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TO: Interested Parties / Applicant

DATE: December 22, 2008

RE: Delphi Automotive Systems, LLC / 067-23927-00061

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

Notice of Decision: Approval – Effective Immediately

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

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

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

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

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

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

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

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

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



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Mitchell E. Daniels Jr.
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Commissioner

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Indianapolis, Indiana 46204
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Part 70 Operating Permit Renewal OFFICE OF AIR QUALITY

Delphi Automotive Systems, 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	
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

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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)]

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

Source Address:	2100 East Lincoln Road, Kokomo, Indiana, 46904
Mailing Address:	PO Box 9005-MS 8121, Kokomo, IN 46904-9005
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)]

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 Delphi Automotive Systems LLC. 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)]

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) One (1) wave solder machine, ID# 184842 (Plant 9, Dept. 270E), constructed in 1997, with a capacity of 500 boards per hour, 5.78 pounds of flux per hour, and 0.09 pounds of thinner per hour, and exhausting to stack 9-E98-1;
 - (2) One (1) selective soldering machine, (ID# 6049081) Electrovert Vectra model; (Plant 9, Dept. 270S), constructed in 2006, with a capacity of 90 boards per hour, 0.63 pounds of flux per hour, and no thinner use, and exhausting to stack 9-F96-1;
 - (3) Five (5) 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; one (1) constructed in 2004, ID# 6044245; and one constructed in 2005, ID#

6049303; with a total capacity (5 solder machines) of 1150 boards per hour, exhausting to stacks, 9-Z21-2, 9-Z21-1, 9-Z23-1, 9-Z22-1, and 9-A21-2 respectively;

- (4) Three (3) selective soldering machines, two (2) constructed in 2004, identified as Lines 1 (ID# 6403964) exhausting to stack 7-W17-1, Line 2 (ID# 36047356) exhausting to 7-X17-1 and one (1) constructed in 2006, identified as Line 3 (ID# 764303) exhausting to stack 7-W6-1 all three (3) located at Plant 7, Department 7643, each 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# 8294003, 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) Four (4) dynamometer testing cells, known as cells 1 through 4, constructed in 1997, each equipped with a 4,000 acfm exhaust stack, total capacity: 3.75 gallons of unleaded motor fuel burned per hour, and exhausting to stack 9-E85-1; and
 - (21) 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 6, Dept. 850), ID# 6040222, constructed in 2002, with a maximum throughput of 1,500 ceramic substrates, and exhausting to stack 6-N6-1.
- (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 9,990 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 climate controlled clean room, designated as Fab I, constructed in 1981, including one (1) wet process exhausting through five (5) wet scrubbers with maximum air flow rates of 3400 CFM, 8950 CFM, 12150 CFM, 20000 CFM, and 20000 CFM, respectively, and one (1) silicon wafer coating process;
- (3) 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
- (4) 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(15)]

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) Two (2) maintenance spray booths, constructed in 2003, located in the Central Maintenance Shop, with a total maximum paint usage of 0.71 gallons per hour,

both controlled by dry filters;

- (3) Three (3) low-volume wave solder machines (Vitronics Delta Wave model) (Plant 7); approved for construction in 2007; one (1) identified as MW TECH 2000-1, ID# 212607, exhausting to stack 7-U18-1; one (1) identified as MW TECH 2000-2, ID# 6035293, exhausting to stack 7-U18-2; and one (1) identified as MW TECH 2000-3, ID# 6035381, exhausting to stack 7-T18-1; with a maximum capacity of 100 boards per hour for each unit;
 - (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# 6035605, exhausting to stack 7-S17-2; and one (1) identified as GMT900Solder-2, ID# 603582, exhausting to stack 7-S18-1; with a maximum capacity of 120 boards per hour for each unit;
 - (5) One (1) TBC wave solder machine (waterborne flux) (Plant 7), approved for construction in 2007, identified as TBC, ID# 204288, with a maximum capacity of 400 boards per hour, exhausting to stack 7-T16-1;
 - (6) Two (2) solvent washers (TREK Industries Inc. DCC model); approved for construction in 2007; one (1) identified as TREK 3 Washer (Plant 9), ID#6040052, exhausting to stack 9-Z20-1; and one (1) identified as TREK 4 Washer (Plant 7), ID#6113861, exhausting through stack 7-T19-1; with a maximum capacity of 75.33 gallons per year for each unit;
 - (7) Three (3) coaters (PVA Conformal Coater model) (Plant 6); 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 6-K3-1; with maximum capacity of 400 units per hour for each unit.
 - (8) Two (2) solvent washers (TREK Industries Inc. DCC model); approved for construction in 1999; one (1) identified as TREK 1 Washer (Plant 9), ID#DE208552, no exhaust; and one (1) identified as TREK 2 Washer (Plant 9), ID#6030016, exhausting through stack 9-A20-1; with a maximum capacity of 75.33 gallons per year for each unit.
 - (9) One (1) wave solder machine, ID# 1015805 (Plant 6, 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 6-K3-1;
 - (10) Two (2) coaters (PVA Conformal Coater model) (Plant 7); approved for construction in 2007; one (1) identified as GMT900 Coater-1, ID# 6035513, exhausting to stack 7-S16-1; and one (1) identified as GMT900 Coater-2, ID# 6035675, exhausting to stack 7-S17-1; 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]

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)]

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

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

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

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

and

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

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

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

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

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

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

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

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

Telephone Number: 317-233-0178 (ask for Compliance Section)
Facsimile Number: 317-233-6865

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

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

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

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

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

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

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

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

- (a) Pursuant to 326 IAC 2-7-15, the Permittee has been granted a permit shield. The permit shield provides that compliance with the conditions of this permit shall be deemed compliance with any applicable requirements as of the date of permit issuance, provided

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

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

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

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

- (a) All terms and conditions of permits established prior to 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 Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

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

- (a) This permit may be modified, reopened, revoked and reissued, or terminated for cause. The filing of a request by the Permittee for a Part 70 Operating Permit modification, revocation and reissuance, or termination, or of a notification of planned changes or anticipated noncompliance does not stay any condition of this permit. [326 IAC 2-7-5(6)(C)] The notification by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (b) This permit shall be reopened and revised under any of the circumstances listed in IC 13-15-7-2 or if IDEM, OAQ determines any of the following:
- (1) That this permit contains a material mistake.
 - (2) That inaccurate statements were made in establishing the emissions standards or other terms or conditions.
 - (3) That this permit must be revised or revoked to assure compliance with an applicable requirement. [326 IAC 2-7-9(a)(3)]

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

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

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

Request for renewal shall be submitted to:

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

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

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

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

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

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

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

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

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

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

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

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

and

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

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

- (5) The Permittee maintains records on-site, on a rolling five (5) year basis, which document all such changes and emission trades that are subject to 326 IAC 2-7-20(b),(c), or (e). The Permittee shall make such records available, upon reasonable request, for public review.

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

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

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

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

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

- (a) 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
Permits Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

- (a) The Permittee shall pay annual fees to IDEM, OAQ within thirty (30) calendar days of receipt of a billing. Pursuant to 326 IAC 2-7-19(b), if the Permittee does not receive a bill from IDEM, OAQ the applicable fee is due April 1 of each year.
- (b) Except as provided in 326 IAC 2-7-19(e), failure to pay may result in administrative enforcement action or revocation of this permit.

- (c) The Permittee may call the following telephone numbers: 1-800-451-6027 or 317-233-4230 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

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

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

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

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

C.1 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
Asbestos Section, Office of Air Quality
100 North Senate Avenue
MC 61-52 IGCN 1003
Indianapolis, Indiana 46204-2251

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

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.
- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

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

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

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

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

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

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

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

Compliance Requirements [326 IAC 2-1.1-11]

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

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

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

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

Unless otherwise specified in this permit, all monitoring and record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance 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 Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

The statement must be submitted to:

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

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

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

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

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance 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(II)) 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(II)) 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 Data Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit “calendar year” means the twelve (12) month period from January 1 to December 31 inclusive.

- (f) 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
Air Compliance Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251

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

Stratospheric Ozone Protection

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

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

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

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

SECTION D.1 FACILITY OPERATION CONDITIONS

Facility 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) One (1) wave solder machine, ID# 184842 (Plant 9, Dept. 270E), constructed in 1997, with a capacity of 500 boards per hour, 5.78 pounds of flux per hour, and 0.09 pounds of thinner per hour, and exhausting to stack 9-E98-1;
 - (2) One (1) selective soldering machine, (ID# 6049081) Electrovert Vectra model; (Plant 9, Dept. 270S), constructed in 2006, with a capacity of 90 boards per hour, 0.63 pounds of flux per hour, and no thinner use, and exhausting to stack 9-F96-1;
 - (3) Five (5) 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; one (1) constructed in 2004, ID# 6044245; and one constructed in 2005, ID# 6049303; with a total capacity (5 solder machines) of 1150 boards per hour, exhausting to stacks, 9-Z21-2, 9-Z21-1, 9-Z23-1, 9-Z22-1, and 9-A21-2 respectively;
 - (4) Three (3) selective soldering machines, two (2) constructed in 2004, identified as Lines 1 (ID# 6403964) exhausting to stack 7-W17-1, Line 2 (ID# 36047356) exhausting to 7-X17-1 and one (1) constructed in 2006, identified as Line 3 (ID# 764303) exhausting to stack 7-W6-1 all three (3) located at Plant 7, Department 7643, each 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) Pursuant to CP067-8909-00061, issued November 13, 1997, the input volatile organic compounds (VOC) including flux and thinner delivered to the applicators of the two (2) wave solder machines, ID# 184842 (Plant 9, Dept. 270E), and Electrovert Vectra model (ID# 6049081) Plant 9, Dept. 270S shall not exceed 35.0 tons as a group per twelve (12) consecutive month period with compliance determined at the end of each month and shall be limited to less than 25 tons as individual units 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.
- (b) Pursuant to MSM 067-17930-00061, issued on November 19, 2003, the input of volatile organic compounds (VOC), including flux and thinner delivered to the applicators of wave solder machine # 1015805 (Plant 6, Dept. 874) 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 8-1-6 not applicable.
- (c) The input of volatile organic compounds (VOC), including flux and thinner delivered to the applicators of the five (5) 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) through (c) 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 FACILITY OPERATION CONDITIONS

Facility 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 FACILITY OPERATION CONDITIONS (Continued)

Facility 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# 8294003, 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) Four (4) dynamometer testing cells, known as cells 1 through 4, constructed in 1997, each equipped with a 4,000 acfm exhaust stack, total capacity: 3.75 gallons of unleaded motor fuel burned per hour, and exhausting to stack 9-E85-1; and
- (21) 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/m³ 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# 8294003	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 Sulfur Dioxide (SO₂) [326 IAC 7-1.1-1][326 IAC 7-2-1]

Pursuant to 326 IAC 7-1.1 (SO₂ Emissions Limitations) the SO₂ emissions from Boiler #1, Fab III, ID# 151563 and Boiler #2, Fab III, ID# 151562 shall not exceed five-tenths (0.5) pounds per million British thermal units heat input each, when combusting distillate oil. Pursuant to 326 IAC 7-2-1, compliance shall be demonstrated on a thirty (30) day rolling weighted average. 326 IAC 7-1.1 and 326 IAC 7-2-1 are not federally enforceable.

D.2.4 Preventive Maintenance Plan [326 IAC 2-7-5(13)]

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

Compliance Determination Requirements

D.2.5 Sulfur Dioxide Emissions and Sulfur Content

Compliance with Condition D.2.3 shall be determined utilizing one of the following options:

- (a) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input by:

- (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or;
- (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (b) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from Boiler #1, Fab III, ID #151563 and Boiler #2, Fab III, ID# 151562, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.

