

DATE: October 25, 2007  
TO: Interested Parties / Applicant  
RE: Aearo Technologies / SPM 097-24868-00368  
FROM: Felicia A. Robinson  
Administrator



## Notice of Decision: Approval – Effective Immediately

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

If you wish to challenge this decision, IC 4-21.5-3-7 and IC 13-15-7-3 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office Environmental Adjudication, 100 North Senate Avenue, Government Center North, Room 1049, Indianapolis, IN 46204, **within fifteen (15) days of the receipt of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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

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

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

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

Enclosures



Air Quality Hotline: 317-327-4AIR | [knozone.com](http://knozone.com)

Department of Public Works  
Office of Environmental Services

2700 Belmont Avenue  
Indianapolis, IN 46221

317-327-2234  
Fax 327-2274  
TDD 327-5186  
[indygov.org/dpw](http://indygov.org/dpw)



October 25, 2007

Mr. Jim Coratti  
Aearo Technologies  
5457 West 79<sup>th</sup> Street  
Indianapolis, IN 46268

CERTIFIED MAIL: 7007 0710 0005 3965 9740

Re: SPM097-24868-00368  
Second Significant Permit Modification to:  
Part 70 Operating Permit No.: T097-8852-00368

Dear Mr. Coratti:

Aearo Technologies was issued a Part 70 Operating Permit No. T097-8852-00368 on February 19, 2003 for the operation of a stationary plastics manufacturing operation. An application to modify the source was received on May 30, 2007. Pursuant to 326 IAC 2-7-12(d), a significant permit modification to this permit is hereby approved as described in the Technical Support Document.

This modification consists of the addition of one Acoustical Test Facility.

All other conditions of the permit shall remain unchanged and in effect. Please find attached a copy of the revised permit.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Amanda Hennessy at (317) 327-2176.

Sincerely,

Original Signed by Felicia A. Robinson

Felicia A. Robinson  
Administrator  
Office of Environmental Services

Attachments

FAR/ajh

cc: Files  
Marion County Health Department  
Matt Mosier – OES Air Compliance Section  
Mindy Hahn – IDEM, OAQ  
USEPA, Region 5



Air Quality Hotline: 317-327-4AIR | [knozone.com](http://knozone.com)

Department of Public Works  
Office of Environmental Services

2700 Belmont Avenue  
Indianapolis, IN 46221

317-327-2234  
Fax 327-2274  
TDD 327-5186  
[indygov.org/dpw](http://indygov.org/dpw)



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

and

**INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES**

**Aearo Technologies**

**5457 West 79<sup>th</sup> Street  
7911 Zionsville Road  
8001 Woodland Drive  
Indianapolis, IN 46268**

(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 and the Code of Indianapolis and Marion County, Chapter 511.

Operation Permit No.: T097-8852-00368	Issued February 19, 2003 Expires February 19, 2008
Issued by: Janet G. McCabe, Assistant Commissioner, Office of Air Quality John B. Chavez, Administrator, Office of Environmental Services	

First Administrative Amendment, 097-19348-00368, issued on September 22, 2004  
 First Minor Permit Modification, 097-21097-00368, issued on June 13, 2005  
 Second Administrative Amendment 097-23397-00368, issued on September 21, 2006  
 1st Significant Permit Modification 097-24099-00368, issued on May 31, 2007

2nd Significant Permit Modification, SPM 097-24868-00368	Section Added: D.5
Issued by:  Original Signed By Felicia A. Robinson  Felicia A. Robinson Administrator Office of Environmental Services	Issuance Date: October 25, 2007  Expiration Date: February 19, 2008



Air Quality Hotline: 317-327-4AIR | knozone.com

Department of Public Works  
Office of Environmental Services  
2700 Belmont Avenue  
Indianapolis, IN 46221  
317-327-2234  
Fax 327-2274  
TDD 327-5186  
indygov.org/dpw

## TABLE OF CONTENTS

<b>A</b>	<b>SOURCE SUMMARY</b> .....	5
A.1	General Information [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)] [326 IAC 2-7-1(22)]	
A.2	Part 70 Source Definition [326 IAC 2-7-1(22)]	
A.3	Emission Units and Pollution Control Equipment Summary [326 IAC 2-7-4(c)(3)] [326 IAC 2-7-5(15)]	
A.4	Specifically Regulated Insignificant Activities [326 IAC 2-7-1(21)] [326 IAC 2-7-4(c)] [326 IAC 2-7-5(15)]	
A.5	Part 70 Permit Applicability [326 IAC 2-7-2]	
<b>B</b>	<b>GENERAL CONDITIONS</b> .....	8
B.1	Definitions [326 IAC 2-7-1]	
B.2	Permit Term [326 IAC 2-7-5(2)] [326 IAC 2-1.1-9.5][326 IAC 2-7-4(a)(1)(D)][IC 13-15-3-6(a)]	
B.3	Term of Conditions [326 IAC 2-1.1-9.5]	
B.4	Enforceability [326 IAC 2-7-7]	
B.5	Severability [326 IAC 2-7-5(5)]	
B.6	Property Rights or Exclusive Privilege [326 IAC 2-7-5(6)(D)]	
B.7	Duty to Provide Information [326 IAC 2-7-5(6)(E)]	
B.8	Certification [326 IAC 2-7-4(f)] [326 IAC 2-7-6(1)] [326 IAC 2-7-5(3)(C)]	
B.9	Annual Compliance Certification [326 IAC 2-7-6(5)]	
B.10	Preventive Maintenance Plan [326 IAC 2-7-5(1),(3)and (13)][326 IAC 2-7-6(1)and(6)] [326 IAC 1-6-3]	
B.11	Emergency Provisions [326 IAC 2-7-16]	
B.12	Permit Shield [326 IAC 2-7-15] [326 IAC 2-7-20] [326 IAC 2-7-12]	
B.13	Prior Permits Superseded [326 IAC 2-1.1-9.5][326 IAC 2-7-10.5]	
B.14	Termination of Right to Operate [326 IAC 2-7-10] [326 IAC 2-7-4(a)]	
B.15	Deviations from Permit Requirements and Conditions [326 IAC 2-7-5(3)(C)(ii)]	
B.16	Permit Modification, Reopening, Revocation and Reissuance, or Termination [326 IAC 2-7-5(6)(C)] [326 IAC 2-7-8(a)] [326 IAC 2-7-9]	
B.17	Permit Renewal [326 IAC 2-7-3][326 IAC 2-7-4][326 IAC 2-7-8(e)]	
B.18	Permit Amendment or Modification [326 IAC 2-7-11][326 IAC 2-7-12]	
B.19	Permit Revision Under Economic Incentives and Other Programs [326 IAC 2-7-5(8)] [326 IAC 2-7-12(b)(2)]	
B.20	Operational Flexibility [326 IAC 2-7-20] [326 IAC 2-7-10.5]	
B.21	Source Modification Requirement [326 IAC 2-7-10.5][326 IAC 2-3]	
B.22	Inspection and Entry [326 IAC 2-7-6] [IC 13-14-2-2][IC 13-30-3-1][IC 13-17-3-2]	
B.23	Transfer of Ownership or Operational Control [326 IAC 2-7-11]	
B.24	Annual Fee Payment [326 IAC 2-7-19] [326 IAC 2-7-5(7)] [326 IAC 2-1.1-7]	
B.25	Credible Evidence [326 IAC 2-7-5(3)][326 IAC 2-7-6][62 FR 8314] [326 IAC 1-1-6]	
<b>C</b>	<b>SOURCE OPERATION CONDITIONS</b> .....	20
	<b>Emission Limitations and Standards [326 IAC 2-7-5(1)]</b>	
C.1	Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) pounds per hour [326 IAC 6-3-2]	
C.2	Opacity [326 IAC 5-1]	
C.3	Open Burning [326 IAC 4-1] [IC 13-17-9]	
C.4	Incineration [326 IAC 4-2] [326 IAC 9-1-2]	
C.5	Fugitive Dust Emissions [326 IAC 6-4]	
C.6	Operation of Equipment [326 IAC 2-7-6(6)]	
C.7	Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]	

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

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

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

C.9 Compliance Requirements [326 IAC 2-1.1-11]

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

C.10 Compliance Monitoring [326 IAC 2-7-5(3)] [326 IAC 2-7-6(1)]

C.11 Monitoring Methods [326 IAC 3] [40 CFR 60] [40 CFR 63]

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

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

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

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

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

C.15 Emission Statement 326 IAC 2-7-5(3)(C)(iii)[326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

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

**Stratospheric Ozone Protection**

C.18 Compliance with 40 CFR 82 and 326 IAC 22-1

**D.1 FACILITY OPERATION CONDITIONS - Confor Process..... 28**

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

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

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

D.1.2 Record Keeping Requirements

D.1.3 Reporting Requirements

**D.2 FACILITY OPERATION CONDITIONS - PVC Foam Mixing and Casting Line..... 30**

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

D.2.1 Particulate [326 IAC 6-3-2]

**Compliance Determination Requirements**

D.2.2 Particulate Control

**D.3 FACILITY OPERATION CONDITIONS - Mushroom Pilot Line / Tote Cleaning..... 31**

**D.4 FACILITY OPERATION CONDITIONS - Polyurethane Molding Lines ..... 32**

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

D.4.1 Particulate [326 IAC 6-3-2]

D.4.2 Volatile Organic Compounds [326 IAC 8-1-6] [325 IAC 2-3] [326 IAC 2-7-10.5(d)]

**Compliance Determination**

D.4.3 Volatile Organic Compounds

<b>Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]</b>	
D.4.4 Record Keeping Requirements	
D.4.5 Reporting Requirements	
<b>D.5 FACILITY OPERATION CONDITIONS - Acoustical Test Facility</b>	<b>34</b>
<b>Emission Limitations and Standards [326 IAC 2-7-5(1)]</b>	
D.5.1 NOx Emissions [326 IAC 2-3] [326 IAC 2-7-10.5(d)]	
<b>Record Keeping and Reporting Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-19]</b>	
D.5.2 Record Keeping Requirements	
D.5.3 Reporting Requirements	
<b>Certification</b>	<b>35</b>
<b>Emergency Occurrence Report</b>	<b>36</b>
<b>Usage Report</b>	<b>38</b>
<b>Quarterly Report</b>	<b>39</b>
<b>Quarterly Report</b>	<b>40</b>
<b>Quarterly Report</b>	<b>41</b>
<b>Quarterly Deviation and Compliance Monitoring Report</b>	<b>42</b>
<b>Attachment A</b>	<b>44</b>

## SECTION A

## SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES). The information describing the source contained in conditions A.1, A.3 and A.4 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 plastic manufacturing operation.

Source Address:	Plant 1: 7911 Zionsville Road, Indianapolis, IN 46268 Plant 2: 5457 West 79 <sup>th</sup> Street, Indianapolis, IN 46268 Plant 3: 8001 Woodland Drive, Indianapolis, IN 46268
Mailing Address:	5457 West 79 <sup>th</sup> Street, Indianapolis, IN 46268
General Source Phone Number:	(317)692-6666
SIC Code:	3086, 3842 (NAICS Code 326150)
County Location:	Marion
Source Location Status:	Nonattainment for 8 Hour Ozone and PM-2.5 Attainment for all other criteria pollutants
Source Status:	Part 70 Permit Program Minor Source, under Section 112 of Clean Air Act Minor Source, under PSD and nonattainment new source review Major Source, under Emission Offset

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

---

This plastics manufacturing company consists of three (3) plants:

- (a) **Plant 1, EAR Specialty Composites**, is located at 7911 Zionsville Road, Indianapolis, IN 46268;
- (b) **Plant 2, Aeero Technologies**, is located at 5457 West 79<sup>th</sup> Street, Indianapolis, IN 46268; and
- (c) **Plant 3, IDC - Woodland Drive**, is located at 8001 Woodland Drive, Indianapolis, IN 46268

Since the three (3) plants are located on contiguous or adjacent properties, belong to the same industrial grouping, and under common control of the same entity, they will be considered one (1) source, effective from the date of issuance of this Part 70 permit.

