)

Potential HAPs (tons/yr) = Max. Usage (gal/hr) \* Density (lbs/gal) \* (Weight % HAPs) \* (8760 hrs/yr) \* (1 ton/2000 lbs)

Note: Emissions are based upon the Technical Support Document for Significant Permit Modification 067-30666-00061

**Appendix A: Emission Calculations**  
**VOC and HAP Emissions**  
**From the Climate Controlled Clean Rooms**  
**Company Name: GM Components Holdings LLC**  
**Address City IN Zip: 2033 East Boulevard Street**  
**Minor Source Modification No.: 067-33000-00061**  
**Minor Permit Modification No.: 067-33053-00061**  
**Reviewer: Julie Alexander**  
**Date: February 01, 2013**

Material	Density (lbs/gal)	Weight % Organics	Maximum Usage (gal/hr)	Pounds VOC per gallon of Material (lbs/gal)	PTE of VOC (lbs/hr)	PTE of VOC (lbs/day)	PTE of VOC (tons/yr)	Methanol Content (%)	PTE of Methanol (tons/yr)	Trichloroethane Content (%)	PTE of Trichloroethane (tons/yr)
SPR 660-1.0 PHOTORESIST	8.96	48%	0.0112	4.30	0.05	1.16	0.21	0%	0.00	0%	0.00
N-BUTYL ACETATE	7.36	100%	0.0420	7.36	0.31	7.41	1.35	0%	0.00	0%	0.00
ISOPROPYL ALCOHOL	6.59	95%	0.6693	6.26	4.19	101	18.3	0%	0.00	0%	0.00
ACCUSPIN ARSENIC AS-120	7.02	95%	0.0033	6.67	0.02	0.54	0.10	0%	0.00	0%	0.00
P-5 4 LITER BOTTLE	7.26	90%	0.0262	6.53	0.17	4.11	0.75	5.00%	0.042	0%	0.00
TEOS	7.84	60%	0.0213	4.70	0.10	2.40	0.44	0%	0.00	0%	0.00
POLYIMIDE PI 2737	8.34	65%	0.0032	5.42	0.02	0.41	0.08	0%	0.00	0%	0.00
PI DEVELOPER	8.31	100%	0.0348	8.31	0.29	6.94	1.27	0%	0.00	0%	0.00
TRICHLOROETHANE (1000cc)	10.8	100%	0.0003	10.8	0.00	0.07	0.01	0%	0.00	45%	0.006
S1811 PHOTO RESIST	8.51	75%	0.2239	6.38	1.43	34.3	6.26	0%	0.00	0%	0.00
S1822 PHOTO RESIST 1G	8.51	66%	0.0378	5.61	0.21	5.10	0.93	0%	0.00	0%	0.00
EBR-10A (EDGE BEAD REMOVER)	8.01	100%	0.4559	8.01	3.65	87.6	16.0	0%	0.00	0%	0.00
TRICHLOROETHANE (1500cc)	11.1	100%	0.0034	11.1	0.04	0.91	0.17	0%	0.00	100%	0.166
N-METHYL-2-PYRROLIDONE	8.57	100%	0.0137	8.57	0.12	2.82	0.51	0%	0.00	0%	0.00
HEXAMETHYLDISILAZANE, HMDS	6.41	100%	0.1011	6.41	0.65	15.5	2.84	0%	0.00	0%	0.00
SPIN-ON-GLASS, 211	6.92	95%	0.0215	6.58	0.14	3.39	0.62	0%	0.00	0%	0.00
S1818-J2 PHOTO RESIST 1G	8.34	68%	0.0751	5.67	0.43	10.2	1.87	0%	0.00	0%	0.00
<b>Total VOC/HAP Input</b>					<b>11.8</b>		<b>51.7</b>		<b>0.04</b>		<b>0.17</b>
<b>*The VOC/HAP in Shipped Out Waste</b>							<b>28.4</b>		<b>0.00</b>		<b>0.00</b>
<b>Total PTE of VOC/HAP Before Control</b>							<b>23.3</b>		<b>0.04</b>		<b>0.17</b>

\*This information is provided by the source.