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

D.2.6 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.2.7 Record Keeping Requirements

- (a) To document compliance with Condition D.2.3, the Permittee shall maintain records in accordance with (1) through (5) below.
 - (1) Calendar dates covered in the compliance determination period;
 - (2) Actual fuel oil usage since last compliance determination period and equivalent sulfur dioxide emissions;

If the fuel supplier certification is used to demonstrate compliance, when burning alternate fuels and not determining compliance pursuant to 326 IAC 3-7-4, the following, as a minimum, shall be maintained:

- (3) Fuel supplier certifications;
- (4) The name of the fuel supplier; and
- (5) A statement from the fuel supplier that certifies the sulfur content of the fuel oil.

The Permittee shall retain records of all recording/monitoring data and support information for a period of five (5) years, or longer if specified elsewhere in this permit, from the date of the monitoring sample, measurement, or report. Support information includes all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit.

- (b) To document compliance with Condition D.2.6, 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).
- (c) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.2.8 Reporting Requirements

- (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).
- (b) A quarterly summary of the information to document compliance with Condition D.2.3 in any compliance period when No. 2 fuel oil was combusted 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.3 FACILITY OPERATION CONDITIONS

Facility 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 6, Dept. 850), ID# 6040222, constructed in 2002, with a maximum throughput of 1,500 ceramic substrates, and exhausting to stack 6-N6-1.

(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 Hazardous Air Pollutants (HAPs) [40 CFR 63.50 through 63.56]

- (a) The input of hexane to the degreaser (part of this Section) and the semiconductor manufacturing process (Section D.4), shall be less than seven and two-tenths (7.2) tons, combined, per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is structured such that, when including the hexane emissions from the combustion units and insignificant activities, the source total hexane emissions remain less than ten (10) tons per year.
- (b) For HAPs other than hexane, the input of any single HAP to the degreaser (part of this Section) and the semiconductor manufacturing process (Section D.4), combined with the emissions from the combustion units and insignificant activities, the source total single HAP emissions remain less than ten (10) tons per year.
- (c) The input of any combination of HAPs to the degreaser (part of this Section), and the semiconductor manufacturing process (Section D.4), shall be less than twenty-two (22.0) tons, combined, per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is structured such that, when including the emissions of any combination of HAPs from the combustion units and insignificant activities, the source total emissions of any combination of HAPs remain less than twenty-five (25) tons per year.

Compliance with these limitations renders the requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) not applicable.

D.3.2 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.3.3 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 Determination Requirements

D.3.4 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs)

Compliance with the VOC and HAP content and usage limitations contained in Conditions D.3.1 and D.3.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC and HAP 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.3.5 Record Keeping Requirements

- (a) To document compliance with Condition D.3.1, the Permittee shall maintain records of the hexane input, the single HAP input, and the combination HAP input for the degreaser (part of this Section) and the semiconductor manufacturing process (Section D.4), combined.
- (b) All records shall be maintained in accordance with Section C-General Record Keeping Requirements, of this permit.

D.3.6 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.3.1 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.4 FACILITY OPERATION CONDITIONS

Facility 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 9,990 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 climate controlled clean room, designated as Fab I, constructed in 1981, including one (1) wet process exhausting through five (5) wet scrubbers with maximum air flow rates of 3400 CFM, 8950 CFM, 12150 CFM, 20000 CFM, and 20000 CFM, respectively, and one (1) silicon wafer coating process.
 - (3) 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.
 - (4) 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 Hazardous Air Pollutants (HAPs) [40 CFR 63.50 through 63.56]

- (a) The input of hexane to the degreaser (Section D.3) and the semiconductor manufacturing process (part of this section), shall be less than seven and two-tenths (7.2) tons, combined, per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is structured such that, when including the hexane emissions from the combustion units and insignificant activities, the source total hexane emissions remain less than ten (10) tons per year.
- (b) For HAPs other than hexane, the input of any single HAP to the degreaser (Sections D.4) and the semiconductor manufacturing process (part of this section), combined with the emissions from the combustion units and insignificant activities, the source total single HAP emissions remain less than ten (10) tons per year.
- (c) The input of any combination of HAPs to the degreaser (Section D.4) and the semiconductor manufacturing process and the automotive ignition module production line (part of this section), shall be less than twenty-two (22.0) tons, combined, per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is structured such that, when including the emissions of any combination of HAPs from the combustion units and insignificant activities, the source total emissions of any combination of HAPs remain less than twenty-five (25) tons per year.

Compliance with these limitations renders the requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) not applicable.

D.4.2 Volatile Organic Compounds (VOC) [326 IAC 8-1-6]

VOC emissions from each of the climate controlled clean rooms Fab I, 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.4.3 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 and any control devices.

Compliance Determination Requirements

D.4.4 Volatile Organic Compounds (VOC) and Hazardous Air Pollutants (HAPs)

- (a) Compliance with the VOC and HAP content and usage limitations contained in Conditions D.4.1 and D.4.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) by preparing or obtaining from the manufacturer the copies of the "as supplied" and "as applied" VOC and HAP 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.4.2 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

VOC_U = The total amount of VOC, in tons, delivered to the clean room.

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.4.5 Parametric Monitoring

- (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 1 scrubber - Dept. 8026 5ID Room TRI-MER DE No. 169970	0.1 - 1.2
Fab 1 scrubber - 5ID Room (Dept. 8026) Harrington DE No. (none)	0.1 - 2.5
Fab 1 scrubber - SensorFAB (8026) Harrington DE No. 177150 (826B)	0.1 - 3
Fab 1 scrubber - Dept. 8026 SensorFAB East (VIRON) DE No. (none) (SB101A)	0.1 - 3.5
Fab 1 scrubber - Dept. 8026 SensorFAB West (VIRON) DE No. (none) (SB100A)	0.1 - 3.5
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
QFP scrubber	0.1 - 1.2
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 1 scrubber - Dept. 8026 5ID Room TRI-MER DE No. 169970	3 - 30
Fab 1 scrubber - 5ID Room (Dept. 8026) Harrington DE No. (none)	100 - 180
Fab 1 scrubber - SensorFAB (8026) Harrington DE No. 177150 (826B)	100 - 180
Fab 1 scrubber - Dept. 8026 SensorFAB East (VIRON) DE No. (none) (SB101A)	140 - 200
Fab 1 scrubber - Dept. 8026 SensorFAB West (VIRON) DE No. (none) (SB100A)	140 - 200
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
QFP scrubber	3 - 15
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.4.6 Record Keeping Requirements

- (a) To document compliance with Condition D.4.1, the Permittee shall maintain records of the hexane input, the single HAP input, and the combination HAP input for the degreaser

(Section D.3) and the semiconductor manufacturing process and the automotive ignition module production line (part of this section), combined.

- (b) To document compliance with Condition D.4.2, 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.5.2. 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.4.4
 - (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.4.4, 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.
- (c) To document compliance with Condition D.4.5, the Permittee shall maintain a daily record of the scrubber liquor pH, pressure drop, and recirculation flow rate of each of the scrubbers. The Permittee shall include in its daily record when a reading is not taken and the reason for the lack of a reading (e.g., the process did not operate that day).
- (d) The Permittee shall maintain records of any alarms that sound and the response steps taken.
- (e) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

D.4.7 Reporting Requirements

A quarterly summary of the information to document compliance with Conditions D.4.1 and D.4.2 shall be submitted to the address listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).

SECTION D.5 FACILITY 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) Two (2) maintenance spray booths, constructed in 2003, located in the Central Maintenance Shop, with a total maximum paint usage of 0.71 gallons per hour, both controlled by dry filters;
 - (3) Three (3) low-volume wave solder machines (Vitronics Delta Wave model) (Plant 7); approved for construction in 2007; one (1) identified as MW TECH 2000-1, ID# 212607, exhausting to stack 7-U18-1; one (1) identified as MW TECH 2000-2, ID# 6035293, exhausting to stack 7-U18-2; and one (1) identified as MW TECH 2000-3, ID# 6035381, exhausting to stack 7-T18-1; with a maximum capacity of 100 boards per hour for each unit;
 - (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# 6035605, exhausting to stack 7-S17-2; and one (1) identified as GMT900Solder-2, ID# 603582, exhausting to stack 7-S18-1; with a maximum capacity of 120 boards per hour for each unit;
 - (5) One (1) TBC wave solder machine (waterborne flux) (Plant 7), approved for construction in 2007, identified as TBC, ID# 204288, with a maximum capacity of 400 boards per hour, exhausting to stack 7-T16-1;
 - (6) Two (2) solvent washers (TREK Industries Inc. DCC model); approved for construction in 2007; one (1) identified as TREK 3 Washer (Plant 9), ID#6040052, exhausting to stack 9-Z20-1; and one (1) identified as TREK 4 Washer (Plant 7), ID#6113861, exhausting through stack 7-T19-1; with a maximum capacity of 75.33 gallons per year for each unit;

- (7) Three (3) coaters (PVA Conformal Coater model) (Plant 6); 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 6-K3-1; with maximum capacity of 400 units per hour for each unit.
 - (8) Two (2) solvent washers (TREK Industries Inc. DCC model); approved for construction in 1999; one (1) identified as TREK 1 Washer (Plant 9), ID#DE208552, no exhaust; and one (1) identified as TREK 2 Washer (Plant 9), ID#6030016, exhausting through stack 9-A20-1; with a maximum capacity of 75.33 gallons per year for each unit.
 - (9) One (1) wave solder machine, ID# 1015805 (Plant 6, 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 6-K3-1;
 - (10) Two (2) coaters (PVA Conformal Coater model) (Plant 7); approved for construction in 2007; one (1) identified as GMT900 Coater-1, ID# 6035513, exhausting to stack 7-S16-1; and one (1) identified as GMT900 Coater-2, ID# 6035675, exhausting to stack 7-S17-1; 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) for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;

- (f) 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.

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.

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

D.5.5 Particulate [326 IAC 6-3-2(d)]

Pursuant to 326 IAC 6-3-2(d), particulate from the spray booths 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# 8294003, constructed 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, constructed 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, ID# 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 Boiler in Bldg 3600-01 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 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 Boiler in Bldg 3600-01 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: Delphi Automotive Systems, 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 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: Delphi Automotive Systems, 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 form consists of 2 pages

Page 1 of 2

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

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

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

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

Page 2 of 2

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

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

A certification is not required for this report.

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

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

Source Name: Delphi Automotive Systems, 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

<input type="checkbox"/> Natural Gas Only <input type="checkbox"/> 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 DATA SECTION**

Part 70 Quarterly Report

Source Name: Delphi Automotive Systems 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
Facility: Boiler #1, Fab III, ID #151563
Parameter: SO₂
Limits: Less than five tenths (0.5) pounds per million BTU heat input

Month: _____ Year: _____

Month	Sulfur Content (%)	Heat Content	Fuel usage (gal/month)	SO ₂ Emissions (lb/MMBTU)

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

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

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Delphi Automotive Systems 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
Facility: Boiler #2, Fab III, ID #151562
Parameter: SO₂
Limits: Less than five tenths (0.5) pounds per million BTU heat input

Month: _____ Year: _____

Month	Sulfur Content (%)	Heat Content	Fuel usage (gal/month)	SO ₂ Emissions (lb/MMBTU)

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

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

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Delphi Automotive Systems 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
 Facility: One (1) wave solder machine (ID# 184842) and one (1) selective soldering machine Electrovert Vectra model (ID# 6049081).
 Parameter: The VOC input including flux and thinner delivered to the applicators
 Limit: No more than 35.0 tons as a group per twelve (12) consecutive month period with compliance determined at the end of each month
 Less than 25 tons as individuals 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: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Delphi Automotive Systems 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
Facility: One (1) wave solder machine (ID# 184842)
Parameter: The VOC input including flux and thinner delivered to the applicators
Limit: Less than 25 tons as individuals 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: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Delphi Automotive Systems 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
Facility: one (1) selective soldering machine Electrovert Vectra model (ID# 6049081)
Parameter: The VOC input including flux and thinner delivered to the applicators
Limit: Less than 25 tons as individuals 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: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Delphi Automotive Systems 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
Facility: degreaser (Section D.3) and the semiconductor manufacturing process (Section D.4), combined.
Parameter: Hexane input
Limit: Less than seven and two-tenths (7.2) 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: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Delphi Automotive Systems 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
 Facility: For HAPs other than hexane, the input of any single HAP to the degreaser (Section D.3) and the semiconductor manufacturing process (Section D.4), combined with the emissions from the combustion units and insignificant activities, the source total single HAP emissions remain less than ten (10) tons per year.
 Parameter: Single HAP, other than hexane, input
 Limit: input of any single HAP emissions remain less than ten (10) 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: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Delphi Automotive Systems 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
Facility: the degreaser (Section D.3), and the semiconductor manufacturing process and r the automotive ignition module production line (Section D.4), combined.
Parameter: Combination HAP input
Limit: Less than twenty-two (22.0) 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: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Delphi Automotive Systems 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
Facility: Clean Room Fab I
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: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Delphi Automotive Systems 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
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: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Delphi Automotive Systems 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
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: _____

Attach a signed certification to complete this report.