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:

**EAR Specialty Composites 7911 Zionsville Road**

- (a) One (1) confor process, installed in 1990 and modified in 1999, with a maximum isopentane usage rate of 58,441 pounds per year, producing slab stock polyurethane foam and exhausting out stack SU-2.
- (b) One (1) PVC foam mixing and casting line, installed in the 1970's, identified as emission unit ID 5056-01, with a maximum capacity of 5,720,280 pounds of raw material input per year (653 pounds per hour) consisting of a PVC pellet mixing operation with a fabric filter and a casting line with a 6 million Btu per hour natural gas or propane fueled oven, with emissions exhausting to a catalytic oxidizer which exhausts to stack SC-1.
- (c) One urethane foam forming line (Mushroom Pilot Line) installed in 1996, and modified in 2006, producing foam for either of two product lines, with a maximum VOC containing raw material usage rate of 17,078 lbs/yr for process A, and 218,177 lbs/yr, for process B, and with emissions exhausting out stack SU-8.
- (d) One (1) tote cleaning process installed in the 1970's, with a maximum solvent usage rate of 11,384 lbs/yr, and with fugitive emissions vented through general building ventilation stack SU-5.
- (e) One (1) Acoustical Test Facility, receiving approval to construct in 2007, identified as ATF, exhausting to stack ATF-S1 and consisting of one of the following three testing activities:
  - (1) Reciprocating internal combustion engine, identified as ATF-U1, with a maximum capacity of 600 horsepower, burning diesel fuel.
  - (2) Reciprocating internal combustion engine, identified as ATF-U2, with a maximum capacity of 1500 horsepower, burning natural gas.
  - (3) Reciprocating internal combustion engine, identified as ATF-U3, with a maximum capacity of 5 horsepower, burning a mixture of natural gas, diesel and gasoline.

Only one of the three testing activities, ATF-U1, ATF-U2, ATF-U3, can take place at a time.

**Aearo Technologies 5457 West 79<sup>th</sup> Street**

- (f) One polyurethane molding line, installed in 1990 and modified in 2005, identified as Emission Unit 901, with a maximum VOC/HAP containing raw materials usage rate of 776,924 lbs/yr, and exhausting to Stack SU-12. The raw materials used do not meet the definitions of polyurethane under 40 CFR Part 63, Subpart III.
- (g) One polyurethane molding line, installed in 1991, identified as Emission Unit 902 with a production capacity of 2,000 pairs of earplugs per hour, and exhausting to Stack SU-13. The raw materials used do not meet the definitions of polyurethane under 40 CFR Part 63, Subpart III.
- (h) One polyurethane molding line, approved for construction in 2007, identified as Emission Unit 909, with a maximum VOC containing raw material usage rate of 113 pounds per hour, and exhausting to Stacks SU-9 and SU-10. The raw materials used do not meet the definitions of polyurethane under 40 CFR Part 63, Subpart III.

## **IDC - Woodland Drive Woodland Drive**

This plant is a distribution center, therefore there are no emissions units located at this plant.

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

### **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, T097-8852-00368, 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, and OES, 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]

---

- (a) 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, OES, the United States Environmental Protection Agency (U.S. EPA) and by citizens in accordance with the Clean Air Act.
- (b) The Indianapolis Air Pollution Control Board (IAPCB) has adopted by reference state rules listed in Appendix A of this permit. The version adopted by reference includes all amendments, additions and repeals filed with the Secretary of State through May 10, 2003 and published in the Indiana Register on June 1, 2003, unless otherwise indicated in the adoption by reference or in Appendix A. For the purposes of this permit, all state rules adopted by reference by the IAPCB are enforceable by OES using local enforcement procedures. Unless otherwise stated, all terms and conditions in this permit that are local requirements, including any provisions designed to limit the source's potential to emit, are enforceable by OES.

### 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, and OES within a reasonable time, any information that IDEM, OAQ, and OES 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, and OES 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 a 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 April 15 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

Indianapolis OES  
Air Compliance  
2700 South Belmont Avenue  
Indianapolis, IN 46221

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, and OES 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, and OES 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) The Permittee shall implement the PMPs, including any required record keeping as necessary to ensure that failure to implement a PMP does not cause or contribute to an exceedance of any limitation on emissions or potential to emit.
- (c) A copy of the PMPs shall be submitted to IDEM, OAQ, and OES upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ, and OES. IDEM, OAQ, and OES 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 PMP does not require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (d) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

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

---

- (a) An emergency, as defined in 326 IAC 2-7-1(12), is not an affirmative defense for an action brought for noncompliance with a federal or state health-based emission limitation.
- (b) An emergency, as defined in 326 IAC 2-7-1(12), constitutes an affirmative defense to an action brought for noncompliance with a technology-based emission limitation if the affirmative defense of an emergency is demonstrated through properly signed, contemporaneous operating logs or other relevant evidence that describe the following:

- (1) An emergency occurred and the Permittee can, to the extent possible, identify the causes of the emergency;
- (2) The permitted facility was at the time being properly operated;
- (3) During the period of an emergency, the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission standards or other requirements in this permit;
- (4) For each emergency lasting one (1) hour or more, the Permittee notified IDEM, OAQ, and OES 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 IDEM, OAQ, Compliance Section),  
or:

Telephone Number: 317-233-0178 (ask for IDEM, OAQ, Compliance Section)  
Facsimile Number: 317-233-6865;

and

Telephone Number: 317-327-2234 (ask for OES, Air Compliance)  
Facsimile Number: 317-327-2274.

- (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

and

Indianapolis OES  
Air Compliance  
2700 South Belmont Avenue  
Indianapolis, IN 46221

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) IDEM, OAQ, and OES 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, and OES 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 in 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, and OES 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, or OES 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, or OES 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 T097-8852-00368 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 combined 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

and

Indianapolis OES  
Air Compliance  
2700 South Belmont Avenue  
Indianapolis, IN 46221

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 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, or OES 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, or OES 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, or OES at least thirty (30) days in advance of the date this permit is to be reopened, except that IDEM, OAQ, or OES 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 OES 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

and

Indianapolis OES  
Air Permits  
2700 South Belmont Avenue  
Indianapolis, IN 46221

- (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, and OES 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, and OES, 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, and OES, 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
- and
- Indianapolis OES  
Air Permits  
2700 South Belmont Avenue  
Indianapolis, IN 46221
- 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 emissions allowable under 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
    - Indianapolis OES  
Air Permits  
2700 South Belmont Avenue  
Indianapolis, IN 46221
    - 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 which document, on a rolling five (5) year basis, all such changes and emissions trading that are subject to 326 IAC 2-7-20(b), (c), or (e) and makes such records available, upon reasonable request, for public review.

Such records shall consist of all information required to be submitted to IDEM, OAQ, and OES 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 increases and decreases in emissions in 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][326 IAC 2-3-2]

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

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

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

and

Indianapolis OES  
Air Permits  
2700 South Belmont Avenue  
Indianapolis, IN 46221

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, and OES 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, or OES, 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 Particulate Emission Limitations For Processes with Process Weight Rates Less Than One Hundred (100) Pounds per Hour [326 IAC 6-3-2]
- 
- Pursuant to 326 IAC 6-3-2(e)(2), particulate emissions from any process not exempt under 326 IAC 6-3-1(b) or (c) which has a maximum process weight rate less than 100 pounds per hour and the methods in 326 IAC 6-3-2(b) through (d) do not apply shall not exceed 0.551 pounds per hour.
- C.2 Opacity [326 IAC 5-1]
- 
- Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
- (a) Opacity shall not exceed an average of thirty percent (30%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.
  - (b) Opacity shall not exceed sixty percent (60%) for more than a cumulative total of fifteen (15) minutes (sixty (60) readings as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor) in a six (6) hour period.
- C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]
- 
- The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.
- C.4 Incineration [326 IAC 4-2] [326 IAC 9-1-2]
- 
- The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.
- C.5 Fugitive Dust Emissions [326 IAC 6-4]
- 
- The Permittee shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4 (Fugitive Dust Emissions). 326 IAC 6-4-2(4) is not federally enforceable.
- C.6 Operation of Equipment [326 IAC 2-7-6(6)]
- 
- Except as otherwise provided by statute or rule, or in this permit, all air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission unit(s) vented to the control equipment are in operation.
- C.7 Asbestos Abatement Projects [326 IAC 14-10] [326 IAC 18] [40 CFR 61, Subpart M]
- 
- (a) Notification requirements apply to each owner or operator. If the combined amount of regulated asbestos containing material (RACM) to be stripped, removed or disturbed is at least 260 linear feet on pipes or 160 square feet on other facility components, or at least thirty-five (35) cubic feet on all facility components, then the notification requirements of 326 IAC 14-10-3 are mandatory. All demolition projects require notification whether or not asbestos is present.
  - (b) The Permittee shall ensure that a written notification is sent on a form provided by the Commissioner at least ten (10) working days before asbestos stripping or removal work or before

demolition begins, per 326 IAC 14-10-3, and shall update such notice as necessary, including, but not limited to the following:

- (1) When the amount of affected asbestos containing material increases or decreases by at least twenty percent (20%); or
- (2) If there is a change in the following:
  - (A) Asbestos removal or demolition start date;
  - (B) Removal or demolition contractor; or
  - (C) Waste disposal site.
- (c) The Permittee shall ensure that the notice is postmarked or delivered according to the guidelines set forth in 326 IAC 14-10-3(2).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(3).

All required notifications shall be submitted to:

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

and

Indianapolis OES  
Asbestos Section  
2700 South Belmont Avenue  
Indianapolis, IN 46221

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

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

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

### C.8 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

and

Indianapolis OES  
Air Compliance  
2700 South Belmont Avenue  
Indianapolis, IN 46221

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, and OES 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, and OES not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ, and OES if the Permittee submits to IDEM, OAQ, and OES a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

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

### C.9 Compliance Requirements [326 IAC 2-1.1-11]

---

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

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

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

---

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

and

Indianapolis OES  
Air Compliance  
2700 South Belmont Avenue  
Indianapolis, IN 46221

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.11 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.

**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 in January of 1997, and submitted an updated ERP in October of 2002.
- (b) Upon direct notification by IDEM, OAQ, and OES, 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 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, and OES 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, and OES

that retesting in one hundred twenty (120) days is not practicable, IDEM, OAQ, and OES may extend the retesting deadline.

- (c) IDEM, OAQ, and OES reserve 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.15 Emission Statement [326 IAC 2-7-5(3)(C)(iii)][326 IAC 2-7-5(7)][326 IAC 2-7-19(c)][326 IAC 2-6]

- (a) Pursuant to 326 IAC 2-6-3(b)(2), starting in 2005 and every three (3) years thereafter, the Permittee shall submit by July 1 an emission statement covering the previous calendar year. The emission statement shall contain, at a minimum, the information specified in 326 IAC 2-6-4(c) and shall meet the following requirements:

- (1) Indicate estimated actual emissions of all pollutants listed in 326 IAC 2-6-4(a);
- (2) Indicate estimated actual emissions of regulated pollutants (as defined by 326 IAC 2-7-1(32)) ("Regulated pollutant which is used only for purposes of Section 19 of this rule") from the source, for purposes of Part 70 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

and

Indianapolis OES  
Air Compliance  
2700 South Belmont Avenue  
Indianapolis, IN 46221

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

- (b) The annual 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, and OES on or before the date it is due.