Note: Fab III is also controlled by 4 wet scrubbers, which provide 80% capture efficiency and 60% destruction efficiency. Since the PTE of VOC before control is less than 25 tons/yr, the operation of the control devices is not required.

Note: Fab V is also controlled by 2 wet scrubbers, which provide 80% capture efficiency and 60% destruction efficiency. Since the PTE of VOC before control is less than 25 tons/yr, the operation of the control devices is not required.

Note: Emissions are based upon the Technical Support Document for Significant Permit Modification 067-30666-00061

#### METHODOLOGY

Pounds of VOC per Gallon of Material = Density (lbs/gal) x Weight % Organics

PTE of VOC (lbs/hr) = Pounds of VOC per Gallon of Material (lbs/gal) x Max. Usage (gal/hr)

PTE of VOC (lbs/day) = Pounds of VOC per Gallon of Material (lbs/gal) x Max. Usage (gal/hr) x 24 hr/day

PTE of VOC (tons/yr) = Pounds of VOC per Gallon of Material (lbs/gal) x Max. Usage (gal/hr) x 8760 hr/yr x 1 ton/2000 lbs

PTE of HAP (tons/yr) = Density (lbs/gal) x Max. Usage (gal/hr) x HAP Content (%) x 8760 hr/yr x 1 ton/2000 lbs

Total PTE of VOC/HAP Before Control = Total VOC/HAP Input (tons/yr) - The VOC/HAP in Shipped-Out Waste (tons/yr)

## Appendix A: Emissions Calculations

## VOC and Particulate

APM Coater-1, APM Coater-2 &amp; BAS Coater-1, ID#6035513

Company Name: GM Components Holdings LLC

Address City IN Zip: 2033 East Boulevard Street

Minor Source Modification No.: 067-33000-00061

Minor Permit Modification No.: 067-33053-00061

Reviewer: Julie Alexander

Date: February 01, 2013

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	lb VOC/gal solids	Transfer Efficiency
DOW 1953	8.09	3.00%	0.0%	3.0%	0.0%	97.00%	0.0035060	75.000	0.2427	0.2427	0.0638	1.53	0.2795	0.00	0.25	100%
DOW 1953	8.09	3.00%	0.0%	3.0%	0.0%	97.00%	0.0035060	75.000	0.2427	0.2427	0.0638	1.53	0.2795	0.00	0.25	100%

## State Potential Emissions

Add worst case coating to all solvents

0.13

3.06

0.5590

0.00

	Units/hr	No. of Sides	Coating Volume (ml/side)	Gallon / ml	Flux Density (lb/gal)	VOC Fraction	lb VOC/ hr	ton VOC / yr	Solids Fraction	Transfer Efficiency	lb (PM/PM10/PM2.5) / hr	ton (PM/PM10/PM2.5) / yr	HAP Fraction	Transfer Efficiency	lb HAP / hr	ton HAP / yr
BAS + -1 Selective Solder ID#700018	75	2	5	0.000264	6.26	0.95	1.1775	5.1575	0.05	90%	6.20E-03	0.0272	0.0	99.9%	0.00E+00	0.00E+00
BAS + -2 Selective Solder (No ID#)	75	2	5	0.000264	6.26	0.95	1.1775	5.1575	0.05	90%	6.20E-03	0.0272	0.0	99.9%	0.00E+00	0.00E+00
Wave Solder Machine #6041410 (Plt 7, Dept. 874)	75	1	2	0.000264	6.26	0.95	0.2355	1.0315	0.05	90%	1.20E-03	0.0053	0.4	99.9%	9.92E-05	4.34E-04
Point Solder	75	1	2	0.000264	6.26	0.95	0.2355	1.0315	0.05	90%	1.24E-02	0.0543	0.0	99.9%	0.00E+00	0.00E+00