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

Part 70 Quarterly Report

Source Name: Delphi Automotive Systems LLC
 Source Address: 2100 East Lincoln Road, Kokomo, Kokomo, IN 46904
 Mailing Address: PO Box 9005-MS 8121, Kokomo, IN 46904-9005
 Part 70 Permit No.: T067-23927-00061
 Facility: Tech 2000, Dept. 9502 - five (5) solder machines (ID# 211274, ID# 6040058, ID# 6033795, ID# 6044245, and ID# 6049303)
 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: _____

Attach a signed certification to complete this report.

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

Source Name: Delphi Automotive Systems, 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

Months: _____ **to** _____ **Year:** _____

<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>	
<input type="checkbox"/> NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.	
<input type="checkbox"/> THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	
Permit Requirement (specify permit condition #)	
Date of Deviation:	Duration of Deviation:
Number of Deviations:	
Probable Cause of Deviation:	
Response Steps Taken:	

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

Form Completed by: _____

Title / Position: _____

Date: _____

Phone: _____

Attach a signed certification to complete this report.

Attachment A

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

Source: 72 FR 32759, June 13, 2007, unless otherwise noted.

§ 60.40c Applicability and delegation of authority.

(a) Except as provided in paragraph (d) 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/hr)) or less, but greater than or equal to 2.9 MW (10 MMBtu/hr).

(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 (SO₂) 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) Heat recovery steam generators that are associated with combined cycle gas turbines and meet the applicability requirements of subpart GG or KKKK of this part are not subject to this subpart. This subpart will continue to apply to all other heat recovery steam generators that are capable of combusting more than or equal to 2.9 MW (10 MMBtu/hr) heat input of fossil fuel but less than or equal to 29 MW (100 MMBtu/hr) heat input of fossil fuel. If the heat recovery steam generator is subject to this subpart, only emissions resulting from combustion of fuels in the steam generating unit are subject to this subpart. (The gas turbine emissions are subject to subpart GG or KKKK, as applicable, of this part).

(f) Any facility covered by subpart AAAA of this part is not covered by this subpart.

(g) Any facility covered by an EPA approved State or Federal section 111(d)/129 plan implementing subpart BBBB of this part is not covered by this subpart.

§ 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, 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.

Cogeneration steam generating unit means a steam generating unit that simultaneously produces both electrical (or mechanical) and thermal energy from the same primary energy source.

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).

Dry flue gas desulfurization technology means a SO₂ 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 SO₂ 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).

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 SO₂ 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 any other 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.

Wet flue gas desulfurization technology means an SO₂ 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 SO₂.

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.

§ 60.42c Standard for sulfur dioxide (SO₂).

(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 SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO₂ emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ 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 SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 10 percent (0.10) of the potential SO₂ emission rate (90 percent reduction), nor cause to be discharged into the atmosphere from the affected facility any gases that contain SO₂ 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 SO₂ in excess of 87 ng/J (0.20 lb/MMBtu) heat input or 20 percent (0.20) of the potential SO₂ emission rate (80 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ 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 SO₂ emissions limit or the 90 percent SO₂ 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 SO₂ emissions shall neither:

(i) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ in excess of 50 percent (0.50) of the potential SO₂ emission rate (50 percent reduction); nor

(ii) Cause to be discharged into the atmosphere from that affected facility any gases that contain SO₂ 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 SO₂ 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 SO₂ 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/hr) 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.

(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 SO₂ in excess of 215 ng/J (0.50 lb/MMBtu) heat input; 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 SO₂ in excess of the following:

(1) The percent of potential SO₂ emission rate or numerical SO₂ 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/hr); 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_s = SO₂ emission limit, expressed in ng/J or lb/MMBtu heat input;

K_a = 520 ng/J (1.2 lb/MMBtu);

K_b = 260 ng/J (0.60 lb/MMBtu);

K_c = 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

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

(f) Reduction in the potential SO₂ 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 SO₂ emission rate; and

(2) Emissions from the pretreated fuel (without either combustion or post-combustion SO₂ 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), or (3) 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 facilities with heat input capacities between 2.9 and 8.7 MW (10 and 30 MMBtu/hr).

(i) The SO₂ 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) 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.

§ 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/hr) 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/hr) 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/hr) 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.

(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/hr) 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/hr) 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) 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, 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 SO₂ emissions is not subject to the PM limit in this section.

§ 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 SO₂ 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 affected 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 SO₂ emission limits under §60.42c is based on the average percent reduction and the average SO₂ 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 SO₂ 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 SO₂ emission rate (E_{ho}) and the 30-day average SO₂ emission rate (E_{ao}). 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_{ao} 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_{ho} (E_{ho0}) is used in Equation 19–19 of Method 19 of appendix A of this part to compute the adjusted E_{ao} (E_{ao0}). The E_{ho0} is computed using the following formula:

$$E_{ho0} = \frac{E_{ho} - E_w(1 - X_1)}{X_1}$$

Where:

E_{ho0} = Adjusted E_{ho}, ng/J (lb/MMBtu);

E_{ho} = Hourly SO₂ emission rate, ng/J (lb/MMBtu);

E_w = SO₂ 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_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.

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.

(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_w or X_k 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 SO₂ 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 SO₂ 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 SO₂ emission rate, in percent;

%R_g = SO₂ removal efficiency of the control device as determined by Method 19 of appendix A of this part, in percent; and

%R_f = SO₂ 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_go) is computed from E_{ao}o from paragraph (e)(1) of this section and an adjusted average SO₂ inlet rate (E_{ai}o) using the following formula:

$$\%R_{g^o} = 100 \left(1 - \frac{E_{ao}^o}{E_{ai}^o} \right)$$

Where:

%R_go = Adjusted %R_g, in percent;

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

E_{ai}o = Adjusted average SO₂ inlet rate, ng/J (lb/MMBtu).

(ii) To compute E_{ai}o, an adjusted hourly SO₂ inlet rate (E_{hi}o) is used. The E_{hi}o is computed using the following formula:

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

Where:

E_{hi}o = Adjusted E_{hi}, ng/J (lb/MMBtu);

E_{hi} = Hourly SO₂ inlet rate, ng/J (lb/MMBtu);

E_w = SO₂ 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 SO₂ standards based on fuel supplier certification, the

performance test shall consist of the certification, the certification from the fuel supplier, as described under §60.48c(f), as applicable.

(i) The owner or operator of an affected facility seeking to demonstrate compliance with the SO₂ 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 SO₂ emissions data in calculating %P_s and E_{h_o} 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_{h_o} pursuant to paragraphs (d), (e), or (f) of this section, as applicable.

§ 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 3 of appendix A of this part shall be used for gas analysis when applying Method 5, 5B, or 17 of appendix A 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 ± 14 °C (320 ± 25 °F).

(6) For determination of PM emissions, an oxygen (O₂) or carbon dioxide (CO₂) 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 O₂ or CO₂ 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 of this part (6-minute average of 24 observations) 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 EPA Reference Method 5, 5B, or 17 of appendix A 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 EPA Method 5, 5B, or 17 of appendix A of this part shall install, calibrate, maintain, and operate a CEMS and shall comply with the requirements specified in paragraphs (c)(1) through (c)(13) 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 (d)(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 (d)(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 (d)(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 O₂(or CO₂) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraph (d)(7)(i) of this section.

(i) For PM, EPA Reference Method 5, 5B, or 17 of appendix A of this part shall be used.

(ii) For O₂(or CO₂), EPA reference Method 3, 3A, or 3B of appendix A 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.

(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/hr).

§ 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 SO₂ emission limits under §60.42c shall install, calibrate, maintain, and operate a CEMS for measuring SO₂ concentrations and either O₂ or CO₂ concentrations at the outlet of the SO₂ control device (or the outlet of the steam generating unit if no SO₂ 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 SO₂ concentrations and either O₂ or CO₂ concentrations at both the inlet and outlet of the SO₂ control device.

(b) The 1-hour average SO₂ 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 SO₂ 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 SO₂ 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 SO₂ CEMS at the inlet to the SO₂ control device shall be 125 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted, and the span value of the SO₂ CEMS at the outlet from the SO₂ control device shall be 50 percent of the maximum estimated hourly potential SO₂ 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 SO₂ CEMS at the outlet from the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) shall be 125 percent of the maximum estimated hourly potential SO₂ emission rate of the fuel combusted.

(d) As an alternative to operating a CEMS at the inlet to the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂ emission rate by sampling the fuel prior to combustion. As an alternative to operating a CEMS at the outlet from the SO₂ control device (or outlet of the steam generating unit if no SO₂ control device is used) as required under paragraph (a) of this section, an owner or operator may elect to determine the average SO₂ 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 to 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 SO₂ 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 SO₂ at the inlet or outlet of the SO₂ 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 SO₂ and CO₂ 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 SO₂ 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 COMS for measuring the opacity of the emissions discharged to the atmosphere and record the output of the system.

(b) All COMS for measuring opacity 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) 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 (0.06 lb/MMBtu) heat input or less and that do not use a post-combustion technology to reduce SO₂ or PM emissions are not required to operate a CEMS for measuring opacity if they follow the applicable procedures under §60.48c(f).

(d) Owners or operators complying with the PM emission limit by using a PM CEMS monitor instead of monitoring opacity must calibrate, maintain, and operate a CEMS, and record the

output of the system, for PM emissions discharged to the atmosphere as specified in §60.45c(d). The CEMS specified in paragraph §60.45c(d) 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) An affected facility that does not use post-combustion technology (except a wet scrubber) for reducing PM, SO₂, 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 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 for measuring opacity. 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.

(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. At least two data points per hour must be used to calculate each 1-hour average.

(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 affected facility that burns only gaseous fuels or fuel oils that contain less than or equal to 0.5 weight percent sulfur and operates according to a written site-specific monitoring plan approved by the appropriate delegated permitting authority is not required to operate a COMS for measuring opacity. 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.

§ 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 SO₂ 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 SO₂ 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) The owner or operator of each coal-fired, oil-fired, or wood-fired affected facility subject to the opacity limits under §60.43c(c) shall submit excess emission reports for any excess emissions from the affected facility that occur during the reporting period.

(d) The owner or operator of each affected facility subject to the SO₂ 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 SO₂ 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 SO₂ 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 SO₂ 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 SO₂ or diluent (O₂ or CO₂) 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 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 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 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 SO₂ 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 SO₂ 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.