#### C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner or OES Administrator makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner or OES Administrator within a reasonable time.
- (b) Unless otherwise specified in this permit, all record keeping requirements not already legally required shall be implemented within ninety (90) days of permit issuance.

- (c) If there is a "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(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)) and the Permittee elects to utilize the "projected actual emissions" (as defined in 326 IAC 2-2-1(rr) and/or 326 IAC 2-3-1(mm)), the Permittee shall comply with following:
- (1) Before beginning actual construction of the "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(ll)) at an existing emissions unit, document and maintain the following records:
    - (A) A description of the project.
    - (B) Identification of any emissions unit whose emissions of a regulated new source review pollutant could be affected by the project.
    - (C) A description of the applicability test used to determine that the project is not a major modification for any regulated NSR pollutant, including:
      - (i) Baseline actual emissions;
      - (ii) Projected actual emissions;
      - (iii) Amount of emissions excluded under section 326 IAC 2-2-1(rr)(2)(A)(iii) and/or 326 IAC 2-3-1(mm)(2)(A)(3); and
      - (iv) An explanation for why the amount was excluded, and any netting calculations, if applicable.
  - (2) Monitor the emissions of any regulated NSR pollutant that could increase as a result of the project and that is emitted by any existing emissions unit identified in (1)(B) above; and
  - (3) Calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of five (5) years following resumption of regular operations after the change, or for a period of ten (10) years following resumption of regular operations after the change if the project increases the design capacity of or the potential to emit that regulated NSR pollutant at the emissions unit.

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

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

and

Indianapolis OES  
Air Compliance  
2700 South Belmont Ave.  
Indianapolis, IN 46221

- (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, and OES on or before the date it is due.
- (d) Unless otherwise specified in this permit, all reports required in Section D of this permit shall be submitted within thirty (30) days of the end of the reporting period. All reports do require the certification by the "responsible official" as defined by 326 IAC 2-7-1(34).
- (e) Reporting periods are based on calendar years, unless otherwise specified in this permit. For the purpose of this permit "calendar year" means the twelve (12) month period from January 1 to December 31 inclusive.
- (f) If the Permittee is required to comply with the recordkeeping provisions of (c) in Section C- General Record Keeping Requirements for any "project" (as defined in 326 IAC 2-2-1(qq) and/or 326 IAC 2-3-1(II)) at an existing emissions unit, and the project meets the following criteria, then the Permittee shall submit a report to IDEM, OAQ and OES:

- (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).

The report for project at an existing emissions unit shall be submitted within sixty (60) days after the end of the year and contain the following:

- (1) The name, address, and telephone number of the major stationary source.
- (2) The annual emissions calculated in accordance with (c)(2) and (3) in Section C- General Record Keeping Requirements.
- (3) The emissions calculated under the actual-to-projected actual test stated in 326 IAC 2-2-2(d)(3) and/or 326 IAC 2-3-2(c)(3)).
- (4) Any other information that the Permittee deems fit to include in this report,

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

and

Indianapolis OES  
Air Compliance  
2700 South Belmont Ave.  
Indianapolis, IN 46221

- (g) 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 and OES. The general public may request this information from the IDEM, OAQ and OES under 326 IAC 17.1.

### **Stratospheric Ozone Protection**

#### **C.18 Compliance with 40 CFR 82 and 326 IAC 22-1**

---

Pursuant to 40 CFR 82 (Protection of Stratospheric Ozone), Subpart F, except as provided for motor vehicle air conditioners in Subpart B, the Permittee shall comply with 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)]: Plant 1: EAR Specialty Composites** (7911 Zionsville Road)

- (a) One confor process, installed in 1990 and modified in 1999, with a maximum isopentane usage rate of 58,441 pounds per year, producing slab stock polyurethane foam and exhausting out stack SU-2.

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

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

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

Pursuant to 097-11552-00319, issued on November 18, 1999 and revised through this Title V permit, the input of isopentane to the confor process shall be limited to less than 31,000 pounds per twelve (12) consecutive month period, which is equivalent to 15.5 tons of VOC per twelve (12) consecutive month period, with compliance determined at the end of each month. Therefore, the best available control technology (BACT) requirement in 326 IAC 8-1-6 (New Facilities: General Reduction Requirements) does not apply.

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

#### D.1.2 Record Keeping Requirements

- (a) To document compliance with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (4) below. Records maintained for (1) through (4) shall be taken monthly and shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1.1.
- (1) The VOC content of each raw material used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used;
  - (2) The amount of VOC containing raw material and solvent used;
    - (A) Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used.
    - (B) Material usage records shall differentiate between those used as raw materials and those used as cleanup solvents.
  - (3) The total VOC usage for each month; and
  - (4) The weight of VOCs emitted for each compliance period.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.1.3 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.1.1 shall be submitted to the addresses 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)]: Plant 1: EAR Specialty Composites** (7911 Zionsville Road)

- (b) One PVC foam mixing and casting line, installed in the 1970's, identified as emission unit ID 5056-01, with a maximum capacity of 5,720,280 pounds of raw material input per year (653 pounds per hour) consisting of a PVC pellet mixing operation with a fabric filter and a casting line with a 6 million Btu per hour natural gas or propane fueled oven, with emissions exhausting to a catalytic oxidizer which exhausts to stack SC-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 [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from PVC foam mixing shall not exceed 1.94 pounds per hour when operating at a process weight rate of 653 pounds per hour.

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

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

$$E = 4.10 P^{0.67}$$

where E = rate of emission in pounds per hour; and  
P = process weight rate in tons per hour

### Compliance Determination Requirements

#### D.2.2 Particulate Control

In order to comply with condition D.2.1, the fabric filter baghouse for particulate control shall be in operation and control emissions from the mixing operation at all times that the mixing operation is in operation.

### SECTION D.3

### FACILITY OPERATION CONDITIONS

**Facility Description [326 IAC 2-7-5(15)]: Plant 1: EAR Specialty Composites (7911 Zionsville Road)**

- (c) One urethane foam forming line (Mushroom Pilot Line) installed in 1996, and modified in 2006, producing foam for either of two product lines, with a maximum VOC containing raw material usage rate of 17,078 lbs/yr for process A, and 218,177 lbs/yr, for process B, and with emissions exhausting out stack SU-8.
- (d) One tote cleaning process installed in the 1970's, with a maximum solvent usage rate of 11,384 lbs/yr, and with fugitive emissions vented through general building ventilation stack SU-5.

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

These facilities are not insignificant activities, but they have no applicable requirements other than those covered in Sections A, B and C of this permit.

## SECTION D.4

## FACILITY OPERATION CONDITIONS

### Facility Description [326 IAC 2-7-5(15)]: Plant 2: Aero Technologies (5457 West 79<sup>th</sup> Street)

- (f) One polyurethane molding line, installed in 1990 and modified in 2005, identified as Emission Unit 901, with a maximum VOC/HAP containing raw materials usage rate of 776,924 lbs/yr, and exhausting to Stack SU-12. The raw materials used do not meet the definitions of polyurethane under 40 CFR Part 63, Subpart III.
- (g) One polyurethane molding line, installed in 1991, identified as Emission Unit 902 with a production capacity of 2,000 pairs of earplugs per hour, and exhausting to Stack SU-13. The raw materials used do not meet the definitions of polyurethane under 40 CFR Part 63, Subpart III.
- (h) One polyurethane molding line, approved for construction in 2007, identified as Emission Unit 909, with a maximum VOC containing raw material usage rate of 113 pounds per hour, and exhausting to Stacks SU-9 and SU-10. The raw materials used do not meet the definitions of polyurethane under 40 CFR Part 63, Subpart III.

(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 Particulate [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes), the allowable particulate emission rate from Emission Unit 901 and 902, each, shall not exceed 1.39 pounds per hour when operating at a process weight rate of 400 pounds per hour.

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

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

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

#### D.4.2 Volatile Organic Compounds [326 IAC 8-1-6][326 IAC 2-3][326 IAC 2-7-10.5(d)]

VOC input to Emission Unit 901 and Emission Unit 909 shall each be limited to less than 25 tons per twelve (12) consecutive month period, with compliance determined at the end of each month. Compliance with this limit shall make 326 IAC 8-1-6 and 326 IAC 2-3 not applicable. Compliance with this limit will also make this modification minor pursuant to 326 IAC 2-7-10.5(d).

### Compliance Determination

#### D.4.3 Volatile Organic Compounds

Compliance with the VOC usage limitations contained in Condition D.4.2 shall be determined by obtaining from the manufacturer copies of the MSDS describing the VOC content of each chemical. IDEM, OAQ, and OES 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.4.4 Record Keeping Requirements**

- (a) To document compliance with Condition D.4.2, 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 limit established in Condition D.4.2.
- (1) The amount of raw material used on a monthly basis. Records shall include inline flow meter readings of raw material usages and material safety data sheets (MSDS) necessary to verify the type and amount used.
  - (2) The VOC content of each raw material used; and
  - (3) The weight of VOC used at Emission Unit 901 and Emission Unit 909 for each compliance period.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

---

### **D.4.5 Reporting Requirements**

A quarterly summary of the information to document compliance with Condition D.4.2 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, within (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)]: Plant 1: EAR Specialty Composites (7911 Zionsville Road)**

- (e) One (1) Acoustical Test Facility, receiving approval to construct in 2007, identified as ATF, exhausting to stack ATF-S1 and consisting of one of the following three testing activities:
- (1) Reciprocating internal combustion engine, identified as ATF-U1, with a maximum capacity of 600 horsepower, burning diesel fuel.
  - (2) Reciprocating internal combustion engine, identified as ATF-U2, with a maximum capacity of 1500 horsepower, burning natural gas.
  - (3) Reciprocating internal combustion engine, identified as ATF-U3, with a maximum capacity of 5 horsepower, burning a mixture of natural gas, diesel and gasoline.

Only one of the three testing activities, ATF-U1, ATF-U2, ATF-U3, can take place at a time.

(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 NOx Emissions [326 IAC 2-3] [326 IAC 2-7-10.5(d)]

- (a) The hours of operation of ATF shall not exceed 2,688 hours per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) NOx emissions from ATF shall not exceed 18.6 pounds per hour.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than twenty five (25) tons of NOx per year and therefore will render the requirements of 326 IAC 2-3 not applicable. Compliance with this limit will also make this modification minor pursuant to 326 IAC 2-7-10.5(d).

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

#### D.5.2 Record Keeping Requirements

- (a) To document compliance with Condition D.5.1, the Permittee shall maintain records of the monthly hours of operation of ATF.
- (b) All records shall be maintained in accordance with Section C - General Record Keeping Requirements, of this permit.

#### D.5.3 Reporting Requirements

A quarterly summary of the information to document compliance with Condition D.5.1 shall be submitted to the addresses listed in Section C - General Reporting Requirements, of this permit, using the reporting forms located at the end of this permit, or their equivalent, within thirty (30) days after the end of the quarter being reported. The report submitted by the Permittee does require the certification by the responsible official as defined by 326 IAC 2-7-1(34).