Total VOC emissions (lb/hr)	2.826
Total PM/PM10/PM2.5 emissions (lb/hr)	0.026
Total HAP (Lead) emissions (lb/hr)	9.92E-05

Total VOC emissions (ton/yr)	12.378
Total PM/PM10/PM2.5 emissions (ton/yr)	0.114
Total HAP (Lead) emissions (ton/yr)	4.34E-04

Note: Emissions are based upon the Technical Support Document for Part 70 Renewal No. T067-23927-00061

## METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1 - Volume % water)

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

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

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

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

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

lb VOC/hr = (units/hr) x (number of sides) x (coating volume) x (0.000264 gal/ml) x (VOC Fraction) x (Flux Density)

ton VOC/yr = (lb VOC/hr) x (8,760 hr/yr) x (1 ton/2,000 lb)

100% flashoff of VOC was assumed.

lb PM / hr = (units/hr) x (number of sides) x (coating volume) x (0.000264 gal/ml) x (Solids Fraction) x (Flux Density) x (1 - transfer efficiency)

ton PM / yr = (lb PM/hr) x (8,760 hr/yr) x (1 ton/2,000 lb)

The transfer efficiency was estimated. The Permittee submitted PM emission data for the wave soldering unit. This emission data is consistent with a solids transfer efficiency of 93%. As a conservative estimate, a solids transfer efficiency of 90% was used to estimate PM/PM10 emissions.

All particulate matter emissions are assumed to be PM10 due to the nature of the operation.

lb HAP / hr = (units/hr) x (number of sides) x (coating volume) x (0.000264 gal/ml) x (Solids Fraction) x (Flux Density) x (1 - transfer efficiency)

ton HAP / yr = (lb HAP/hr) x (8,760 hr/yr) x (1 ton/2,000 lb)

The transfer efficiency was estimated. The Permittee submitted HAP emission data for the wave soldering unit. This emission data is consistent with a solids transfer efficiency of 99.998%. As a conservative estimate, a solids transfer efficiency of 99.9% was used to estimate HAP (Lead) emissions.

The wave solder unit is the only source of HAP emissions.

**Appendix A: Emissions Calculations**

**Natural Gas Combustion Only**

**MM BTU/HR <100**

**Company Name: GM Components Holdings LLC**

**Address City IN Zip: 2033 East Boulevard Street**

**Minor Source Modification No.: 067-33000-00061**

**Minor Permit Modification No.: 067-33053-00061**

**Reviewer: Julie Alexander**

**Date: February 01, 2013**

Heat Input Capacity		Potential Throughput	
MMBtu/hr		MMCF/yr	
(1)	309.82	(1)	2714.04
(2)	41.80	(2)	366.17

Emission Factor (lb/MMCF)	Pollutant						
	PM*	PM10*	PM2.5	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission (1)	2.58	10.31	10.31	0.81	135.70	7.46	113.99
(tons/yr) (2)	0.35	1.39	1.39	0.11	18.31	1.01	15.38

Emission Factor (lb/MMcf)	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission (1)	2.85E-03	1.63E-03	1.02E-01	2.44E+00	4.61E-03
(tons/yr) (2)	3.84E-04	2.20E-04	1.37E-02	3.30E-01	6.22E-04

Emission Factor (lb/MMcf)	HAPs - Metals					Total HAPs
	Lead	Cadmium	Chromium	Manganese	Nickel	
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission (1)	6.79E-04	1.49E-03	1.90E-03	5.16E-04	2.85E-03	2.56E+00
(tons/yr) (2)	9.15E-05	2.01E-04	2.56E-04	6.96E-05	3.84E-04	3.46E-01

Emission Factor in lb	Greenhouse Gas		
	CO2	CH4	N2O
	120,000	2.3	2.2
Potential Emission (1)	162,842	3.1	3.0
in tons/yr (2)	21,970	4.21E-01	4.03E-01
Summed Potential (1)	162,849		
Emissions in (2)	21,971		
CO2e Total in (1)	163,833		
tons/yr (2)	22,104		

**Notes & Methodology**

Note: Emissions are based upon the Technical Support Document for Part 70 Renewal No. T067-23927-00061

\*PM and PM10 emission factors are combined filterable and condensable PM and PM10, respectively.