Indiana Department of Environmental Management Office of Air Quality

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

Source Name:	Delphi Automotive Systems LLC
Source Location:	2100 East Lincoln Road, Kokomo, Indiana 46904
County:	Howard
SIC Code:	3471, 3674, 3679, 3694
Permit Renewal No.:	T067-23927-00061
Permit Reviewer:	Teresa Freeman

On October 21, 2008 the Office of Air Quality (OAQ) had a notice published in the Kokomo Tribune, Kokomo, Indiana, stating that Delphi Automotive Systems LLC had applied for a Part 70 Operating Permit to continue to operate a stationary source which produces electronic components principally for the automotive industry. The notice also stated that OAQ proposed to issue a permit renewal for this operation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review, the OAQ has decided to make the following revisions to the permit (bolded language has been added, the language with a line through it has been deleted). The Table of Contents has been modified to reflect these changes.

D.4.1 Hazardous Air Pollutants (HAPs) [40 CFR 63.50 through 63.56]

- (a) The input of hexane to the degreaser (Section D.43) and the semiconductor manufacturing process (part of this section), shall be less than seven and two-tenths (7.2) tons, combined, per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is structured such that, when including the hexane emissions from the combustion units and insignificant activities, the source total hexane emissions remain less than ten (10) tons per year.

No change will be made to the original TSD. The OAQ prefers that the TSD reflect the permit that was on public notice. Changes to the permit or technical support material that occur after the public notice are documented in this Addendum to the Technical Support Document. This accomplishes the desired result of ensuring that these types of concerns are documented and part of the record regarding this permit decision.

On November 14, 2008, Steve Dixon of Delphi Automotive Systems LLC submitted comments on the proposed Part 70 permit renewal. The summary of the comments is as follows:

Comment 1: Wave solder machine ID#1015805 in Dept 874, Plant 6 should be moved to Condition A.4 as an insignificant activity. The machine is the same machine which was formerly identified as being in Dept. 286, Plant 7. It was relocated to Plant 6 in 2008 by permit modification 067-26379-00061. The solvent-based flux was replaced with a waterborne flux, significantly lowering emissions thus making the unit an insignificant activity. Also, the new stack number is "6-K3-1" instead of "SK3-1". In addition, MW TECH 2000-1, ID#232607 should be changed to ID#212607.

Response 1: IDEM OAQ agrees and changes will be made to Conditions A.3 (a) (3) and A.4 (a), as well as the Section D.1 and D.4 description boxes as follows:

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

- (3) ~~One (1) wave solder machine, ID# 1015805 (Plant 6, 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 SK3-1;~~
- (43) Five (5) solder machines, identified as Tech 2000, Dept. 9502; one (1) approved for construction in 2007, identified as MW TECH 2000 HV, ID# 211274; one (1) constructed in 2001, ID# 6040058; one (1) constructed in 2003, ID# 6033795; one (1) constructed in 2004, ID# 6044245; and one constructed in 2005, ID# 6049303; with a total capacity (5 solder machines) of 1150 boards per hour, exhausting to stacks, 9-Z21-2, 9-Z21-1, 9-Z23-1, 9-Z22-1, and 9-A21-2 respectively;
- (54) Three (3) selective soldering machines, two (2) constructed in 2004, identified as Lines 1 (ID# 6403964) exhausting to stack 7-W17-1, Line 2 (ID# 36047356) exhausting to 7-X17-1 and one (1) constructed in 2006, identified as Line 3 (ID# 764303) exhausting to stack 7-W6-1 all three (3) located at Plant 7, Department 7643, each with a maximum capacity of 500 boards per hour and a maximum flux usage of 0.44 pounds per unit.

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

- (9) **One (1) wave solder machine, ID# 1015805 (Plant 6, 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 6-K3-1;**

Comment 2: MW TECH 2000 HV, ID#211274 should be changed to ID#208554 in Condition A.3(a)(4).

Response 2: The ID number has been changed in Condition A.3(a)(4) (now Condition A.3(a)(3)) and Description box D.1 as follows:

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

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

- (a) One (1) wave soldering system, referred to as EU_WS, and comprised of the following emission units:

- (3) Five (5) solder machines, identified as Tech 2000, Dept. 9502; one (1) approved for construction in 2007, identified as MW TECH 2000 HV, ID# ~~211274~~ **208554**; one (1) constructed in 2001, ID# 6040058; one (1) constructed in 2003, ID# 6033795; one (1) constructed in 2004, ID# 6044245; and one constructed in 2005, ID# 6049303; with a total capacity (5 solder machines) of 1150 boards per hour, exhausting to stacks, 9-Z21-2, 9-Z21-1, 9-Z23-1, 9-Z22-1, and 9-A21-2 respectively;

Comment 3: The Dept 902 ignition operation was shutdown in October 2008 in Condition A.3 (e). The equipment is in the process of being removed from the plant. In addition the lettering in Section D.2, D.3, D.4 need to be corrected to correspond to Condition A.3.

Response 3: The requested changes have been made to both Condition A.3 (e) and Sections D.2 through D.4 description box as follows:

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

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

...

~~(e) One (1) automotive ignition module production line, constructed in 2006, and consisting of the following:~~

~~(1) One (1) coil potting operation, with a maximum throughput rate of 750 units per hour; and~~

~~(2) One (1) dip coating operation, with a maximum throughput rate of 150 units per hour.~~

Section D.2 through D.4 Description boxes:

~~(eb)~~ One (1) combustion system, referred to as EU_CO, comprised of the following emission units:

~~(ec)~~ One (1) degreasing system, referred to as EU_DG, comprised of the following emission units:

~~(ed)~~ One (1) semiconductor system, referred to as EU_CR, consisting of the following emission units:

Comment 4: Delphi requests that the sub-bullets (1)-(5) be deleted. Delphi does have several remaining cold cleaners. Due to an internal plant-wide rearrangement, the exact number of cold cleaners will decrease, and the specific final locations of remaining cold cleaners by plant cannot be forecasted at this time. None of the remaining cold cleaners will use hazardous air pollutants (HAPs).

Response 4: The sub-bullets have been deleted from Condition A.4 (b) and Description box D.5 as follows:

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

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

...

~~(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];~~

~~(1) Three (3) cold cleaners in Plant 6, constructed pursuant to CP067-3262-00022 and three (3) constructed in 2006;~~

~~(2) Two (2) cold cleaners in Plant 7;~~

~~(3) Four (4) cold cleaners in Plant 8 and one (1) cold cleaner constructed pursuant to CP067-3262-00022;~~

~~(4) Seven (7) cold cleaners in Plant 9; and~~

~~(5) Two (2) cold cleaners in Plant 10.~~

Comment 5: The Part 70 Quarterly Report for Wave Solder Machine #1015805 should be deleted as a requirement. This machine was formerly located in Dept 286 of Plant 7. By permit modification 067-26379-00061, it was relocated to Dept 874, Plant 6. The flux was changed from solvent-based to

waterborne, significantly lowering VOC emissions. No monitoring and reporting requirement was required by the permit modification.

Response 5: IDEM OAQ agrees that the Part 70 Quarterly Report for Wave Solder Machine #1015805 should have been removed from the Part 70 Operating Permit Renewal. The Quarterly Report has been removed.

Comment 6: Certain insignificant pieces of equipment were approved under 067-26168-00061 and 067-26379-00061 in 2008, specifically the relocation of one waterborne flux wave solder machine (see comment 1), the installation of four (4) new waterborne flux solder machines and the installation of three (3) conformal coaters. These have not been incorporated into Sections A.5 and D.5.

Response 6: Section A.5 (e) and the Description Box D.5 has been revised as follows:

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

(10) Two (2) coaters (PVA Conformal Coater model) (Plant 7); approved for construction in 2007; one (1) identified as GMT900 Coater-1, ID# 6035513, exhausting to stack 7-S16-1; and one (1) identified as GMT900 Coater-2, ID# 6035675, exhausting to stack 7-S17-1; 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).

Indiana Department of Environmental Management
Office of Air Quality

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

Source Background and Description

Source Name:	Delphi Automotive Systems LLC
Source Location:	2100 East Lincoln Road, Kokomo, Indiana 46904
County:	Howard
SIC Code:	3471, 3674, 3679, 3694
Permit Renewal No.:	T067-23927-00061
Permit Reviewer:	Teresa Freeman

The Office of Air Quality (OAQ) has reviewed the operating permit renewal application from Delphi Automotive Systems LLC (formerly Delco Electronic Corporation) relating to the operation of a stationary source which produces electronic components principally for the automotive industry.

History

On November 26, 2006, Delphi Automotive Systems LLC submitted applications to the OAQ requesting to renew its operating permit. Delphi Automotive Systems LLC was issued a Part 70 Operating Permit on October 21, 2002.

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.

Permitted Emission Units and Pollution Control Equipment

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) One (1) wave solder machine, ID# 184842 (Plant 9, Dept. 270E), constructed in 1997, with a capacity of 500 boards per hour, 5.78 pounds of flux per hour, and 0.09 pounds of thinner per hour, and exhausting to stack 9-E98-1;

- (2) One (1) selective soldering machine, (ID# 6049081) Electrovert Vectra model; (Plant 9, Dept. 270S), constructed in 2006, with a capacity of 90 boards per hour, 0.63 pounds of flux per hour, and no thinner use, and exhausting to stack 9-F96-1;
 - (3) One (1) wave solder machine, ID# 1015805 (Plant 6, 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 SK3-1;
 - (4) Five (5) solder machines, identified as Tech 2000, Dept. 9502; one (1) approved for construction in 2007, identified as MW TECH 2000 HV, ID# 211274; one (1) constructed in 2001, ID# 6040058; one (1) constructed in 2003, ID# 6033795; one (1) constructed in 2004, ID# 6044245; and one constructed in 2005, ID# 6049303; with a total capacity (5 solder machines) of 1150 boards per hour, exhausting to stacks, 9-Z21-2, 9-Z21-1, 9-Z23-1, 9-Z22-1, and 9-A21-2 respectively;
 - (5) Three (3) selective soldering machines, two (2) constructed in 2004, identified as Lines 1 (ID# 6403964) exhausting to stack 7-W17-1, Line 2 (ID# 36047356) exhausting to 7-X17-1 and one (1) constructed in 2006, identified as Line 3 (ID# 764303) exhausting to stack 7-W6-1 all three (3) located at Plant 7, Department 7643, each 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# 8294003, 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) Four (4) dynamometer testing cells, known as cells 1 through 4, constructed in 1997, each equipped with a 4,000 acfm exhaust stack, total capacity: 3.75 gallons of unleaded motor fuel burned per hour, and exhausting to stack 9-E85-1; and
- (21) 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 6, Dept. 850), ID# 6040222, constructed in 2002, with a maximum throughput of 1,500 ceramic substrates, and exhausting to stack 6-N6-1.
- (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 9,990 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 climate controlled clean room, designated as Fab I, constructed in 1981, including one (1) wet process exhausting through five (5) wet scrubbers with maximum air flow rates of 3400 CFM, 8950 CFM, 12150 CFM, 20000 CFM, and 20000 CFM, respectively, and one (1) silicon wafer coating process;
 - (3) 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
 - (4) 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.
- (e) One (1) automotive ignition module production line, constructed in 2006, and consisting of the following:
 - (1) One (1) coil potting operation, with a maximum throughput rate of 750 units per hour; and
 - (2) One (1) dip coating operation, with a maximum throughput rate of 150 units per hour.

Emission Units and Pollution Control Equipment Removed From the Source

- (a) Two (2) automated select conformal coaters, (Plant 7, Dept. 7130), with a maximum capacity of 222 pounds of circuit board per hour, constructed in 2002, with no control exhausting to stack 7-T22-1;
- (b) One (1) paint spray booth 1, ID #153415, (Plant 9, Dept. 962), constructed in 1985, with a maximum coating usage of 1.5 gallons per hour, with waterwalls for control, and exhausting to stack 9-C17-1; and
- (c) One (1) paint booth to coat automotive plastic parts, ID #165441, (Plant 9, Dept. 964), constructed in 1993, with a maximum coating usage of 0.89 gallons per hour with waterwalls for control, and exhausting to stack 9-C15-1.