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY**

and

**INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES**

**PART 70 OPERATING PERMIT  
CERTIFICATION**

Source Name: Aero Technologies  
Source Address: 7911 Zionsville Road, Indianapolis, 8001 Woodland Drive and 5457 West 79<sup>th</sup>  
Street, Indianapolis  
Mailing Address: 5457 West 79<sup>th</sup> Street, Indianapolis, IN 46268  
Part 70 Permit No.: T097-8852-00368

**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:

- 9 Annual Compliance Certification Letter
- 9 Test Result (specify) \_\_\_\_\_
- 9 Report (specify) \_\_\_\_\_
- 9 Notification (specify) \_\_\_\_\_
- 9 Affidavit (specify) \_\_\_\_\_
- 9 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**

and

**INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES  
AIR QUALITY MANAGEMENT SECTION  
2700 South Belmont Ave.  
Indianapolis Indiana 46221  
Phone: 317-327-2234  
Fax: 317-327-2274**

**PART 70 OPERATING PERMIT  
EMERGENCY OCCURRENCE REPORT**

Source Name: Aeero Technologies  
Source Address: 7911 Zionsville Road, Indianapolis, 8001 Woodland Drive, and 5457 West 79<sup>th</sup> Street, Indianapolis  
Mailing Address: 5457 West 79<sup>th</sup> Street, Indianapolis, IN 46268  
Part 70 Permit No.: T097-8852-00368

**This form consists of 2 pages**

**Page 1 of 2**

- 9** 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 Describe:
Type of Pollutants Emitted: TSP, PM-10, SO <sub>2</sub> , VOC, NO <sub>x</sub> , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

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

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

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

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

A certification is not required for this report.

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

**Part 70 Usage Report  
 (Submit Quarterly)**

Source Name: Aero Technologies  
 Source Address: 7911 Zionsville Road, Indianapolis, 8001 Woodland Drive and 5457 West 79<sup>th</sup> Street, Indianapolis  
 Mailing Address: 5457 West 79<sup>th</sup> Street, Indianapolis, IN 46268  
 Part 70 Permit No.: T097-8852-00368  
 Facility: Confor Process (7911 Zionsville Road)  
 Parameter: Isopentane usage  
 Limit: less than 31,000 pounds of isopentane per twelve (12) consecutive month period with compliance determined at the end of each month

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

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

- 9 No deviation occurred in this quarter.
- 9 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  
 and  
 INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES  
 AIR COMPLIANCE**

**Part 70 Quarterly Report**

Source Name: Aero Technologies  
 Source Address: 7911 Zionsville Road, 5457 West 79<sup>th</sup> Street and 8001 Woodland Drive, Indianapolis, IN 46268  
 Mailing Address: 5457 West 79<sup>th</sup> Street, Indianapolis, IN 46268  
 Part 70 Permit No.: T097-8852-00368  
 Facility: Emission Unit 901  
 Parameter: VOC Input  
 Limit: VOC input to Emission Unit 901 shall be limited to less than 25 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER:

YEAR:

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

No deviation occurred in this quarter.

Deviation/s occurred in this quarter.

Deviation has been reported on: \_\_\_\_\_

Submitted by: \_\_\_\_\_

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

Signature: \_\_\_\_\_

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

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

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR QUALITY, COMPLIANCE DATA SECTION  
and  
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES  
AIR COMPLIANCE**

**Part 70 Quarterly Report**

Source Name: Aearo Technologies  
Source Address: 7911 Zionsville Road, 5457 West 79<sup>th</sup> Street and 8001 Woodland Drive, Indianapolis, IN 46268  
Mailing Address: 5457 West 79<sup>th</sup> Street, Indianapolis, IN 46268  
Part 70 Permit No.: T097-8852-00368  
Facility: Emission Unit 909  
Parameter: VOC Input  
Limit: VOC input to Emission Unit 909 shall be limited to less than 25 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

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

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

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

Attach a signed certification to complete this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
 OFFICE OF AIR QUALITY, COMPLIANCE DATA SECTION  
 and  
 INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES  
 AIR COMPLIANCE**

**Part 70 Quarterly Report**

Source Name: Aearo Technologies  
 Source Address: 7911 Zionsville Road, Indianapolis, IN 46268  
 8001 Woodland Drive, Indianapolis, IN 46268  
 5457 West 79<sup>th</sup> Street, Indianapolis, IN 46268  
 Mailing Address: 5457 West 79<sup>th</sup> Street, Indianapolis, IN 46268  
 Part 70 Permit No.: T097-8852-00368  
 Facility: Acoustical Test Facility (ATF)  
 Parameter: Hours of Operation  
 Limit: less than 2,688 hours of operation per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

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

9 No deviation occurred in this quarter.  
 9 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  
and  
INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES  
AIR QUALITY MANAGEMENT SECTION  
DATA COMPLIANCE**

**PART 70 OPERATING PERMIT  
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Aeero Technologies  
Source Address: 7911 Zionsville Road, 8001 Woodland Drive and 5457 West 79<sup>th</sup> Street,  
Indianapolis  
Mailing Address: 5457 West 79<sup>th</sup> Street, Indianapolis, IN 46268  
Part 70 Permit No.: T097-8852-00368

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

Page 1 of 2

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. Deviations that are required to be reported by an applicable requirement shall be reported according to the schedule stated in the applicable requirement and do not need to be included in this report. Additional pages may be attached if necessary. If no deviations occurred, please specify in the box marked  No deviations occurred this reporting period.

NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

**Permit Requirement** (specify permit condition #)

**Date of Deviation:**

**Duration of Deviation:**

**Number of Deviations:**

**Probable Cause of Deviation:**

**Response Steps Taken:**

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

Form Completed By:

Title/Position:

Date:

Phone:

Attach a signed certification to complete this report.

### Attachment A

The following state rule have been adopted by reference by the Indianapolis Air Pollutant Control Board and are enforceable by Indianapolis Office of Environmental Services (OES) using local enforcement procedures.

- (1) 326 IAC 1-1-1 through 1-1-3 and 1-1-5;
- (2) 326 IAC 1-2-1 through 1-2-91 (In addition, the IAPCB has adopted several local definitions);
- (3) 326 IAC 1-3-1 through 1-3-4;
- (4) 326 IAC 1-4-1 (The IAPCB added to the adoption by reference a citation to 61 FR 58482 (November 15, 1996));
- (5) 326 IAC 1-5-1 through 1-5-5;
- (6) 326 IAC 1-6-1 through 1-6-6;
- (7) 326 IAC 1-7-1 through 1-7-5
- (8) 326 IAC 2-3-1 through 2-3-5;
- (9) 326 IAC 2-4-1 through 2-4-6;
- (10) 326 IAC 2-6-1 through 2-6-4;
- (11) 326 IAC 2-7-1 through 2-7-18, 2-7-20 through 2-7-25;
- (12) 326 IAC 2-8-1 through 2-8-15, 2-8-17 through 2-8-10;
- (13) 326 IAC 2-9-1 through 2-9-14;
- (14) 326 IAC 2-10-1 through 2-10-5 (The IAPCB adoption adds the language astate or local@ immediately after the word afederal@ in 326 IAC 2-10-1);
- (15) 326 IAC 2-11-1, 2-11-3 and 2-11-4 (The IAPCB adoption adds the language afederal, state or local@ immediately after the word aby@ in 326 IAC 2-11-1);
- (16) 326 IAC 3-1.1-1 through 3-1.1-5;
- (17) 326 IAC 3-2.1-1 through 3-2.1-5;
- (18) 326 IAC 3-3-1 through 3-3-5;
- (19) 326 IAC 4-2-1 through 4-2-2;
- (20) 326 IAC 5-1-1 (a), (b) and c) (5), 5-1-2 (1), (2)(A), (2)c) (4), 5-1-3 through 5-1-5, 5-1-7;
- (21) 326 IAC 7-1.1-1 and 7-1.1-2;
- (22) 326 IAC 7-2-1;
- (23) 326 IAC 7-3-1 and 7-3-2;
- (24) 326 IAC 7-4-2(28) through (31) (Instead of adopting by reference 7-4-2(1) through (27), the IAPCB regulation substitutes the same requirements listed in a format in which the companies are alphabetized and emission points known to no longer exist have been deleted);
- (25) 326 IAC 8-1-0.5 except (b), 8-1-1 through 8-1-2, 8-1-3 except c), (g) and (i), 8-1-5 through 8-1-12;
- (26) 326 IAC 8-2-1 through 8-2-12 (The IAPCB adoption by reference of 8-2- 5 adds additional language specific to Zimmer Paper Products, Incorporated as subpart c);
- (27) 326 IAC 8-3-1 through 8-3-7;
- (28) 326 IAC 8-4-1 through 8-4-5, 8-4-6 (a)(6), (a)(8) and (a)(14) and 8-4-6(b)(1), (b)(3) and 8-4-6c) (In place of 8-4-6(b)(2), which was not adopted, the IAPCB adopted language requiring a pressure relief valve set to release at no less than four and eight-tenths (4.8) Kilo Pascals (seven-tenths (0.7) pounds per square inch)), 8-4-7 except (e), 8-4-8 and 8-4-9;
- (29) 326 IAC 8-5-1 through 8-5-4, 8-5-5 except (a)(3) and (d)(3);
- (30) 326 IAC 8-6-1 and 8-6-2;
- (31) 326 IAC 9-1-1 and 9-1-2;
- (32) 326 IAC 11-1-1 through 11-1-2;
- (33) 326 IAC 11-2-1 through 11-2-3;
- (34) 326 IAC 11-3-1 through 11-3-6;
- (35) 326 IAC 14-1-1 through 14-1-4;

Attachment A continued

- (36) 326 IAC 14-2-1 except 40 CFR 61.145;
- (37) 326 IAC 14-3-1;
- (38) 326 IAC 14-4-1;
- (39) 326 IAC 14-5-1;
- (40) 326 IAC 14-6-1;
- (41) 326 IAC 14-7-1;
- (42) 326 IAC 14-8-1 through 14-8-5;
- (43) 326 IAC 15-1-1, 15-1-2(a)(1), (a)(2) and (a)(8), 15-1-3 and 15-1-4;
- (44) 326 IAC 20-1-1 through 20-1-4 (In 20-1-3(b)(2) the adoption states that a permitting authority@ means the commissioner of IDEM or the administrator of OES, whichever is applicable);
- (45) 326 IAC 20-2-1;
- (46) 326 IAC 20-3-1;
- (47) 326 IAC 20-4-1;
- (48) 326 IAC 20-5-1;
- (49) 326 IAC 20-6-1;
- (50) 326 IAC 20-7-1;
- (51) 326 IAC 20-8-1;
- (52) 326 IAC 20-9-1;
- (53) 326 IAC 20-14-1;
- (54) 326 IAC 20-15-1;
- (55) 326 IAC 20-16-1;
- (56) 326 IAC 20-17-1;
- (57) 326 IAC 20-18-1;
- (58) 326 IAC 20-19-1;
- (59) 326 IAC 20-20-1;
- (60) 326 IAC 20-21-1;
- (61) 326 IAC 21-1-1 (The adoption states that a or the administrator of OES@ is added in (b));
- (62) 326 IAC 22-1-1 (The adoption states that a or the administrator of OES@ is added in (b)).