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

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03

(SUPPLEMENT D 3/98)

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

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox burner is 0.64.

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

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

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) +

Each of the natural gas combustion units have individual capacities of less than 100 MMBtu/hr.

(1) represents the following boilers:

Boiler TTC, ID# 9424001 at 1.8 MMBtu/hr

Boiler MOS, Plt 8, ID# 15917 at 12.6 MMBtu/hr

Boiler #1 Plt. 10 at 14.65 MMBtu/hr

Boiler #2 Plt. 10, ID# 201182 at 14.65 MMBtu/hr

Boiler #1E, Plt. 8, ID# 38302 at 14.6 MMBtu/hr

Boiler #3E, Plt. 9, ID# 181067 at 20.922 MMBtu/hr

Boiler #3, Fab III, ID# 6012611 at 20.9 MMBtu/hr

(2) represents the following boilers:

Boiler #1, Fab III, ID# 151563 at 20.9 MMBtu/hr

Boiler #2E, Plt. 8, ID# 13313 at 14.6 MMBtu/hr

Boiler #3E, Plt. 8, ID# 13312 at 14.6 MMBtu/hr

Boiler #1W, Plt. 8, ID# 852 at 14.6 MMBtu/hr

Boiler #9, Plt. 6, ID# 16554 at 16.7 MMBtu/hr

Boiler #10, Plt. 6, ID# 21492 at 16.7 MMBtu/hr

Boiler Clayton 8W1, Plt. 8 at 24.5 MMBtu/hr

Boiler #2E, Plt. 9, ID# 839 at 16.7 MMBtu/hr

Boiler West (831), Plt. 8, ID# 17383 at 16.7 MMBtu/hr

Boiler #8W, Plt. 9, ID# 840 at 16.7 MMBtu/hr

Boiler #6W, Plt 9, ID# 841 at 16.7 MMBtu/hr

Boiler #5W, Plt. 9, ID# 5569 at 16.7 MMBtu/hr

Boiler Clayton 8W2, Plt. 8, at 24.5 MMBtu/hr

**Appendix A: Emissions Calculations**  
**Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)**  
**#1 and #2 Fuel Oil**

**Company Name: GM Components Holdings LLC**  
**Address City IN Zip: 2033 East Boulevard Street**  
**Minor Source Modification No.: 067-33000-00061**  
**Minor Permit Modification No.: 067-33053-00061**  
**Reviewer: Julie Alexander**  
**Date: February 01, 2013**

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur 0.015	Boiler #1, Fab III, ID# 151563 at 20.9 MMBtu/hr Boiler #2, Fab III, ID# 151562 at 20.9 MMBtu/hr
41.8	2615.49		

Emission Factor in lb/kgal	Pollutant						
	PM*	PM10	direct PM2.5	SO2 2.13 (142S)	NOx 20.0	VOC 0.56	CO 5.0
	2.0	2.3	1.6				
	2.6	3.0	2.0	2.8	26.2	0.7	6.5

Emission Factor in lb/mmBtu	HAPs - Metals				
	Arsenic 4.0E-06	Beryllium 3.0E-06	Cadmium 3.0E-06	Chromium 3.0E-06	Lead 9.0E-06
Potential Emission in tons/yr	7.32E-04	5.49E-04	5.49E-04	5.49E-04	1.65E-03

Emission Factor in lb/mmBtu	HAPs - Metals (continued)			
	Mercury 3.0E-06	Manganese 6.0E-06	Nickel 3.0E-06	Selenium 1.5E-05
Potential Emission in tons/yr	5.49E-04	1.10E-03	5.49E-04	2.75E-03
Total:				8.97E-03