- (d) One (1) semi-aqueous cleaner for ceramic substrates, located in Plant 8, Dept 889, constructed in 2005, with a maximum throughput of 150 ceramic substrates per hour. (This unit was never built)
- (e) One (1) wave solder machine, ID# 194110 (Plant 9, Department 9601), constructed in 1991, with a capacity of 280 boards per hour, and exhausting to Stack 9-F7-1;
- (f) One (1) wave solder machine, ID# 165812 (Plant 9, Dept. 9604), constructed in 1983, with a capacity of 280 boards per hour, and exhausting to stack 9-C8-1;
- (g) One (1) conformal coater, ID# 182386, (Plant 9, Dept. 7641), constructed in 1991, with a capacity of 515 boards per hour with no control, and exhausting to stack 9-C4-1;
- (h) One (1) wave solder machine, ID# 181019, (Plant 9, Dept. 9602), constructed in 1991, with a capacity of 515 boards per hour, and exhausting to stack 9-F8-1;
- (i) One (1) wave soldering machine, ID# 60000984, (Plant 7, Dept. 7661), constructed in 1996, with a capacity of 450 boards per hour, and exhausting to stack 7-T18-1; and
- (j) One (1) surface coating system, referred to as EU_SC, with conformal coating applied to populated fiberglass circuit boards, paints applied to plastic radio and air control buttons and plastic face plates, comprised of the following emission units:
 - (1) Two (2) conformal coating hoods, (Plant 7, Dept. 7086), constructed in 1996, with a maximum capacity of 200 boards per hour, venting to stack 7-S18-1; and
 - (2) automated select conformal coaters, (Plant 7, Dept. 7130), with a maximum capacity of 222 pounds of circuit board per hour, constructed in 2002, with no control exhausting to stack 7-T22-1.
- (k) One (1) quad-fine-pitch (QFP) plater with a 3400 CFM fume scrubber, constructed in 1992, referred to as EU_EP, and exhausting to stack 6-K24-3.
- (l) One (1) wave solder machine, ID# 202031, Dept, 7120, constructed in 1999;
- (m) One (1) wave solder machine, Dept. 7120, constructed in 1999;
- (n) One (1) wave solder machine, ID# 1012806, Dept. 7120, constructed in 1999;
- (o) One (1) wave solder machine, ID# 194110 (Plant 9, Department 9601), constructed in 1991, with a capacity of 280 boards per hour, and exhausting to Stack 9-F7-1;
- (p) One (1) wave solder machine, ID# 186604 (Plant 9, Dept. 9602), constructed in 1991, with a capacity of 515 boards per hour, and exhausting to stack 9-F7-2;
- (q) One (1) wave solder machine, ID# 165812 (Plant 9, Dept. 9604), constructed in 1983, with a capacity of 280 boards per hour, and exhausting to stack 9-C8-1;

Insignificant Activities

The source also consists of the following insignificant activities, 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) A gasoline fuel transfer and dispensing operation handling less than or equal to 1,300 gallons per day, such as filling of tanks, locomotives, automobiles, having a storage capacity less than or equal to 10,500 gallons;
- (c) A petroleum fuel, other than gasoline, dispensing facility, having a storage capacity of less than or equal to 10,500 gallons, and dispensing less than or equal to 230,000 gallons per month;
- (d) The following VOC and HAP storage containers:
 - (1) Storage tanks with capacity less than or equal to 1,000 gallons and annual throughput less than 12,000 gallons.
 - (2) Vessels storing lubricating oils, hydraulic oils, machining oils, and machining fluids.
- (e) Machining where an aqueous cutting coolant continuously floods the machining interface.
- (f) 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];
 - (1) Three (3) cold cleaners in Plant 6, constructed pursuant to CP067-3262-00022 and three (3) constructed in 2006;
 - (2) Two (2) cold cleaners in Plant 7;
 - (3) Four (4) cold cleaners in Plant 8 and one (1) cold cleaner constructed pursuant to CP067-3262-00022;
 - (4) Seven (7) cold cleaners in Plant 9; and
 - (5) Two (2) cold cleaners in Plant 10.
- (g) Cleaners and solvents characterized as follows:
 - (1) Having a vapor pressure equal to or less than 2 kPa; 15 mm Hg; or 0.3 psi measured at 38 degrees C (100 degrees F); or
 - (2) Having a vapor pressure equal to or less than 0.7 kPa; 5mm Hg; or 0.1 psi measure at 20 degrees C (68 degrees F); orthe use of which for all cleaners and solvents combined does not exceed 145 gallons per 12 months;
- (h) Closed loop heating and cooling systems;
- (i) Activities associated with the treatment of wastewater streams with an oil and grease content less than or equal to 1% by volume.
- (j) Solvent recycling systems with batch capacity less than or equal to 100 gallons;
- (k) Any operation using aqueous solution containing less than 1% by weight of VOCs excluding HAPs;

- (l) Water based adhesives that are less than or equal to 5% by volume of VOCs, excluding HAPs.
- (m) Noncontact cooling tower systems with either of the following:
 - (1) Natural draft cooling towers not regulated under a NESHAP.
- (n) Heat exchanger cleaning and repair.
- (o) Natural draft cooling towers not regulated under a NESHAP;
- (p) Replacement or repair of electrostatic precipitators, bags in baghouses and filters in other air filtration equipment;
- (q) 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];
- (r) Stockpiled soils from soil remediation activities that are covered and waiting transport for disposal;
- (s) Paved and unpaved roads and parking lots with public access.
- (t) Asbestos abatement projects regulated by 326 IAC 14-10.
- (u) Enclosed systems for conveying plastic raw materials and plastic finished goods;
- (v) Blowdown for any of the following: sight glass; boiler; compressors; pumps; and cooling tower;
- (w) On-site fire and emergency response training approved by the department.
- (x) Stationary fire pump engines;
- (y) Diesel generators not exceeding one thousand six hundred (1600) horsepower (emergency only);
- (z) Routine maintenance and repair of buildings, structures, or vehicles at the source where air emissions from those activities would not be associated with any production process, including purging of gas lines and purging of vessels.
- (aa) 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];
- (bb) Mold release agents using low volatile products (vapor pressure less than or equal to 2 kilopascals measured at 38 degrees C;
- (cc) Laboratory as defined in 326 IAC 2-7-1(21)(D);
- (dd) Pad printing (VOC emissions less than 3 pounds per hour) in Department 964 of EU_SC; and

- (ee) 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) Two (2) maintenance spray booths, constructed in 2003, located in the Central Maintenance Shop, with a total maximum paint usage of 0.71 gallons per hour, both controlled by dry filters;
 - (3) Three (3) low-volume wave solder machines (Vitronics Delta Wave model) (Plant 7); approved for construction in 2007; one (1) identified as MW TECH 2000-1, ID# 232607, exhausting to stack 7-U18-1; one (1) identified as MW TECH 2000-2, ID# 6035293, exhausting to stack 7-U18-2; and one (1) identified as MW TECH 2000-3, ID# 6035381, exhausting to stack 7-T18-1; with a maximum capacity of 100 boards per hour for each unit;
 - (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# 6035605, exhausting to stack 7-S17-2; and one (1) identified as GMT900Solder-2, ID# 603582, exhausting to stack 7-S18-1; with a maximum capacity of 120 boards per hour for each unit;
 - (5) One (1) TBC wave solder machine (waterborne flux) (Plant 7), approved for construction in 2007, identified as TBC, ID# 204288, with a maximum capacity of 400 boards per hour, exhausting to stack 7-T16-1;
 - (6) Two (2) solvent washers (TREK Industries Inc. DCC model); approved for construction in 2007; one (1) identified as TREK 3 Washer (Plant 9), ID#6040052, exhausting to stack 9-Z20-1; and one (1) identified as TREK 4 Washer (Plant 7), ID#6113861, exhausting through stack 7-T19-1; with a maximum capacity of 75.33 gallons per year for each unit;
 - (7) Three (3) coaters (PVA Conformal Coater model) (Plant 6); 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 6-K3-1; with maximum capacity of 400 units per hour for each unit.
 - (8) Two (2) solvent washers (TREK Industries Inc. DCC model); approved for construction in 1999; one (1) identified as TREK 1 Washer (Plant 9), ID#DE208552, no exhaust; and one (1) identified as TREK 2 Washer (Plant 9), ID#6030016, exhausting through stack 9-A20-1; with a maximum capacity of 75.33 gallons per year for each unit.

Existing Approvals

Since the issuance of the **Part 70 Operating Permit** T067-6505-00061 on October 21, 2002, the source has constructed or has been operating under the following approvals as well:

- (a) First Significant Permit Modification No. 067-16294-00061, issued on April 14, 2003;
- (b) First Administrative Amendment No. 067-17300-00061, issued on September 10, 2003;

- (c) First Minor Source Modification No. 067-17930-00061, issued on November 19, 2003;
- (d) Second Minor Source Modification No. 067-18089-00061, issued on November 20, 2003;
- (e) First Minor Permit Modification No. 067-17932-00061, issued on December 2, 2003;
- (f) Second Minor Permit Modification No. 067-18036-00061, issued on December 15, 2003;
- (g) Second Administrative Amendment No. 067-18768-00061, issued on June 22, 2004;
- (h) Third Minor Source Modification No. 067-20445-00061, issued on March 1, 2005;
- (i) Third Minor Permit Modification No. 067-20625-00061, issued on May 2, 2005;
- (j) Fourth Minor Source Modification No. 067-20862-00061, issued on August 1, 2005;
- (k) Second Significant Permit Modification No. 067-20987-00061, issued on October 18, 2005;
- (l) Fifth Minor Source Modification No. 067-22651-00061, issued on March 2, 2006;
- (m) Fourth Minor Permit Modification No. 067-22558-00061, issued on May 12, 2006;
- (n) Third Significant Permit Modification No. 067-23156-00061, issued on January 10, 2007;
- (o) Third Administrative Amendment No. 067-24169-00061, issued on January 25, 2007;
- (p) First Interim Minor Source Modification No. 067-25046I-00061, issued on August 7, 2007;
- (q) Sixth Minor Source Modification No. 067-25046-00061, issued on September 14, 2007;
- (r) Fifth Minor Permit Modification No. 067-25061-00061, issued on November, 13, 2007;
- (s) Second Interim Minor Source Modification No. 067-26168I-00061, issued on March 18, 2008;
- (t) Seventh Minor Source Modification No.: 067-26168-00061, issued on March 31, 2008; and
- (u) Fourth Administrative Amendment No.: 067-26379-00061, issued on April 17, 2008.

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

Enforcement Issue

There are no enforcement actions pending.

Emission Calculations

See Appendix A of this document for detailed emission calculations.

County Attainment Status

The source is located in Howard County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Unclassifiable or attainment effective June 15, 2004, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.
¹ Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM2.5	

(a) Ozone Standards

- (1) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision to 326 IAC 1-4-1 revoking the one-hour ozone standard in Indiana.
- (2) On September 6, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Allen, Clark, Elkhart, Floyd, LaPorte, St. Joseph as attainment for the 8-hour ozone standard.
- (3) On November 9, 2007, the Indiana Air Pollution Control Board finalized a temporary emergency rule to re-designate Boone, Clark, Elkhart, Floyd, LaPorte, Hamilton, Hancock, Hendricks, Johnson, Madison, Marion, Morgan, Shelby, and St. Joseph as attainment for the 8-hour ozone standard.
- (4) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Howard County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

(b) PM2.5

Howard County has been classified as attainment for PM2.5. U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions. Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.

(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.

(d) Fugitive Emissions

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

Unrestricted Potential Emissions

This table reflects the unrestricted potential emissions of the source.