**Indiana Department of Environmental Management  
Office of Air Quality  
and  
Indianapolis Office of Environmental Services**

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

<b>Source Description and Location</b>
--

<b>Source Name:</b>	<b>Aearo Technologies, Inc.</b>
<b>Source Location:</b>	<b>Plant 1: 7911 Zionsville Road, Indianapolis, IN 46268 Plant 2: 5457 West 79<sup>th</sup> Street, Indianapolis, IN 46268 Plant 3: 8001 Woodland Drive, Indianapolis, IN 46268</b>
<b>County:</b>	<b>Marion</b>
<b>SIC Code:</b>	<b>3086, 3842 (NAICS Code 326150)</b>
<b>Source Modification No.:</b>	<b>MSM097-24860-00368</b>
<b>Permit Modification No.:</b>	<b>SPM097-24868-00368</b>
<b>Permit Reviewer:</b>	<b>A. Hennessy</b>

<b>Source Definition</b>
--------------------------

This plastics manufacturing company consists of three (3) plants:

- (a) **Plant 1, EAR Specialty Composites**, is located at 7911 Zionsville Road, Indianapolis, IN 46268;
- (b) **Plant 2, Aearo Technologies**, is located at 5457 West 79<sup>th</sup> Street, Indianapolis, IN 46268; and
- (a) **Plant 3, IDC - Woodland Drive**, is located at 8001 Woodland Drive, Indianapolis, IN 46268

Since the three (3) plants are located on contiguous or adjacent properties, belong to the same industrial grouping, and under common control of the same entity, they are considered one (1) source, as defined by 326 IAC 2-7-1(22), effective from the date of issuance of the Part 70 permit (February 19, 2003).

<b>Existing Approvals</b>
---------------------------

The source was issued a Part 70 Operating Permit 097-8852-00368 on February 19, 2003. The source has since received the following:

- (a) First Administrative Amendment No. 097-19348-00368 issued on September 22, 2004.
- (b) First Minor Source Modification No. 097-20928-00368 issued on April 18, 2005.
- (c) First Minor Permit Modification No. 097-21097-00368 issued on June 13, 2005.
- (d) Second Administrative Amendment No. 097-23397-00368 issued on September 21, 2006.
- (e) Second Minor Source Modification No. 097-24100-00368 issued May 15, 2007.
- (f) First Significant Permit Modification No. 097-24099-00368 issued May 21, 2007.

All conditions from previous approvals were incorporated into this Part 70 Operating Permit.

**County Attainment Status**

The source is located in Marion County.

<b>Pollutant</b>	<b>Status</b>
PM2.5	nonattainment
PM10	attainment
SO <sub>2</sub>	maintenance attainment
NO <sub>2</sub>	attainment
8-hour Ozone	basic nonattainment
CO	attainment
Lead	attainment

- (a) 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 the ozone standards. Marion County has been designated as nonattainment for the 8-hour ozone standard. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Marion County has been classified as nonattainment for PM2.5 in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions pursuant to the requirements of Nonattainment New Source Review, 326 IAC 2-1.1-5.
- (c) Marion County has been classified as attainment or unclassifiable for PM10, SO<sub>2</sub>, CO and Lead. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (d) On October 25, 2006, the Indiana Air Pollution Control Board finalized a rule revision revoking the one-hour ozone standard in Indiana.

**Source Status**

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

<b>Pollutant</b>	<b>Emissions (tons/year)</b>
PM	less than 250
PM10	less than 100
SO <sub>2</sub>	less than 250
VOC	greater than 100
CO	less than 250
NO <sub>x</sub>	less than 100

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1).
- (b) This existing source is a major stationary source under Emission Offset (326 IAC 2-3) because VOC, a nonattainment regulated pollutant, is emitted at a rate of 100 tons per year or more.

- (c) These emissions are based upon the Title V Operating Permit and all modifications issued to date.

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

HAPs	Potential To Emit (tons/year)
Single HAP	Less than 10
Combined HAP	Less than 25

This existing source is not a major source of HAPs, as defined in 40 CFR 63.41, because HAPs emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA).

#### Actual Emissions

The following table shows the actual emissions from the source. This information reflects the 2002 Indiana Department of Environmental Management (IDEM) Office of Air Quality (OAQ) and Indianapolis Office of Environmental Services (OES) emission data.

Pollutant	Actual Emissions (tons/year)
PM	not reported
PM10	not reported
SO <sub>2</sub>	not reported
VOC	55
CO	not reported
NO <sub>x</sub>	not reported
HAP	not reported

#### Description of Proposed Modification

The OAQ and OES have reviewed a modification application, submitted by Aearo Technologies, Inc. on May 30, 2007, relating to the proposed construction and operation of a new Acoustical Test Facility (ATF) to be considered part of Plant 1: EAR Specialty Composites Division. The Acoustical Test Facility will consist of one area where acoustical testing will take place. For the acoustical testing, one of three different engine types could be operated. The following is a description of the proposed emission unit:

- (e) One (1) Acoustical Test Facility, receiving approval to construct in 2007, identified as ATF, exhausting to stack ATF-S1 and consisting of one of the following three testing activities:
- (1) Reciprocating internal combustion engine, identified as ATF-U1, with a maximum capacity of 600 horsepower, burning diesel fuel.
  - (2) Reciprocating internal combustion engine, identified as ATF-U2, with a maximum capacity of 1500 horsepower, burning natural gas.
  - (3) Reciprocating internal combustion engine, identified as ATF-U3, with a maximum capacity of 5 horsepower, burning a mixture of natural gas, diesel and gasoline.

Only one of the three testing activities, ATF-U1, ATF-U2, ATF-U3, can take place at a time.

In addition, a reporting form for Emission Unit 909 (approved for construction and operation through Minor Source Modification 097-24100-00368 and Significant Permit Modification 097-24099-00368) is being added to the Part 70 Operating Permit.

**Enforcement Issues**

There are no pending enforcement actions related to this modification.

**Stack Summary**

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
ATF-S1	ATF-U1 ATF-U2 ATF-U3	46	1.67	6500	500

**Emission Calculations**

See Appendix A of this document for detailed emission calculations.

**Permit Level Determination – Part 70**

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-7-10.5. This table reflects the PTE before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Worst Case Emission Unit	Potential To Emit (tons/year) <sup>1</sup>
PM	ATF-U1	5.78
PM10	ATF-U1	5.78
SO <sub>2</sub>	ATF-U1	5.39
VOC	ATF-U1	6.49
CO	ATF-U2	62.19
NO <sub>x</sub>	ATF-U1	81.47 <sup>2</sup>

HAPs	Worst Case Emission Unit	Potential To Emit (tons/year)
Worst Case Single HAP (formaldehyde)	ATF-U2	0.343
Combined HAP	ATF-U2	0.513

<sup>1</sup> Only one emission unit can be operated at a time, therefore, the potential to emit represents the worst case emissions from ATF-U1, ATF-U2 and ATF-U3.

<sup>2</sup> This source and permit modification will limit NO<sub>x</sub> to less than 25 tons per year.

This source modification is subject to 326 IAC 2-7-10.5(d)(3) and (4). The potential to emit of CO is

greater than twenty five (25) tons per year but less than one hundred (100) tons per year and the potential to emit of NOx will be limited to less than twenty five (25) tons per year by limiting fuel usage. Additionally, the modification will be incorporated into the Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d), because the modification involves adding an emission limit which involves significant changes to record keeping and reporting and establishment of a case-by-case emission limit.

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

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

Process/Emission Unit	Potential to Emit (tons/year)						Single HAP/Combined HAP
	PM	PM10	SO <sub>2</sub>	VOC	CO	NO <sub>x</sub>	
ATF-U1	5.78	5.78	5.39	6.49	17.56	25 <sup>2</sup>	0.01725 / 0.04317
ATF-U2	0.16	0.16	0.010	0.49	62.19		0.3427 / 0.51286
ATF-U3	0.00048	0.00048	0.001	0.01	0.36		0.00392 / 0.00609
Total for Modification (worst case for ATF-U1 through 3) <sup>1</sup>	5.78	5.78	5.39	6.49	62.19	25	NA
PSD and Nonattainment NSR Significant Level or Emission Offset Major Source Threshold	250	250	250	40	250	40	NA

<sup>1</sup> Only one of the emission units (ATF-U1, ATF-U2, or ATF-U3) can be operated at a time. Therefore, the total potential to emit is the worst case emissions from ATF-U1, ATF-U2, or ATF-U3.

<sup>2</sup> NOx emissions from the Acoustical Testing Facility will be limited to less than 25 tons per year in this Minor Source Modification and Significant Permit Modification.

This modification to an existing minor stationary source is not major because the emissions increase of PM, SO<sub>2</sub>, CO, and PM10 are each less than the PSD major source thresholds. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

This modification to an existing major stationary source is not major because the emissions increase of NOx and VOC are each less than the Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.

Marion County has been designated as nonattainment for PM 2.5 in 70 FR 943 dated January 5, 2005. According to the April 5, 2005 EPA memo titled "Implementation of New Source Review Requirements in PM2.5 Nonattainment Areas" authored by Steve Page, Director of OAQPS, until EPA promulgates the PM2.5 major NSR regulations, states should assume that a major stationary source's PM10 emissions represent PM2.5 emissions. IDEM, OAQ and OES will use the PM10 nonattainment major NSR program as a surrogate to address the requirements of nonattainment major NSR for the PM2.5 NAAQS. A major source in a nonattainment area is a source that emits or has the potential to emit one hundred (100) tons per year of any nonattainment regulated pollutant. Aero Technologies has a potential to emit of PM10 below one hundred (100) tons per year. Therefore, assuming that PM10 emissions represent PM2.5 emissions, 326 IAC 2-1.1-5 does not apply for PM2.5.

This source is considered a major source under 326 IAC 2-3 and the unrestricted potential to emit of

this modification is greater than forty (40) tons of NOx per year. This minor source modification and significant permit modification will limit the potential to emit NOx to less than 25 tons per year as described below.

- (a) The hours of operation of ATF shall not exceed 2,688 hours per twelve (12) consecutive month period with compliance determined at the end of each month.
- (b) NOx emissions from ATF shall not exceed 18.60 pounds per hour.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than twenty five (25) tons of NOx per year and, therefore, will render the requirements of 326 IAC 2-3 not applicable. Compliance with this limit will also make this modification minor pursuant to 326 IAC 2-7-10.5(d).

#### Federal Rule Applicability Determination

The following federal rules are applicable to the source due to this modification:

- (a) There are no New Source Performance Standards (NSPS)(326 IAC 12 and 40 CFR Part 60) included in this permit for the Acoustical Test Facility.
- (b) The requirements of the New Source Performance Standards (NSPS), Subpart IIII are not included in this permit for the Acoustical Test Facility. ATF-U1 is not a stationary compression ignition (CI) internal combustion engine. The engines being operated as part of ATF-U1 are used to propel a motor vehicle. ATF-U2 and ATF-U3 are spark ignited engines and are not regulated by this rule.
- (c) On June 12, 2006 (with a correction published on June 26, 2006), the US EPA proposed a New Source Performance Standard (NSPS), Subpart JJJJ, for spark ignition internal combustion engines. This rule is not final at this time. Based on the proposed rule, it appears that ATF-U2 and ATF-U3 may have requirements under this rule.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in this permit for the Acoustical Test Facility.
- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Stationary Reciprocating Internal Combustion Engines, Subpart ZZZZ are not included in this permit for the Acoustical Test Facility since Aearo Technologies is not a major source of HAPs.
- (d) The Acoustical Test Facility is not an affected source under 40 CFR 63, Subpart OOOOOO. The Acoustical Test Facility is not part of a collection of equipment used to produce slabstock flexible polyurethane foam, molded foam, or rebond foam nor is it used to bond foam to foam or other substrates.
- (e) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is applicable to new or modified emission units that involve a pollutant-specific emission unit and meet the following criteria:
  - (1) has a potential to emit before controls equal to or greater than the major source threshold for the pollutant involved;
  - (2) is subject to an emission limitation or standard for that pollutant; and
  - (3) uses a control device, as defined in 40 CFR 64.1, to comply with that emission limitation or standard.