Emission Factor in lb/kgal	Greenhouse Gas		
	CO2 21,500	CH4 0.216	N2O 0.26
Potential Emission in tons/yr	28,116	0.3	0.3
Summed Potential Emissions in tons/yr	28,117		
CO2e Total in tons/yr	28,228		

Note: Emissions are based upon the Technical Support Document for Part 70 Renewal No. T067-23927-00061  
\*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

**Methodology**

1 gallon of No. 2 Fuel Oil has a heating value of 140,000 Btu

Potential Throughput (kgals/year) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1kgal per 1000 gallon x 1 gal per 0.140 MM Btu

Emission Factors are from AP 42, Tables 1.3-1, 1.3-2, and 1.3-3 (SCC 1-02-005-01/02/03) Supplement E 9/98

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

No data was available in AP-42 for organic HAPs.

Potential Emissions (tons/year) = Throughput (mmBtu/hr)\*Emission Factor (lb/mmBtu)\*8,760 hrs/yr / 2,000 lb/ton

The CO2 Emission Factor for #1 Fuel Oil is 21500. The CO2 Emission Factor for #2 Fuel Oil is 22300.

Emission Factors are from AP 42, Tables 1.3-3, 1.3-8, and 1.3-12 (SCC 1-03-005-01/02/03) Supplement E 9/99 (see erata file)

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

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

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP (21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Appendix A: Emission Calculations**  
**Large Reciprocating Internal Combustion Engines - Diesel Fuel**  
**Company Name: GM Components Holdings LLC**  
**Address City IN Zip: 2033 East Boulevard Street**  
**Minor Source Modification No.: 067-33000-00061**  
**Minor Permit Modification No.: 067-33053-00061**  
**Reviewer: Julie Alexander**  
**Date: February 01, 2013**

Output Horsepower Rating (hp)	1600.0
Maximum Hours Operated per Year	500
Potential Throughput (hp-hr/yr)	800,000
Sulfur Content (S) of Fuel (% by weight)	0.015

	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
Emission Factor in lb/hp-hr	7.00E-04	4.01E-04	4.01E-04	1.21E-04 (.00809S)	2.40E-02 **see below	7.05E-04	5.50E-03
Potential Emission in tons/yr	0.28	0.16	0.16	0.05	9.60	0.28	2.20

**Hazardous Air Pollutants (HAPs)**

	Pollutant						
	Benzene	Toluene	Xylene	Formaldehyde	Acetaldehyde	Acrolein	Total PAH HAPs***
Emission Factor in lb/hp-hr****	5.43E-06	1.97E-06	1.35E-06	5.52E-07	1.76E-07	5.52E-08	1.48E-06
Potential Emission in tons/yr	2.17E-03	7.87E-04	5.40E-04	2.21E-04	7.06E-05	2.21E-05	5.94E-04

<b>Potential Emission of Total HAPs (tons/yr)</b>	<b>4.41E-03</b>
---	-----------------

**Green House Gas Emissions (GHG)**

	Pollutant		
	CO2	CH4	N2O
Emission Factor in lb/hp-hr	1.16E+00	6.35E-05	9.30E-06
Potential Emission in tons/yr	4.64E+02	2.54E-02	3.72E-03

<b>Summed Potential Emissions in tons/yr</b>	<b>4.64E+02</b>
<b>CO2e Total in tons/yr</b>	<b>4.66E+02</b>

Note: Emissions are based upon the Technical Support Document for Part 70 Renewal No. T067-23927-00061

\*PM10 emission factor in lb/hp-hr was calculated using the emission factor in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

\*\*NOx emission factor: uncontrolled = 0.024 lb/hp-hr, controlled by ignition timing retard = 0.013 lb/hp-hr

\*\*\*PAH = Polyaromatic Hydrocarbon (PAHs are considered HAPs, since they are considered Polycyclic Organic Matter)

\*\*\*\*Emission factors in lb/hp-hr were calculated using emission factors in lb/MMBtu and a brake specific fuel consumption of 7,000 Btu / hp-hr (AP-42 Table 3.3-1).