Pollutant	Emissions (tons/year)
PM	Less than 100
PM10	Less than 100
SO ₂	Greater than 100 but less than 250
VOC	Greater than 250
CO	Less than 100
NO _x	Greater than 250

HAPs	Potential To Emit (tons/year)
A single HAP	Less than 10
Total HAPs	Less than 25

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of SO₂, VOC and NO_x is equal to or greater than 100 tons per year. Therefore, the source is subject to the provisions of 326 IAC 2-7.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) of all other criteria pollutants are less than 100 tons per year.
- (c) The potential to emit (as defined in 326 IAC 2-7-1(29)) of any single HAP is equal to or less than ten (10) tons per year and/or the potential to emit (as defined in 326 IAC 2-7-1(29)) of a combination of HAPs is equal to or less than twenty-five (25) tons per year.
- (d) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-7, fugitive emissions are not counted toward the determination of Part 70 applicability.

Part 70 Permit Conditions

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

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

Potential to Emit After Issuance

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

Process/Emission Unit	Potential to Emit (tons/year)						
	PM	PM10	SO ₂	VOC	CO	NO _x	HAPs
ID#184842 (Plt. 9, Dept. 270E) Electrovert Vectra (ID#6049081 (Plt 9, Dept. 270S))	-	-	-	35.0 as a group, less than 25 limit for each one individual	-	-	-
Wave Solder Machine #1015805 (Plt 7, Dept. 2860)	-	-	-	Less than 25	-	-	-
Wave Solder Machine (MW TECH 2000 HV, ID# 211274)	-	-	-	5.26	-	-	-
Wave Solder Machine (MW TECH 2000-1, ID# 232607)	-	-	-	1.91	-	-	-
Wave Solder Machine (MW TECH 2000-2, ID# 6035293)	-	-	-	1.91	-	-	-
Wave Solder Machine (MW TECH 2000-3, ID# 6035381)	-	-	-	1.91	-	-	-
ID#764303 (Plt. 7, Dept. 7643)	-	-	-	Less than 25	-	-	-
Semi-aqueous cleaner (Plt. 6, Dept. 850)	-	-	-	24.8	-	-	Hexane 7.2 single <10
Acid mixing operations controlled by a fume scrubber	-	-	-	Less than 25	-	-	
Clean Room Fab 1	-	-	-	23.3	-	-	
Clean Room Fab III	-	-	-	Less than 25	-	-	
Clean Room Fab V	-	-	-	Less than 25	-	-	
Boiler #9, Plt. 6, ID#16554	0.6	0.6	0	0.4	6.1	7.3	<1
Boiler #10, Plt. 6, ID#21492	0.6	0.6	0	0.4	6.1	7.3	<1
Boiler #1E, Plt. 8, ID#38302	0.5	0.5	0	0.4	5.4	6.4	<1
Boiler #2E, Plt. 8, ID#13313	0.5	0.5	0	0.4	5.4	6.4	<1
Boiler #3E, Plt. 8, #13312	0.5	0.5	0	0.4	5.4	6.4	<1
Boiler #1W, Plt. 8, ID 852	0.5	0.5	0	0.4	5.4	6.4	<1
Boiler Clayton 8W1, Plt. 8	0.8	0.8	0.1	0.6	9.0	10.7	<1
Boiler Clayton 8W2, Plt. 8	0.8	0.8	0.1	0.6	9.0	10.7	<1
Boiler West (831), Plt. 8, ID#17383	0.8	0.8	0.1	0.6	9.0	10.7	<1
Boiler #8W, Plt 9, ID#840	0.6	0.6	0	0.4	6.1	7.3	<1

Process/Emission Unit	Potential to Emit (tons/year)						
	PM	PM10	SO ₂	VOC	CO	NO _x	HAPs
Boiler#6W, Plt. 9, ID#841	0.6	0.6	0	0.4	6.1	7.3	<1
Boiler #5W, Plt. 9, ID#5569	0.6	0.6	0	0.4	6.1	7.3	<1
Boiler #3E, Plt. 9, ID#181067	0.7	0.7	0.1	0.5	7.7	9.2	<1
Boiler #2E, Plt. 9, ID#839	0.6	0.6	0	0.4	6.1	7.3	<1
Boiler #1, Fab III, ID#151563	1.3	1.3	55.7	0.5	7.7	13.1	<1
Boiler #2, Fab III, ID#151562	1.3	1.3	55.7	0.5	7.7	13.1	<1
Boiler #3, Fab III, ID#8294003	0.7	0.7	0.1	0.5	7.7	9.2	<1
Boiler #1, Plt. 10	0.5	0.5	0	0.4	5.4	6.4	<1
Boiler #2, Plt. 10 ID#201182	0.5	0.5	0	0.4	5.4	6.4	<1
Four dynamometer testing cells	0.087	-	-	2.43	64.7	1.68	<1
Boiler Mos, Plt. 8, ID#15917	0.4	0.4	0	0.3	4.6	5.5	<1
Automotive Ignition Module Production Line	-	-	-	9.71	-	-	1.01
Wave Solder Machine (GMT900Solder-1, ID# 6035605)	-	-	-	0.26	-	-	-
Wave Solder Machine (GMT900Solder-2, ID# 603582)	-	-	-	0.26	-	-	-
Wave Solder Machine (TBC, ID# 204288)	-	-	-	0.12	-	-	-
Solvent Washer (TREK 3 Washer, ID# 6035287)	-	-	-	0.40	-	-	-
Solvent Washer (TREK 4 Washer, ID# 211289)	-	-	-	0.40	-	-	-
Coater (GMT900 Coater-1, ID# 6035513)	-	-	-	0.88	-	-	-
Coater (GMT900 Coater-2, ID# 6035675)	-	-	-	0.88	-	-	-
Total	<250	<250	<250	>250	<250	>250	<10 single, <25 combined

- (a) This existing stationary source is major for PSD because the emissions of VOC and NO_x, criteria pollutant are greater than two hundred fifty (>250) tons per year.
- (b) Fugitive Emissions
 Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2 or 326 IAC 2-3, fugitive emissions are not counted toward the determination of PSD and Emission Offset applicability.

Federal Rule Applicability

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to existing emission units that involve a pollutant-specific emission unit and meet the following criteria:
- (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
 - (2) is subject to an emission limitation or standard for that pollutant; and
 - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the existing units as part of this Part 70 permit renewal.

The following federal rules are applicable to the source:

- (a) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to existing emission units that involve a pollutant-specific emission unit and meet the following criteria:
- (4) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
 - (5) is subject to an emission limitation or standard for that pollutant; and
 - (6) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the existing units as part of this Part 70 permit renewal.

- (b) The Boilers, identified Clayton 8W1, Plt.8, Clayton 8W2, Plt.8, Boiler #3E, Plt. 9, ID #181067, Boiler #3, Fab III, ID #8294003, Boiler #1, Plt. 10 and Boiler #2, Plt. 10, ID #201182 are subject to the requirements of the New Source Performance Standard, 40 CFR 60, Subpart Dc, Standard of Performance for Small Industrial-Commercial Institutional Steam Generating Unit, because the boiler was constructed in 1995, which was after June 9, 1989, which was the applicability date for this rule and each boiler has heat input capacity of greater than 10 million Btu/hour but less than 100 million Btu/hour. The specific facilities subject to this rule include the following:

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

The remainder of the boilers are not subject to this rule because they were constructed prior to 1989.

- (c) The two diesel generators are not subject to the requirements of the New Source Performance Standard, 40 CFR 60, Subpart IIII, Standard of Stationary Compression Ignition Internal Combustion Engines because they are emergency generators and built prior to July 11, 2005.

- (d) The solvent applied in the batch semi-aqueous cleaner does not contain any halogenated HAP specified in 40 CFR 63.460. Therefore, the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Halogenated Solvent Cleaning (40 CFR Part 63, Subpart T) are not applicable to these units.
- (e) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit renewal.
- (f) Hazardous Air Pollutants (HAPs) [40 CFR 63.50 through 63.56]
 - (1) The input of hexane to the degreaser (Sections D.3) and the semiconductor manufacturing process (Section D.4), shall be less than seven and two-tenths (7.2) tons, combined, per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is structured such that, when including the hexane emissions from the combustion units and insignificant activities, the source total hexane emissions remain less than ten (10) tons per year.
 - (2) For HAPs other than hexane, the input of any single HAP to the degreaser (Sections D.3) and the semiconductor manufacturing process (Section D.4), combined with the emissions from the combustion units and insignificant activities, the source total single HAP emissions remain less than ten (10) tons per year.
 - (3) The input of any combination of HAPs to the degreaser (Section D.3) and the semiconductor manufacturing process (Section D.4), shall be less than twenty-two (22.0) tons, combined, per twelve (12) consecutive month period with compliance determined at the end of each month. This limit is structured such that, when including the emissions of any combination of HAPs from the combustion units and insignificant activities, the source total emissions of any combination of HAPs remain less than twenty-five (25) tons per year.

Compliance with these limitations renders the requirements of Section 112(j) of the Clean Air Act (40 CFR Part 63.50 through 63.56) not applicable.

State Rule Applicability - Entire Source

326 IAC 1-6-3 (Preventive Maintenance Plan)

The source has submitted a Preventive Maintenance Plan (PMP) on September 6, 1996.

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

The HAP emissions from the existing source were limited to 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 in T067-6505-00061, issued on October 21, 2002. Therefore, the existing source is a minor source for HAPs. Therefore, the requirements of 326 IAC 2-4.1 are not applicable.

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

- (a) The units in plants 6, 7, and 9, permitted under 067-00022 (Delco Electronics), were major PSD sources as of 1989.
- (b) The units in plants 8 and 10, permitted under 067-00023 (Delco Electronics), and the units in FAB III, permitted under 067-00051, were never PSD major for any pollutant.

This source which includes plants 6, 7, 8, 9, 10 and Fab III, has the potential to emit greater than two hundred fifty (250) tons per year of VOC and NO_x. Therefore the source is major under 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting) because it is required to have an operating permit under 326 IAC 2-7, Part 70 program. Pursuant to this rule, the Permittee shall submit an emission statement certified pursuant to the requirements of 326 IAC 2-6. In accordance with the compliance schedule specified in 326 IAC 2-6-3, an emission statement must be submitted triennially by July 1 beginning in 2004 and every 3 years after.

326 IAC 5-1 (Opacity Limitations)

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

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

326 IAC 6-1-2 (Particulate Emission Limitations)

This source is not subject to 326 IAC 6.5-1-2 (Particulate Emission Limitations) even though Howard County is listed in 326 IAC 6.5-5-1 and Delphi Delco is listed in 326 IAC 6.5-5-5 because there are no specific limits for existing units at the source in 326 IAC 6.5-5-5, the potential to emit particulate matter for the source is less than one hundred (100) tons per year, and the actual emissions of particulate matter are less than ten (10) tons per year.

State Rule Applicability - Individual Facilities

Wave Soldering (EU_WS)

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

- (a) Pursuant to CP067-8909-00061, issued November 13, 1997, the input volatile organic compounds (VOC) including flux and thinner delivered to the applicators of the two (2) wave solder machines, ID# 184842 (Plant 9, Dept. 270E), and Electrovert Vectra model (ID# 6049081) Plant 9, Dept. 270S shall not exceed 35.0 tons as a group per twelve (12) consecutive month period with compliance determined at the end of each month and shall be limited to less than 25 tons as individual units 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.
- (b) The input of volatile organic compounds (VOC), including flux and thinner delivered to the applicators of the five (5) 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.

326 IAC 8-1-6 (New Facilities; General Reduction Requirements)

In order to render 326 IAC 8-1-6 (New Facilities; General Reduction Requirements) not applicable, the following requirements apply:

- (a) Pursuant to CP067-8909-00061, issued November 13, 1997, the input volatile organic compounds (VOC) including flux and thinner delivered to the applicators of the two (2) wave solder machines, ID# 184842 (Plant 9, Dept. 270E), and Electrovert Vectra model (ID# 6049081) Plant 9, Dept. 270S shall not exceed 35.0 tons as a group per twelve (12)

consecutive month period with compliance determined at the end of each month and shall be limited to less than 25 tons as individual units 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.