The following table is used to identify the applicability of each of the criteria, under 40 CFR 64.1, to each new or modified emission unit involved:

Emission Unit	Control Device Used	Emission Limitation (Y/N)	Uncontrolled PTE (tons/year)	Controlled PTE (tons/year)	Major Source Threshold (tons/year)	CAM Applicable (Y/N)	Large Unit (Y/N)
ATF 1 NOx	No	Yes	81.47	< 25	100	No	No
ATF 1 SO2	No	No	5.387	5.387	100	No	No
ATF 1 PM/PM 10	No	No	5.78	5.78	100	No	No
ATF 1 CO	No	No	17.56	17.56	100	No	No
ATF 1 VOC	No	No	6.49	6.49	100	No	No
ATF 2 NOx	No	Yes	36.94	<25	100	No	No
ATF 2 SO2	No	No	0.01	0.01	100	No	No
ATF 2 PM/PM 10	No	No	0.16	0.16	100	No	No
ATF 2 CO	No	No	62.19	62.19	100	No	No
ATF 2 VOC	No	No	0.49	0.49	100	No	No
ATF 3 NOx	No	Yes	0.13	<25	100	No	No
ATF 3 SO2	No	No	0.001	0.001	100	No	No
ATF 3 PM/PM 10	No	No	0.00048	0.00048	100	No	No
ATF 3 CO	No	No	0.36	0.36	100	No	No
ATF 3 VOC	No	No	0.01	0.01	100	No	No

Based on this evaluation, the requirements of 40 CFR Part 64, CAM are not applicable to any of the new units as part of this modification.

<b>State Rule Applicability Determination</b>
---

The following state rules are applicable to the source due to the modification:

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

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

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

The operation of the new Acoustical Test Facility will emit less than ten (10) tons per year for a single HAP and less than twenty-five (25) tons per year for a combination of HAPs. Therefore, 326 IAC 2-4.1 does not apply.

**326 IAC 6.5 (Particulate Matter Limitations Except Lake County)**

Aeero Technologies, Inc. is located in Marion County, but has potential PM emissions less than 100 tons per year, actual PM emissions less than 10 tons per year, and is not specifically regulated in 326 IAC 6.5-2 through 6.5-10. Therefore, 326 IAC 6.5 does not apply to the new Acoustical Test Facility.

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

The Acoustical Test Facility is not a source of indirect heating, therefore, 326 IAC 6-2 does not apply.

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

The Acoustical Test Facility does not meet the definition of a manufacturing process, therefore 326 IAC 6-3 does not apply to the Acoustical Test Facility.

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

Potential VOC emissions from the Acoustical Test Facility are less than twenty five (25) tons per year, therefore, 326 IAC 8-1-6 does not apply.

**326 IAC 10-4 (Nitrogen Oxides Budget Trading Program)**

ATF-U1, ATF-U2, and ATF-U3 are not electricity generating units (EGU) (as defined in 326 IAC 10-4-2(16)) nor are they large affected units (as defined in 326 IAC 10-4-2(27)). Therefore, 326 IAC 10-4 does not apply to the Acoustical Test Facility.

326 IAC 20-82 (Stationary Reciprocating Internal Combustion Engines)  
Aearo Technologies is not a major source of HAPs, therefore, 326 IAC 20-82 does not apply to the Acoustical Test Facility.

### 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 and OES, in conjunction with the source, must develop specific conditions to satisfy 326 IAC 2-7-5. As a result, Compliance Determination Requirements are included in the permit. The Compliance Determination Requirements in Section D of the permit are those conditions that are found directly within state and federal rules and the violation of which serves as grounds for enforcement action.

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

The Compliance Determination Requirements applicable to this modification are as follows:

- (a) Compliance with the hours of operation limit will be determined by records kept by the source of the hours of operation and quarterly reports summarizing those records.

There are no compliance monitoring requirements applicable to this modification.

### Air Quality Impacts from Minor Sources

#### Modeling Overview

Pursuant to 326 IAC 2-1.1-5, OES has conducted a modeling analysis of the Potential to Emit (PTE) criteria pollutants from this proposed modification to estimate whether the PTE criteria pollutants will cause or contribute to a violation of any National Ambient Air Quality Standard (NAAQS).

#### Modeling Results – Criteria Pollutants

The modeling results indicate that the Limited PTE of criteria pollutants from this modification will not exceed the National Ambient Air Quality Standards (NAAQS).

### Proposed Changes

The changes listed below have been made to Part 70 Operating Permit No. T097-8852-00368. Deleted language appears as ~~strike throughs~~ and new language appears in **bold**.

#### Change 1:

To incorporate the new Acoustical Test Facility, Condition A.3 has been modified, a new Section D.5 has been added, and the Section D.4 Emission Unit description has been revised to reflect the new lettering.

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:

**EAR Specialty Composites 7911 Zionsville Road**

- (a) One (1) confor process, installed in 1990 and modified in 1999, with a maximum isopentane usage rate of 58,441 pounds per year, producing slab stock polyurethane foam and exhausting out stack SU-2.
- (b) One (1) PVC foam mixing and casting line, installed in the 1970's, identified as emission unit ID 5056-01, with a maximum capacity of 5,720,280 pounds of raw material input per year (653 pounds per hour) consisting of a PVC pellet mixing operation with a fabric filter and a casting line with a 6 million Btu per hour natural gas or propane fueled oven, with emissions exhausting to a catalytic oxidizer which exhausts to stack SC-1.
- (c) One urethane foam forming line (Mushroom Pilot Line) installed in 1996, and modified in 2006, producing foam for either of two product lines, with a maximum VOC containing raw material usage rate of 17,078 lbs/yr for process A, and 218,177 lbs/yr, for process B, and with emissions exhausting out stack SU-8.
- (d) One (1) tote cleaning process installed in the 1970's, with a maximum solvent usage rate of 11,384 lbs/yr, and with fugitive emissions vented through general building ventilation stack SU-5.
- (e) **One (1) Acoustical Test Facility, receiving approval to construct in 2007, identified as ATF, exhausting to stack ATF-S1 and consisting of one of the following three testing activities:**
  - (1) **Reciprocating internal combustion engine, identified as ATF-U1, with a maximum capacity of 600 horsepower, burning No. 2 fuel oil (diesel).**
  - (2) **Reciprocating internal combustion engine, identified as ATF-U2, with a maximum capacity of 1500 horsepower, burning natural gas.**
  - (3) **Reciprocating internal combustion engine, identified as ATF-U3, with a maximum capacity of 5 horsepower, burning a mixture of natural gas, diesel and gasoline.**

**Only one of the three testing activities, ATF-U1, ATF-U2, ATF-U3, can take place at a time.**

**Aearo Technologies 5457 West 79<sup>th</sup> Street**

- (ef) One polyurethane molding line, installed in 1990 and modified in 2005, identified as Emission Unit 901, with a maximum VOC/HAP containing raw materials usage rate of 776,924 lbs/yr, and exhausting to Stack SU-12. The raw materials used do not meet the definitions of polyurethane under 40 CFR Part 63, Subpart III.
- (fg) One polyurethane molding line, installed in 1991, identified as Emission Unit 902 with a production capacity of 2,000 pairs of earplugs per hour, and exhausting to Stack SU-13. The raw materials used do not meet the definitions of polyurethane under 40 CFR Part 63, Subpart III.

- (gh) One polyurethane molding line, approved for construction in 2007, identified as Emission Unit 909, with a maximum VOC containing raw material usage rate of 113 pounds per hour, and exhausting to Stacks SU-9 and SU-10. The raw materials used do not meet the definitions of polyurethane under 40 CFR Part 63, Subpart III.

#### **IDC - Woodland Drive Woodland Drive**

This plant is a distribution center, therefore there are no emissions units located at this plant.

#### **SECTION D.4 FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-7-5(15)]: Plant 2: Aeero Technologies (5457 West 79<sup>th</sup> Street)**

- (ef) One polyurethane molding line, installed in 1990 and modified in 2005, identified as Emission Unit 901, with a maximum VOC/HAP containing raw materials usage rate of 776,924 lbs/yr, and exhausting to Stack SU-12. The raw materials used do not meet the definitions of polyurethane under 40 CFR Part 63, Subpart III.
- (fg) One polyurethane molding line, installed in 1991, identified as Emission Unit 902 with a production capacity of 2,000 pairs of earplugs per hour, and exhausting to Stack SU-13. The raw materials used do not meet the definitions of polyurethane under 40 CFR Part 63, Subpart III.
- (gh) One polyurethane molding line, approved for construction in 2007, identified as Emission Unit 909, with a maximum VOC containing raw material usage rate of 113 pounds per hour, and exhausting to Stacks SU-9 and SU-10. The raw materials used do not meet the definitions of polyurethane under 40 CFR Part 63, Subpart III.

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

#### **SECTION D.5 FACILITY OPERATION CONDITIONS**

**Facility Description [326 IAC 2-7-5(15)]: Plant 1: EAR Specialty Composites (7911 Zionsville Road)**

- (e) **One (1) Acoustical Test Facility, receiving approval to construct in 2007, identified as ATF, exhausting to stack ATF-S1 and consisting of one of the following three testing activities:**
- (1) **Reciprocating internal combustion engine, identified as ATF-U1, with a maximum capacity of 600 horsepower, burning No. 2 fuel oil (diesel).**
  - (2) **Reciprocating internal combustion engine, identified as ATF-U2, with a maximum capacity of 1500 horsepower, burning natural gas.**
  - (3) **Reciprocating internal combustion engine, identified as ATF-U3, with a maximum capacity of 5 horsepower, burning a mixture of natural gas, diesel and gasoline.**

**Only one of the three testing activities, ATF-U1, ATF-U2, ATF-U3,**

can take place at a time.

(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 NOx Emissions [326 IAC 2-3] [326 IAC 2-7-10.5(d)]**

(a) The hours of operation of ATF shall not exceed 2,688 hours per twelve (12) consecutive month period with compliance determined at the end of each month.

(b) NOx emissions from ATF shall not exceed 18.60 pounds per hour.

Compliance with these emission limits will ensure that the potential to emit from this modification is less than twenty five (25) tons of NOx per year and, therefore, will render the requirements of 326 IAC 2-3 not applicable. Compliance with this limit will also make this modification minor pursuant to 326 IAC 2-7-10.5(d).

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

**D.5.2 Record Keeping Requirements**

(a) To document compliance with Condition D.5.1, the Permittee shall maintain records of the monthly hours of operation of ATF.

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

**D.5.3 Reporting Requirements**

A quarterly summary of the information to document compliance with Condition D.5.1 shall be submitted to the addresses 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).

Change 2:

A reporting form for the new Acoustical Test Facility has been added to the permit. In addition, a reporting form for Emission Unit 909 (approved for construction and operation through Minor Source Modification 097-24100-00368 and Significant Permit Modification 097-24099-00368) has been added.

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

**INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES  
AIR COMPLIANCE**

**Part 70 Quarterly Report**

Source Name: Aearo Technologies  
Source Address: 7911 Zionsville Road, 5457 West 79<sup>th</sup> Street and 8001 Woodland Drive,  
Indianapolis, IN 46268

Mailing Address: 5457 West 79<sup>th</sup> Street, Indianapolis, IN 46268  
 Part 70 Permit No.: T097-8852-00368  
 Facility: Emission Unit 909  
 Parameter: VOC Input  
 Limit: VOC input to Emission Unit 909 shall be limited to less than 25 tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

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

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

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

Attach a signed certification to complete this report.