**Methodology**

Emission Factors are from AP 42 (Supplement B 10/96) Tables 3.4-1 , 3.4-2, 3.4-3, and 3.4-4.

CH4 and N2O Emission Factor from 40 CFR 98 Subpart C Table C-2.

Global Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

Potential Throughput (hp-hr/yr) = [Output Horsepower Rating (hp)] \* [Maximum Hours Operated per Year]

Potential Emission (tons/yr) = [Potential Throughput (hp-hr/yr)] \* [Emission Factor (lb/hp-hr)] / [2,000 lb/ton]

CO2e (tons/yr) = CO2 Potential Emission ton/yr x CO2 GWP (1) + CH4 Potential Emission ton/yr x CH4 GWP

(21) + N2O Potential Emission ton/yr x N2O GWP (310).

**Appendix A: Emission Calculations  
VOC and HAP Emissions**

**From the Automotive Ignition Module Production Line**

**Company Name: GM Components Holdings LLC**

**Address City IN Zip: 2033 East Boulevard Street**

**Minor Source Modification No.: 067-33000-00061**

**Minor Permit Modification No.: 067-33053-00061**

**Reviewer: Julie Alexander**

**Date: February 01, 2013**

Material	Maximum Throughput (unit/hr)	Maximum Usage (lbs/unit)	Weight % VOC	PTE of VOC (lbs/hr)	PTE of VOC (lbs/day)	PTE of VOC (tons/yr)	Phthalic Anhydride Content (lbs/lbs of VOC)	PTE of Phthalic Anhydride (tons/yr)	Ethylene Glycols Content (lbs/lbs of VOC)	PTE of Ethylene Glycols (tons/yr)
Epoxy Potting Mixture*	750	0.265	0.370%	0.73	17.6	3.22	5.00%	0.16	0.00%	0.00
Dip Coating	150	0.052	19.02%	1.48	35.6	6.50	0.00%	0.00	13.0%	0.84
<b>Total</b>				<b>2.22</b>	<b>53.2</b>	<b>9.71</b>		<b>0.16</b>		<b>0.84</b>

\* A two-part heat cured epoxy potting material will be used to encase the coil and electronic subassembly within a plastic molded case. No particulates are emitted from this process.

**Total HAPs (tons/yr) = 1.01 tons/yr**

**METHODOLOGY**

PTE of VOC (lbs/hr) = Max. Throughput (unit/hr) x Max. Usage (lbs/unit) x Weight % VOC (%)

PTE of VOC (lbs/day) = PTE of VOC (lbs/hr) x 24 hrs/day

PTE of VOC (tons/yr) = PTE of VOC (lbs/hr) x 8760 hr/yr x 1 ton/2000 lbs

PTE of HAP (tons/yr) = PTE of VOC (tons/yr) x HAP Content (%)

Note: Source wide emissions are based upon the Technical Support Document for Part 70 Renewal No. T067-23927-00061



**Appendix A: Emissions Calculations**  
**Other Insignificant Activities**  
**Company Name: GM Components Holdings LLC**  
**Address City IN Zip: 2033 East Boulevard Street**  
**Minor Source Modification No.: 067-33000-00061**  
**Minor Permit Modification No.: 067-33053-00061**  
**Reviewer: Julie Alexander**  
**Date: February 01, 2013**

**Insignificant Degreasing**

In order for the degreaser to qualify as an insignificant activity under the listing in 326 IAC 2-7-1(21)(J)(vi)(DD), the source shall use solvents "the use of which, for all cleaners and solvents combined, does not exceed one hundred forty-five (145) gallons per twelve (12) months".