- (b) Pursuant to MSM 067-17930-00061, issued on November 19, 2003, the input of volatile organic compounds (VOC), including flux and thinner delivered to the applicators of wave solder machine # 1015805 (Plant 6, Dept. 286) 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 8-1-6 not applicable.
- (c) The input of volatile organic compounds (VOC), including flux and thinner delivered to the applicators of the five (5) 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) Pursuant to MSM 067-15608-00061, the potential to emit VOC of the semi-aqueous cleaner for ceramic substrates, located at Dept. 850, ID# 6040222, is less than 25 tons per year. Therefore the requirements of 326 IAC 8-1-6 are not applicable.
- (e) VOC emissions from each of the climate controlled clean rooms Fab I, 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.

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

There are no particulate emissions from solder machines because they are similar to flow coaters. Therefore, the requirements of 326 IAC 6-3-2 are not applicable. In addition, Condition D.1.2 in the source's Part 70 permit (T067-6505-000061, issued on October 21, 2002) for particulate emission limitations has been removed from the revised permit.

Combustion (EU_CO)

326 IAC 6-1-15 (Howard County)

Pursuant to 326 IAC 6-1-15 (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;
Boiler #2E, Plt. 9, ID#839; and
Boiler #2, Plt., 10, ID#201182.

There are no specific emissions limitations in 326 IAC 6-1-15 for any units at this source.

326 IAC 6-2 (Sources of Indirect Heating)

- (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 matter per million British thermal units heat input emission limit shown in the table.

Construction Date	Unit	Q (MMBtu/hr)	h* (ft)	N	Pt (lb/MMBtu)	Limit (lb/MMBtu)
1966	Boiler #1E, Plant 8, ID #38302	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 = 125.2	42.25	8	0.29	0.29
1966	Boiler #2E, Plant 8, ID #13313	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 = 125.2	42.25	8	0.29	0.29
1966	Boiler #3E, Plant 8, ID #13312	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 = 125.2	42.25	8	0.29	0.29
1967	Boiler #1W, Plant 8, ID #852	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 = 125.2	42.25	8	0.29	0.29
1967	Boiler #8W, Plant 9, ID #840	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 = 125.2	42.25	8	0.29	0.29
1967	Boiler #6W, Plant 9, ID #841	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 = 125.2	42.25	8	0.29	0.29
1967	Boiler #5W, Plant 9, ID #5569	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 = 125.2	42.25	8	0.29	0.29
1967	Boiler #2E, Plant 9, ID #839	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 = 125.2	42.25	8	0.29	0.29
1977	Boiler #9, Plant 6, ID #16554	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 + 16.7 + 12.6 = 154.5	41.4	10	0.23	0.23
1977	Boiler MOS, Plant 8, ID #15917	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 + 16.7 + 12.6 = 154.5	41.4	10	0.23	0.23
1980	Boiler West (831), Plant 8, ID #17383	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 + 16.7 + 12.6 + 16.7 + 16.7 = 187.9	40.8	12	0.21	0.21
1980	Boiler #10, Plant 6, ID #21492	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 + 16.7 + 12.6 + 16.7 + 16.7 = 187.9	40.8	12	0.19	0.19

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/m³
 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	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 + 16.7 + 12.6 + 16.7 + 20.9 + 20.9 = 229.7	0.27	0.27
1984	Boiler #2, Fab III, ID #151562	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 + 16.7 + 12.6 + 16.7 + 20.9 + 20.9 = 229.7	0.27	0.27
1990	Boiler #3E, Plant 9, ID #181067	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 + 16.7 + 12.6 + 16.7 + 20.9 + 20.9 + 20.922 = 250.6	0.26	0.26
1992	Boiler #3, Fab III, ID #8294003	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 + 16.7 + 12.6 + 16.7 + 20.9 + 20.9 + 20.922 + 20.9 = 271.5	0.25	0.25
1995	Boiler #2, Plant 10, ID# 201182	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 + 16.7 + 12.6 + 16.7 + 20.9 + 20.9 + 20.922 + 20.9 + 14.65 = 286.15	0.25	0.25
1996	Boiler Clayton 8W1, Plant 8	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 + 16.7 + 12.6 + 16.7 + 20.9 + 20.9 + 20.922 + 20.9 + 14.65 + 24.5 + 24.5 = 335.2	0.24	0.24
1996	Boiler Clayton 8W2, Plant 8	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 + 16.7 + 12.6 + 16.7 + 20.9 + 20.9 + 20.922 + 20.9 + 14.65 + 24.5 + 24.5 = 335.2	0.24	0.24
2001	Boiler #1, Plant 10	14.6 + 14.6 + 14.6 + 14.6 + 16.7 + 16.7 + 16.7 + 16.7 + 16.7 + 12.6 + 16.7 + 20.9 + 20.9 + 20.922 + 20.9 + 14.65 + 24.5 + 24.5 + 14.65 = 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)

326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)

Boiler #1, Fab III, ID#151563 and Boiler #2, Fab III, ID#151562 are subject to 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations) because when they burn No. 2 fuel oil, they have the potential to emit greater than twenty-five (25) tons per year of SO₂. Pursuant to this rule, SO₂ emissions from each boiler shall be limited to less than 0.5 pounds per million British thermal units.

Degreasing (EU_DG)

326 IAC 8-3-4 (Conveyorized Degreaser Operation)

The source has indicated this is a conveyorized degreaser. Therefore, 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.

The solvent used in this cleaner is water soluble and the rinse water will be directed to the on-site wastewater treatment plant. Therefore, 326 IAC 8-3-4(5) does not apply to this cleaner.

326 IAC 8-3-7 (Conveyorized Degreaser Operation and Control)

The Permittee has indicated that this cleaner has an air to solvent interface of less than two (2) square meters (twenty-one and six-tenths (21.6) square feet). Therefore, the requirements of 326 IAC 8-3-7 are not applicable to this new cleaner.

326 IAC 8-1-6 (General Reduction Requirements for VOC Emissions)

The potential to emit of VOCs from the batch semi-aqueous cleaner is less than 25 tons per year and the requirements of 326 IAC 8-3-4 for degreasing operation have applied to this cleaner. Therefore, the requirements of 326 IAC 8-1-6 are not applicable to this new semi-aqueous cleaner.

Clean Room Units

326 IAC 8-1-6 (General Reduction Requirements for VOC Emissions)

VOC emissions from each of the climate controlled clean rooms Fab I, 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.

Insignificant Boiler TTC, ID#9424001

326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating)

Boiler TTC is subject to 326 IAC 6-2-4 (Particulate Matter Emission Limitations for Sources of Indirect Heating) because it was constructed after 1993. Pursuant to this rule, the particulate emission rate from Boiler TTC shall be limited to 0.25 pounds per hour. This limit was established using the following equation:

$$Pt = \frac{1.09}{Q^{0.26}} = \frac{1.09}{271.52^{0.26}} = 0.25 \text{ lb/MMBtu}$$

where Pt = emission rate limit (lb/MMBtu)
Q = total source heat input capacity

Insignificant Trimmers, Grinding and Machining Operations, Wave Solder Machines, and Hand Brush Coating Stations

326 IAC 6-3-2 (Process Operations)

Pursuant to 326 IAC 6-3-2 (Process Operations), the allowable PM 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.

Insignificant Degreasers

326 IAC 8-3-2 (Cold Cleaner Operations)

Pursuant to 326 IAC 8-3-2 (Cold Cleaner Operations) for cold cleaning operations constructed after January 1, 1980, the owner or operator shall:

- (a) Equip the cleaner with a cover;
- (b) Equip the cleaner with a facility for draining cleaned parts;
- (c) Close the degreaser cover whenever parts are not being handled in the cleaner;
- (d) Drain cleaned parts for at least fifteen (15) seconds or until dripping ceases;
- (e) Provide a permanent, conspicuous label summarizing the operation requirements;
- (f) 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.

326 IAC 8-3-5 (Cold Cleaner Degreaser Operation and Control)

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.

Compliance Determination and Monitoring Requirements

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

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

- (a) The compliance monitoring requirements applicable to this source are as follows:
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.

- (b) Pursuant to 326 IAC 3-7-4, the Permittee shall demonstrate that the sulfur dioxide emissions do not exceed five-tenths (0.5) pounds per million Btu heat input by:
 - (1) Providing vendor analysis of fuel delivered, if accompanied by a vendor certification, or;
 - (2) Analyzing the oil sample to determine the sulfur content of the oil via the procedures in 40 CFR 60, Appendix A, Method 19.
 - (A) Oil samples may be collected from the fuel tank immediately after the fuel tank is filled and before any oil is combusted; and
 - (B) If a partially empty fuel tank is refilled, a new sample and analysis would be required upon filling.
- (c) Compliance may also be determined by conducting a stack test for sulfur dioxide emissions from Boiler #1, Fab III, ID #151563 and Boiler #2, Fab III, ID# 151562, using 40 CFR 60, Appendix A, Method 6 in accordance with the procedures in 326 IAC 3-6.

 A determination of noncompliance pursuant to any of the methods specified in (a) or (b) above shall not be refuted by evidence of compliance pursuant to the other method.
- (d) 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. 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. 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. 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. 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.
- (e) 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 1 scrubber - Dept. 8026 5ID Room TRI-MER DE No. 169970	0.1 - 1.2
Fab 1 scrubber - 5ID Room (Dept. 8026) Harrington DE No. (none)	0.1 - 2.5
Fab 1 scrubber - SensorFAB (8026) Harrington DE No. 177150 (826B)	0.1 - 3
Fab 1 scrubber - Dept. 8026 SensorFAB East (VIRON) DE No. (none) (SB101A)	0.1 - 3.5

Scrubber	Pressure Drop (inches of water)
Fab 1 scrubber - Dept. 8026 SensorFAB West (VIRON) DE No. (none) (SB100A)	0.1 - 3.5
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
QFP scrubber	0.1 - 1.2
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 1 scrubber - Dept. 8026 5ID Room TRI-MER DE No. 169970	3 - 30
Fab 1 scrubber - 5ID Room (Dept. 8026) Harrington DE No. (none)	100 - 180
Fab 1 scrubber - SensorFAB (8026) Harrington DE No. 177150 (826B)	100 - 180
Fab 1 scrubber - Dept. 8026 SensorFAB East (VIRON) DE No. (none) (SB101A)	140 - 200
Fab 1 scrubber - Dept. 8026 SensorFAB West (VIRON) DE No. (none) (SB100A)	140 - 200
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
QFP scrubber	3 - 15
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.

(f) Offsite recycling or disposal:

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.5.2 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

VOC_U = The total amount of VOC, in tons, delivered to the clean room.

VOC_R = The total amount of VOC, in tons, shipped off-site.

Recommendation

The staff recommends to the Commissioner that the Part 70 Operating Permit Renewal be approved. This recommendation is based on the following facts and conditions:

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on November 21, 2006.

Conclusion

The operation of this stationary source which produces electronic components principally for the automotive industry shall be subject to the conditions of the attached Part 70 Operating Permit Renewal No.T067-23927-00061.