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

**Part 70 Quarterly Report**

Source Name: Aero Technologies  
 Source Address: 7911 Zionsville Road, Indianapolis, 8001 Woodland Drive and 5457 West 79<sup>th</sup> Street, Indianapolis  
 Mailing Address: 5457 West 79<sup>th</sup> Street, Indianapolis, IN 46268  
 Part 70 Permit No.: T097-8852-00368  
 Facility: Acoustical Test Facility (ATF)  
 Parameter: Hours of Operation

Limit: less than 2,688 hours of operation per twelve (12) consecutive month period with compliance determined at the end of each month.

QUARTER: \_\_\_\_\_ YEAR: \_\_\_\_\_

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

- 9 No deviation occurred in this quarter.
- 9 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.

Change 3:

IDEM and OES have decided to make the following correction to Condition C.14 for clarity:

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

---

...

- (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, and OES that retesting in ~~one hundred and twenty~~ **one hundred twenty** (120) days is not practicable, IDEM, OAQ, and OES may extend the retesting deadline.

...

Change 4:

IDEM and OES have decided to remove the phrase "in letter form" from Condition B.9 Annual Compliance Certification. The submittal does not have to be in letter form.

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 ~~in letter form~~ no later than April 15 of each year to:

...

Change 5:

IDEM and OES have decided to make the following change to Condition C.16 for clarity:

C.16 General Record Keeping Requirements [326 IAC 2-7-5(3)] [326 IAC 2-7-6]

...

- (c) If there is 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)) 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:

...

<b>Conclusion and Recommendation</b>
--------------------------------------

The construction of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Minor Source Modification No. MSM097-24860-00368. The operation of this proposed modification shall be subject to the conditions of the attached proposed Part 70 Significant Permit Modification No. SPM097-24868-00368. The staff recommend to the IDEM Commissioner and OES Administrator that this Part 70 Minor Source Modification and Significant Permit Modification be approved.

**Indiana Department of Environmental Management  
Office of Air Quality  
and  
City of Indianapolis  
Office of Environmental Services**

Addendum to the Technical Support Document  
for a Significant Permit Modification

<b>Source Name:</b>	<b>Aearo Technologies</b>
<b>Source Location:</b>	<b>Plant 1: 7911 Zionsville Road, Indianapolis, IN 46268 Plant 2: 5457 West 79<sup>th</sup> Street, Indianapolis, IN 46268 Plant 3: 8001 Woodland Drive, Indianapolis, IN 46268</b>
<b>County:</b>	<b>Marion</b>
<b>SIC Code:</b>	<b>3086, 3842 (NAICS Code 326150)</b>
<b>Operating Permit No.:</b>	<b>T097-8852-00368</b>
<b>Source Modification No.:</b>	<b>MSM097-24860-00368</b>
<b>Permit Modification No.:</b>	<b>SPM097-24868-00368</b>
<b>Permit Reviewer:</b>	<b>A. Hennessy</b>

On August 30, 2007, the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) and the Indianapolis Office of Environmental Services (OES) had a notice published in the Indianapolis Star, Indianapolis, Indiana, stating that Aearo Technologies had applied for a Minor Source Modification and a Significant Permit Modification to construct and operate a new Acoustical Test Facility. The notice also stated that OAQ and OES proposed to issue a permit 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.

On September 7, 2007, Aearo Technologies submitted comments on the draft Significant Permit Modification. Upon further review, the OAQ and OES have decided to make the following revisions to the Significant Permit Modification. The TSD will remain as it originally appeared when published. Changes to the permit or technical support material that occur after the permit has published for 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. Bolded language has been added and the language with strikeout has been deleted. The Table of Contents has been modified to reflect these changes.

The comments and responses, including changes to the permit, are as follows:

Comment 1:

Aearo Technologies has identified a few discrepancies between the calculations submitted with the application and the calculations in Appendix A of the Technical Support Document.

#### IDEM and OES Response to Comment 1:

Some of the differences were due to the use of a slightly different conversion factor for converting Output hp-hr to Input MMBtu/hr. Some of the differences are due to errors in the formulas. The conversion factor on the criteria pollutant emission calculation page for ATF-U3 was incorrect.

In order to correct these errors, the calculations have been revised and are included as Appendix A to this TSD Addendum. Items that have changed include: criteria pollutant emissions and MMBtu/hr input capacity for ATF-U3 and HAP emissions from ATF-U2 (ethane, benzene, methylene chloride, vinyl chloride, and xylene). These changes changed the highest single HAP emissions from ATF-U2 to Ethane at 1.18 tons per year (previously was presented as formaldehyde at 0.343) and potential combined HAP increased from 0.513 to 1.72 tons per year.

The differences in the numbers from these revisions, do not impact the level of permit needed or the emission limitations in the modification. Source wide combined HAP remains less than 25 tons per year and source wide highest potential single HAP emissions remain less than 10 tons per year. In addition, the Permit Level Determination - Part 70 table, the Permit Level Determination - PSD or Emission Offset table and the CAM applicability table in the TSD indicated that the potential to emit of CO from the modification is 62.19 when, in fact, the calculations show that the potential to emit of CO from the modification is 62.16.

In addition to the changes described above, IDEM and OES have decided to make the following changes:

#### **IDEM and OES change 1:**

Page 3 of the Technical Support Document identified ATF-U1 as: Reciprocating internal combustion engine, identified as ATF-U1, with a maximum capacity of 600 horsepower, burning diesel fuel. However, the source modification and draft permit referred to the fuel combusted in the unit as "No. 2 fuel oil (diesel)". In order to correct this, Condition A.3(e) and the D.5 Facility Description Box have been revised as follows:

- (e) One (1) Acoustical Test Facility, receiving approval to construct in 2007, identified as ATF, exhausting to stack ATF-S1 and consisting of one of the following three testing activities:
  - (1) Reciprocating internal combustion engine, identified as ATF-U1, with a maximum capacity of 600 horsepower, burning ~~diesel fuel No. 2 fuel oil (diesel)~~.
  - (2) Reciprocating internal combustion engine, identified as ATF-U2, with a maximum capacity of 1500 horsepower, burning natural gas.
  - (3) Reciprocating internal combustion engine, identified as ATF-U3, with a maximum capacity of 5 horsepower, burning a mixture of natural gas, diesel and gasoline.

Only one of the three testing activities, ATF-U1, ATF-U2, ATF-U3, can take place at a time.

**Emissions Calculations**

**Company Name:** Aeero Technologies  
**Address City IN Zip:** 5457 West 79th Street, Indianapolis, Indiana  
**Permit Number:** MSM 097-24860-00368  
 SPM 097-24868-00368  
**Permit Reviewer:** Amanda Hennessy  
**Date:** June 2007

**Acoustical Test Facility**  
 Reciprocating Internal Combustion Engines

**Criteria Pollutants**

Equipment	Maximum Output Power (hp-hr)	Maximum Power (MMBtu/hr)	Hours of Operation (hr/year)	NO <sub>x</sub>				CO				VOCs				SO <sub>x</sub>				PM/PM <sub>10</sub>			
				Emission Factor <sup>1</sup>		Potential Emissions		Emission Factor <sup>1</sup>		Potential Emissions		Emission Factor <sup>1</sup>		Potential Emissions		Emission Factor <sup>1</sup>		Potential Emissions		Emission Factor <sup>1</sup>		Potential Emissions	
				lb/hp-hr	lb/MMBtu	lb/hr	tons/yr	lb/hp-hr	lb/MMBtu	lb/hr	tons/yr	lb/hp-hr	lb/MMBtu	lb/hr	tons/yr	lb/hp-hr	lb/MMBtu	lb/hr	tons/yr	lb/hp-hr	lb/MMBtu	lb/hr	tons/yr
ATF-U1	600	1.53	8760	0.031		18.60	81.47	0.00668		4.01	17.56	0.00247		1.48	6.49	0.00205		1.23	5.387	0.0022		1.32	5.78
ATF-U2	1500	3.82	8760		2.21	8.43	36.93		3.72	14.19	62.16		0.03	0.11	0.49		0.0006	0.00224	0.010		0.010	0.04	0.16
ATF-U3 <sup>2</sup>	5	0.001	8760		2.29	0.00	0.01		6.53	0.01	0.04		0.15	0.00019	0.00		0.0192	0.00002	0.000		0.009	0.00001	0.00005
<b>Worst Case PTE**</b>						<b>18.60</b>	<b>81.47</b>			<b>14.20</b>	<b>62.16</b>			<b>1.48</b>	<b>6.49</b>			<b>1.23</b>	<b>5.39</b>			<b>1.32</b>	<b>5.78</b>

Notes:

- Emission factors are from AP-42 (Table 3.3-1 (Gasoline and Diesel Industrial Engines) and Table 3.2-3 (4-stroke Rich Burn Natural Gas Engines) (Supplement B, October 1996)
  - Gas mixture is 90% natural gas (NG), 5% diesel (D) and 5% gasoline (G). Emission factors (EF) were calculated by using this ratio. e.g. (EF Mixed = EF-NG\*0.9+EF-D\*0.05+EF-G\*0.05)
  - hp-hr conversion to MMBtu/hr: hp-hr\*2543.5/1000000 (conversion factor from AP-42 Conversion Table)
- \*\* Totals are not accurate reflections of the PTE since only one emission unit can physically be tested at a time. Units cannot be operated simultaneously.

Emissions Calculations

**Company Name:** Aearo Technologies  
**Address City IN Zip:** 5457 West 79th Street, Indianapolis, Indiana  
**Permit Number:** MSM 097-24860-00368  
 SPM 097-24868-00368  
**Permit Reviewer:** Amanda Hennessy  
**Date:** June 2007

**Acoustical Test Facility - HAPs**  
 ATF-U1 and ATF-U2

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	Benzene			Toluene			Xylenes			Propylene			Formaldehyde		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Potential Emissions			Potential Emissions		
				lb/MMBtu	lb/hr	tons/yr	lb/MMBtu	lb/hr	tons/yr	lb/MMBtu	lb/hr	tons/yr	lb/MMBtu	lb/hr	tons/yr	lb/MMBtu	lb/hr	tons/yr
ATF-U1	600	1.53	8760	0.00093	0.00142	0.00622	0.00041	0.00063	0.00274	0.00029	0.00044	0.00194	0.00258	0.00394	0.01725	0.00118	0.00180	0.00789

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	1,3-Butadiene			Acetaldehyde			Acrolein			Total PAH		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
				lb/MMBtu	lb/hr	tons/yr									
ATF-U1	600	1.53	8760	0.00004	0.00006	0.00026	0.000767	0.00117	0.00513	0.0000925	0.00014	0.00062	0.000168	0.00026	0.00112

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	1,1,2,2-Tetrachloroethane			1,1,2-Trichloroethane			1,1-Dichloroethane			1,2-Dichloroethane			1,2-Dichloropropane		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
				lb/MMBtu	lb/hr	tons/yr												
ATF-U2	1500	3.82	8760	0.00003	0.00010	0.00042	0.0000153	0.00006	0.00026	0.0000113	0.00004	0.00019	0.0000113	0.00004	0.00019	0.000013	0.00005	0.00022

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	1,3-Butadiene			1,3-Dichloropropene			Acetaldehyde			Acrolein			Benzene		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
				lb/MMBtu	lb/hr	tons/yr												
ATF-U2	1500	3.82	8760	0.00066	0.00253	0.01108	0.0000127	0.00005	0.00021	0.00279	0.01065	0.04664	0.00263	0.01004	0.04397	0.00158	0.00603	0.00000