Based on a review of the solvents most widely supplied for the industry by Crystal Clean and Safety-Kleen, the following PTE is based on the following conservative estimates:

The solvent has a maximum density of 6.7 lb/gal.

The solvent used in the degreaser contains 100% VOC and up to 0.2% HAP (tetrachloroethylene).

Utilized MSDS for Safety-Kleen 105 Recycled Solvent as worse case HAP content: <http://www.safety-kleen.com/msds/82310rev8-21-09.pdf>

Number of Degreasers: 1 each using a maximum of 5 gallons of solvent per week

**Uncontrolled Potential Emissions**

6.7	lb/gal x	100	% VOC x	145	gal/yr ÷	2000	lb/ton =	0.49	tons VOC per year
				0.49	tpy VOC x	0.2	% HAP =	0.001	tons HAP per year

**Insignificant Grinding, machining and trimming**

Outlet Grain Loading	Maximum Air Flow Rate	Uncontrolled PTE		Control Efficiency	Controlled PTE	
		PM/PM <sub>10</sub> /PM <sub>2.5</sub>			PM/PM <sub>10</sub> /PM <sub>2.5</sub>	
grains/dscf	dscfm	lbs/hr	TPY	%	lbs/hr	TPY
0.030	4,000	2.06	9.01	50.0%	1.03	4.51
<b>Totals</b>		<b>2.06</b>	<b>9.01</b>		<b>1.03</b>	<b>4.51</b>

**Methodology:**

Conversion Factors: 7000 grains/pound; 60 minutes/hour; 8,760 hours/year; 2,000 pounds/ton

PTE of PM/PM<sub>10</sub> after Control (lbs/hr) = Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 mins/hr x 1/7000 lb/gr

PTE of PM/PM<sub>10</sub> after Control (tons/yr) = Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 mins/hr x 1/7000 lb/gr x 8760 hr/yr x 1 ton/2000 lbs

PTE of PM/PM<sub>10</sub> before Control (tons/yr) = PTE of PM/PM<sub>10</sub> after Control (tons/yr) / (1-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: Stephen Dixon  
GM Components Holdings, LLC  
2100 East Lincoln Road  
Kokomo, IN 46904

DATE: June 20, 2013

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

SUBJECT: Final Decision  
Minor Permit Modification to a Part 70 Operating Permit  
067-33053-00061

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:  
Steven Hartwig, Plant Manager  
OAQ Permits Branch Interested Parties List

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178, or toll-free at 1-800-451-6027 (ext. 3-0178), and ask to speak to the permit reviewer who prepared the permit. If you think you have received this document in error, please contact Joanne Smiddie-Brush of my staff at 1-800-451-6027 (ext 3-0185), or via e-mail at [jbrush@idem.IN.gov](mailto:jbrush@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*

June 20, 2013

TO: Howard County Public Library

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

Subject: **Important Information for Display Regarding a Final Determination**


**Applicant Name: GM Components Holdings, LLC**  
**Permit Number: 067-33053-00061**

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	VHAUN 6/20/2013 GM Components Holdings LLC 067-33053-00061 FINAL		Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Stephen Dixon GM Components Holdings LLC 2100 E Lincoln Rd Kokomo IN 46902 (Source CAATS)										Confirmed Delivery
2		Steven Hartwig Plant Mgr GM Components Holdings LLC 2100 E Lincoln Rd Kokomo IN 46902 (RO CAATS)										
3		Kokomo City Council and Mayors Office City Hall, 100 S. Union Street Kokomo IN 46901 (Local Official)										
4		Kokomo Howard Co Public Library 220 N Union St Kokomo IN 46901-4600 (Library)										
5		Howard County Commissioners 220 North Main Kokomo IN 46901-4624 (Local Official)										
6		Howard County Health Department 120 E. Mulberry St, Suite 206 Kokomo IN 46901-4657 (Health Department)										
7		Mr. Leslie Ellison Howard County Council, District 3 408 East Mulberry Street Kokomoe IN 46901 (Affected Party)										
8												
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11												
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