Appendix A: Emission Calculations
VOC Emissions
Wave Solder Machine

Company Name: Delphi Automotive Systems LLC
Address City IN Zip: 2033 East Boulevard Street
Part 70 Operating Permit No. 067-23927-00061
Reviewer: Teresa Freeman
Date: May 24, 2008

	*Material	Density (lbs/gal)	Weight % Volatile (H ₂ 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)
ID# 1015805	Thinner - Isopropyl Alcohol	6.59	100.00%	0.0%	100.0%	500	0.00044	6.59	1.45	34.80	6.35
MSM 067-17930-00061	Flux - Kester 958	6.72	91.16%	0.0%	91.2%	500	0.0116	6.13	35.53	852.73	155.6
	Total								36.98		162.0

* 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

Appendix A: Emission Calculations

Company Name: Delphi Automotive Systems LLC
Address City IN Zip: 2033 East Boulevard Street
Part 70 Operating Permit No. 067-23927-00061
Reviewer: Teresa Freeman
Date: May 24, 2008

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)
2 TREK Solvent Washers							
TREK 3 (ID# 6035287)	10.63	100%	75.335	10.63	800.81	0.40	2.19
TREK 4 (ID# 211289)	10.63	100%	75.335	10.63	800.81	0.40	2.19
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)							

Emission Unit	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# 211274)	275	0.0045	0.9697	1.20	10512.03	5.26	28.80
MW TECH 2001-1 (ID# 232607)	100	0.0045	0.9697	0.44	3822.56	1.91	10.47
MW TECH 2001-2 (ID# 6035293)	100	0.0045	0.9697	0.44	3822.56	1.91	10.47
MW TECH 2001-3 (ID# 6035381)	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# 6035605)	120	0.0005	0.06	525.6	0.26	1.44
GMT900Solder-2 (ID# 603582)	120	0.0005	0.06	525.6	0.26	1.44
GMT900 Coater-1 (ID# 6035513)	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						

Emission Unit	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)
1 TBC Wave Solder Machine							
TBC (ID# 204288)	400	0.0045	0.015	0.03	236.52	0.12	0.65
PTE of VOC (lbs/hr) = Number of Units per Hour x Pounds of Flux per Unit x Pounds VOC per Pounds of Flux							

Total VOC Emissions	PTE of VOC (lbs/yr)	PTE of VOC (tons/yr)
	28373.05	14.19

* 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.

**Appendix A: Emission Calculations
VOC and HAPs Emissions
Semi-Aqueous Cleaner ID# 6040222**

**Company Name: Delphi Automotive Systems LLC
Address City IN Zip: 2033 East Boulevard Street
Part 70 Operating Permit No. 067-23927-00061
Reviewer: Teresa Freeman
Date: May 24, 2008**

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 ₂ 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
Total								24.81			0.00

Note:

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)

**Appendix A: Emission Calculations
VOC and HAP Emissions
From the Climate Controlled Clean Room Fab III**

**Company Name: Delphi Automotive Systems LLC
Address City IN Zip: 2033 East Boulevard Street
Part 70 Operating Permit No. 067-23927-00061
Reviewer: Teresa Freeman
Date: May 24, 2008**

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 Methanol (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
Total VOC/HAP Input					11.8		51.7		0.04		0.17
*The VOC/HAP in Shipped Out Waste							28.4		0.00		0.00
Total PTE of VOC/HAP Before Control							23.3		0.04		0.17

*This information is provided by the source.

Note: This clean room 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.

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
Natural Gas Combustion Only
MM BTU/HR <100**

**Company Name: Delphi Automotive Systems LLC
Address City IN Zip: 2033 East Boulevard Street
Part 70 Operating Permit No. 067-23927-00061
Reviewer: Teresa Freeman
Date: May 24, 2008**

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
349.822	3064.44072

	Pollutant					
Emission Factor in lb/MMCF	PM* 7.6	PM10* 7.6	SO2 0.6	NOx 100 **see below	VOC 5.5	CO 84
Potential Emission in tons/yr	11.64	11.64	0.92	153.22	8.43	128.71

*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

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

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

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

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

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

Appendix A: Emissions Calculations**Natural Gas Combustion Only****MM BTU/HR <100****HAPs Emissions****Company Name: Delphi Automotive Systems LLC****Address City IN Zip: 2033 East Boulevard Street****Part 70 Operating Permit No. 067-23927-00061****Reviewer: Teresa Freeman****Date: May 24, 2008****HAPs - Organics**

Emission Factor in lb/MMcf	Benzene 2.10E-03	Dichlorobenzene 1.20E-03	Formaldehyde 7.50E-02	Hexane 1.80E+00	Toluene 3.40E-03
Potential Emission in tons/yr	3.22E-03	1.84E-03	1.15E-01	2.76E+00	5.21E-03

HAPs - Metals

Emission Factor in lb/MMcf	Lead 5.00E-04	Cadmium 1.10E-03	Chromium 1.40E-03	Manganese 3.80E-04	Nickel 2.10E-03
Potential Emission in tons/yr	7.66E-04	1.69E-03	2.15E-03	5.82E-04	3.22E-03

Methodology is the same as page 1.

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

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

**Company Name: Delphi Automotive Systems LLC
Address City IN Zip: 2033 East Boulevard Street
Part 70 Operating Permit No. 067-23927-00061
Reviewer: Teresa Freeman
Date: May 24, 2008**

Heat Input Capacity MMBtu/hr	Potential Throughput kgals/year	S = Weight % Sulfur 0.6
41.8	2615.485714	

	Pollutant				
Emission Factor in lb/kgal	PM*	SO2 (142.0S)	NOx	VOC	CO
Potential Emission in tons/yr	2.62	111.42	26.15	0.44	6.54

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 1-03-005-01/02/03) Supplement E 9/98 (see erata file)

*PM emission factor is filterable PM only. Condensable PM emission factor is 1.3 lb/kgal.

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

**Appendix A: Emissions Calculations
Commercial/Institutional/Residential Combustors (< 100 mmBtu/hr)**

#1 and #2 Fuel Oil

Company Name: Delphi Automotive Systems LLC

Address City IN Zip: 2033 East Boulevard Street

Part 70 Operating Permit No. 067-23927-00061

Reviewer: Teresa Freeman

Date: May 24, 2008

HAPs - Metals

Emission Factor in lb/mmBtu	Arsenic 4.00E-06	Beryllium 3.00E-06	Cadmium 3.00E-06	Chromium 3.00E-06	Lead 9.00E-06
Potential Emission in tons/yr	7.32E-04	5.49E-04	5.49E-04	5.49E-04	1.65E-03

HAPs - Metals (continued)

Emission Factor in lb/mmBtu	Mercury 3.00E-06	Manganese 6.00E-06	Nickel 3.00E-06	Selenium 1.50E-05
Potential Emission in tons/yr	5.49E-04	1.10E-03	5.49E-04	2.75E-03

Methodology

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

Appendix A: Emission Calculations
VOC and HAP Emissions
From the Automotive Ignition Module Production Line

Company Name: Delphi Automotive Systems LLC
Address City IN Zip: 2033 East Boulevard Street
Part 70 Operating Permit No. 067-23927-00061
Reviewer: Teresa Freeman
Date: May 24, 2008

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
Total				2.22	53.2	9.71		0.16		0.84

* 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 (%)

**Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations - Conformal Coat Dispense Machine #1 and #2**

**Company Name: Delphi Automotive Systems LLC
Address City IN Zip: 2033 East Boulevard Street
Part 70 Operating Permit No. 067-23927-00061
Reviewer: Teresa Freeman
Date: May 24, 2008**

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
DOW 1953	8.09	3.00%	0.0%	3.0%	0.0%	97.00%	0.0035060	75.000	0.2427	0.2427	0.0638
DOW 1953	8.09	3.00%	0.0%	3.0%	0.0%	97.00%	0.0035060	75.000	0.2427	0.2427	0.0638

State Potential Emissions

Add worst case coating to all solvents

0.13

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

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

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

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

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

Appendix A: Emissions Calculations
VOC and Particulate
From Surface Coating Operations - Conformal Coat Dispense Machine #1 and #2

Company Name: Delphi Automotive Systems LLC
Address City IN Zip: 2033 East Boulevard Street
Part 70 Operating Permit No. 067-23927-00061
Reviewer: Teresa Freeman
Date: May 24, 2008

	Units/hr	No. of Sides	Coating Volume (ml/side)	Gallon / ml	VOC Fraction	Flux Density (lb/gal)	lb VOC/ hr	ton VOC / yr
Topaz Solder BAS+ 1	75	2	5	0.000264	0.95	6.26	1.1775	5.1575
Topaz Solder BAS+ 2	75	2	5	0.000264	0.95	6.26	1.1775	5.1575
Wave Solder BAS+ 3	75	1	2	0.000264	0.95	6.26	0.2355	1.0315
	Units/hr	No. of Sides	Coating Volume (ml/side)	Gallon / ml	VOC Fraction	Flux Density (lb/gal)	lb VOC /hr	ton VOC /yr
Point Solder	75	1	2	0.000264	0.95	6.26	0.2355	1.0315

Total VOC emissions (lb/hr) 2.826
Total VOC emissions (ton/yr) 12.378

Methodology:

- 1) lb VOC/hr = (units/hr) x (number of sides) x (coating volume) x (0.000264 gal/ml) x (VOC Fraction) x (Flux Density)
- 2) ton VOC/yr = (lb VOC/hr) x (8,760 hr/yr) x (1 ton/2,000 lb)
- 3) 100% flashoff of VOC was assumed.

**Appendix A: Emissions Calculations
VOC and Particulate**

From Surface Coating Operations - Conformal Coat Dispense Machine #1 and #2

**Company Name: Delphi Automotive Systems LLC
Address City IN Zip: 2033 East Boulevard Street
Part 70 Operating Permit No. 067-23927-00061
Reviewer: Teresa Freeman
Date: May 24, 2008**

	Units/hr	No. of Sides	Coating Volume (ml/side)	Gallon / ml	Solids Fraction	Flux Density (lb/gal)	Transfer Efficiency	lb PM / hr	ton PM / yr
Topaz Solder BAS+ 1	75	2	5	0.000264	0.05	6.26	90%	0.0062	0.0272
Topaz Solder BAS+ 2	75	2	5	0.000264	0.05	6.26	90%	0.0062	0.0272
Wave Solder BAS+ 3	75	1	2	0.000264	0.05	6.26	90%	0.0012	0.0053
	Units/hr	No. of Sides	Coating Volume (ml/side)	Gallon / ml	Solids Fraction	Flux Density (lb/gal)	Transfer Efficiency	lb PM / hr	ton PM /yr
Point Solder	75	1	2	0.000264	0.05	6.26	90%	0.0124	0.0543

Total PM/PM10 emissions (lb/hr) 0.026
Total PM/PM10 emissions (ton/yr) 0.114

Methodology:

- 1) 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)
- 2) ton PM / yr = (lb PM/hr) x (8,760 hr/yr) x (1 ton/2,000 lb)
- 3) 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.
- 4) All particulate matter emissions are assumed to be PM10 due to the nature of the operation.

Appendix A: Emissions Calculations

VOC and Particulate

From Surface Coating Operations - Conformal Coat Dispense Machine #1 and #2

Company Name: Delphi Automotive Systems LLC

Address City IN Zip: 2033 East Boulevard Street

Part 70 Operating Permit No. 067-23927-00061

Reviewer: Teresa Freeman

Date: May 24, 2008

	Units/hr	No. of Sides	Coating Volume (ml/side)	Gallon / ml	HAP Fraction	Flux Density (lb/gal)	Transfer Efficiency	lb HAP / hr	ton HAP / yr
Topaz Solder BAS+ 1	75	2	5	0.000264	0.0	6.26	99.9%	0.00E+00	0.00E+00
Topaz Solder BAS+ 2	75	2	5	0.000264	0.0	6.26	99.9%	0.00E+00	0.00E+00
Wave Solder BAS+ 3	75	1	2	0.000264	0.4	6.26	99.9%	9.92E-05	4.34E-04
	Units/hr	No. of Sides	Coating Volume (ml/side)	Gallon / ml	HAP Fraction	Flux Density (lb/gal)	Transfer Efficiency	lb HAP / hr	ton HAP / yr
Point Solder	75	1	2	0.000264	0.0	6.26	99.9%	0.00E+00	0.00E+00

Total HAP (Lead) emissions (lb/hr) 9.92E-05
Total HAP (Lead) emissions (ton/yr) 4.34E-04

Methodology:

- 1) 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)
- 2) ton HAP / yr = (lb PM/hr) x (8,760 hr/yr) x (1 ton/2,000 lb)
- 3) 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.
- 4) The wave solder unit is the only source of HAP emissions.