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	Butyr/isobutyraldehyde			Carbon Tetrachloride			Chlorobenzene			Chloroform			Ethane		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
				lb/MMBtu	lb/hr	tons/yr												
ATF-U2	1500	3.82	8760	0.00005	0.00019	0.00081	0.0000177	0.00007	0.00030	0.0000129	0.00005	0.00022	0.0000137	0.00005	0.00023	0.0704	0.26869	0.00000

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	Ethylbenzene			Ethylene Dibromide			Formaldehyde			Methanol			Methylene Chloride		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
				lb/MMBtu	lb/hr	tons/yr												
ATF-U2	1500	3.82	8760	0.00002	0.00009	0.00041	0.0000213	0.00008	0.00036	0.0205	0.07824	0.34270	0.00306	0.01168	0.05115	0.0000412	0.00016	0.00000

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	Naphthalene			PAH			Styrene			Toluene			Vinyl Chloride			Xylene		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
				lb/MMBtu	lb/hr	tons/yr															
ATF-U2	1500	3.82	8760	0.00010	0.00037	0.00162	0.000141	0.00054	0.00236	0.0000119	0.00005	0.00020	0.000558	0.00213	0.00933	0.00000718	0.00003	0.00000	0.00020	0.00000	0.00000

<b>ATF-U1</b>	<b>0.04317</b>	<b>Worst Case Single HAP</b>	
<b>ATF-U2</b>	<b>0.51286</b>	<b>ATF-U1 - Propylene</b>	<b>0.01725</b>
		<b>ATF-U2 - Formaldehyde</b>	<b>0.34270</b>

Notes:  
 1. Emission factors are from AP-42 (Table 3.3-2 (Speciated Organic Compound Emission Factors) (Supplement B, October 1996)  
 \*\* Totals are not accurate reflections of the PTE since only one emission unit (either ATF-U1, ATF-U2 or ATF-U3) can physically be tested at a time. Units cannot be operated simultaneously.

Emissions Calculations

Company Name: Aeero Technologies  
 Address City IN Zip: 5457 West 79th Street, Indianapolis, Indiana  
 Permit Number: MSM 097-24860-00368  
 SPM 097-24868-00368  
 Permit Reviewer: Amanda Hennessy  
 Date: June 2007

Acoustical Test Facility - HAPs  
 ATF-U3

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	Benzene			Toluene			Xylenes			Propylene			Formaldehyde		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
					lb/MMBtu	lb/hr		tons/yr	lb/MMBtu		lb/hr	tons/yr		lb/MMBtu	lb/hr		tons/yr	lb/MMBtu
ATF-U3 (D & G mix)	5	0.01	8760	0.00093	0.00001	0.00005	0.00041	0.00001	0.00002	0.00029	0.00000	0.00002	0.00258	0.00003	0.00014	0.00118	0.00002	0.00007

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	1,3-Butadiene			Acetaldehyde			Acrolein			Total PAH		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
					lb/MMBtu	lb/hr		tons/yr	lb/MMBtu		lb/hr	tons/yr		lb/MMBtu	lb/hr
ATF-U3 (D & G mix)	5	0.01	8760	0.00004	0.00000	0.00000	0.000767	0.00001	0.00004	0.0000925	0.00000	0.00001	0.000168	0.00000	0.00001

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	1,1,2,2 - Tetrachloroethane			1,1,2-Trichloroethane			1,1-Dichloroethane			1,2-Dichloroethane			1,2-Dichloropropane		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
					lb/MMBtu	lb/hr		tons/yr	lb/MMBtu		lb/hr	tons/yr		lb/MMBtu	lb/hr		tons/yr	lb/MMBtu
ATF-U3 (nat. gas)	5	0.01	8760	0.00003	0.00000	0.00000	0.0000153	0.00000	0.00000	0.0000113	0.00000	0.00000	0.0000113	0.00000	0.00000	0.000013	0.00000	0.00000

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	1,3-Butadiene			1,3-Dichloropropane			Acetaldehyde			Acrolein			Benzene		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
					lb/MMBtu	lb/hr		tons/yr	lb/MMBtu		lb/hr	tons/yr		lb/MMBtu	lb/hr		tons/yr	lb/MMBtu
ATF-U3 (nat gas)	5	0.01	8760	0.00066	0.00001	0.00004	1.27E-05	0.00000	0.00000	0.00279	0.00004	0.00016	0.00263	0.00003	0.00015	0.00158	0.00002	0.00009

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	Butyr/isobutyraldehyde			Carbon Tetrachloride			Chlorobenzene			Chloroform			Ethane		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
					lb/MMBtu	lb/hr		tons/yr	lb/MMBtu		lb/hr	tons/yr		lb/MMBtu	lb/hr		tons/yr	lb/MMBtu
ATF-U3 (nat gas)	5	0.01	8760	0.00005	0.00000	0.00000	0.0000177	0.00000	0.00000	0.0000129	0.00000	0.00000	0.0000137	0.00000	0.00000	0.0704	0.00090	0.00392

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	Ethylbenzene			Ethylene Dibromide			Formaldehyde			Methanol			Methylene Chloride		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
					lb/MMBtu	lb/hr		tons/yr	lb/MMBtu		lb/hr	tons/yr		lb/MMBtu	lb/hr		tons/yr	lb/MMBtu
ATF-U3 (nat gas)	5	0.01	8760	0.00002	0.00000	0.00000	0.0000213	0.00000	0.00000	0.0205	0.00026	0.00114	0.00306	0.00004	0.00017	0.0000412	0.00000	0.00000

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	Naphthalene			PAH			Styrene			Toluene			Vinyl Chloride			Xylene		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
					lb/MMBtu	lb/hr		tons/yr	lb/MMBtu		lb/hr	tons/yr		lb/MMBtu	lb/hr		tons/yr	lb/MMBtu		lb/hr	tons/yr
ATF-U3 (nat gas)	5	0.01	8760	0.00010	0.00000	0.00001	0.000141	0.00000	0.00001	0.0000119	0.00000	0.00000	0.000558	0.00001	0.00003	7.18E-06	0.00000	0.00000	0.000195	0.00000	0.00001

ATF-U3                                      **Total Combined HAPs (tons per year)**                                      **Worst Case Single HAP**  
 0.00609                                      **Ethane**                                      0.003923

Note: ATF-U3 gas mixture is 90% natural gas, 5% diesel, and 5% gasoline. Emission factors from Table 3.2-3 (4-stroke Rich Burn)

**Emissions Calculations**

**Company Name:** Aeero Technologies  
**Address City IN Zip:** 5457 West 79th Street, Indianapolis, Indiana  
**Permit Number:** MSM 097-24860-00368  
 SPM 097-24868-00368  
**Permit Reviewer:** Amanda Hennessy  
**Date:** June 2007

**Acoustical Test Facility**  
 Reciprocating Internal Combustion Engines

**Criteria Pollutants**

Equipment	Maximum Output Power (hp-hr)	Maximum Power (MMBtu/hr)	Hours of Operation (hr/year)	NO <sub>x</sub>				CO				VOCs				SO <sub>x</sub>				PM/PM <sub>10</sub>			
				Emission Factor <sup>1</sup>		Potential Emissions		Emission Factor <sup>1</sup>		Potential Emissions		Emission Factor <sup>1</sup>		Potential Emissions		Emission Factor <sup>1</sup>		Potential Emissions		Emission Factor <sup>1</sup>		Potential Emissions	
				lb/hp-hr	lb/MMBtu	lb/hr	tons/yr	lb/hp-hr	lb/MMBtu	lb/hr	tons/yr	lb/hp-hr	lb/MMBtu	lb/hr	tons/yr	lb/hp-hr	lb/MMBtu	lb/hr	tons/yr	lb/hp-hr	lb/MMBtu	lb/hr	tons/yr
ATF-U1	600	1.53	8760	0.031		18.60	81.47	0.00668		4.01	17.56	0.00247		1.48	6.49	0.00205		1.23	5.387	0.0022		1.32	5.78
ATF-U2	1500	3.82	8760		2.21	8.43	36.93		3.72	14.19	62.16		0.03	0.11	0.49		0.0006	0.00224	0.010		0.010	0.04	0.16
ATF-U3 <sup>2</sup>	5	0.013	8760		2.29	0.03	0.13		6.53	0.08	0.36		0.15	0.00190	0.01		0.0192	0.00024	0.001		0.009	0.00011	0.00048
<b>Worst Case PTE**</b>						<b>18.60</b>	<b>81.47</b>			<b>14.20</b>	<b>62.16</b>			<b>1.48</b>	<b>6.49</b>			<b>1.23</b>	<b>5.39</b>			<b>1.32</b>	<b>5.78</b>

Notes:

- Emission factors are from AP-42 (Table 3.3-1 (Gasoline and Diesel Industrial Engines) and Table 3.2-3 (4-stroke Rich Burn Natural Gas Engines) (Supplement B, October 1996)
- Gas mixture is 90% natural gas (NG), 5% diesel (D) and 5% gasoline (G). Emission factors (EF) were calculated by using this ratio. e.g. (EF Mixed = EF-NG\*0.9+EF-D\*0.05+EF-G\*0.05)
- hp-hr conversion to MMBtu/hr: hp-hr\*2543.5/1000000 (conversion factor from AP-42 Conversion Table)

\*\* Totals are not accurate reflections of the PTE since only one emission unit can physically be tested at a time. Units cannot be operated simultaneously.

Emissions Calculations

**Company Name:** Aeero Technologies  
**Address City IN Zip:** 5457 West 79th Street, Indianapolis, Indiana  
**Permit Number:** MSM 097-24860-00368  
 SPM 097-24868-00368  
**Permit Reviewer:** Amanda Hennessy  
**Date:** June 2007

**Acoustical Test Facility - HAPs**  
 ATF-U1 and ATF-U2

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	Benzene			Toluene			Xylenes			Propylene			Formaldehyde		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Potential Emissions			Potential Emissions		
				lb/MMBtu	lb/hr	tons/yr	lb/MMBtu	lb/hr	tons/yr	lb/MMBtu	lb/hr	tons/yr	lb/MMBtu	lb/hr	tons/yr	lb/MMBtu	lb/hr	tons/yr
ATF-U1	600	1.53	8760	0.00093	0.00142	0.00622	0.00041	0.00063	0.00274	0.00029	0.00044	0.00194	0.00258	0.00394	0.01725	0.00118	0.00180	0.00789

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	1,3-Butadiene			Acetaldehyde			Acrolein			Total PAH		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
				lb/MMBtu	lb/hr	tons/yr									
ATF-U1	600	1.53	8760	0.00004	0.00006	0.00026	0.000767	0.00117	0.00513	0.0000925	0.00014	0.00062	0.000168	0.00026	0.00112

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	1,1,2,2-Tetrachloroethane			1,1,2-Trichloroethane			1,1-Dichloroethane			1,2-Dichloroethane			1,2-Dichloropropane		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
				lb/MMBtu	lb/hr	tons/yr												
ATF-U2	1500	3.82	8760	0.00003	0.00010	0.00042	0.0000153	0.00006	0.00026	0.0000113	0.00004	0.00019	0.0000113	0.00004	0.00019	0.000013	0.00005	0.00022

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	1,3-Butadiene			1,3-Dichloropropene			Acetaldehyde			Acrolein			Benzene		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
				lb/MMBtu	lb/hr	tons/yr												
ATF-U2	1500	3.82	8760	0.00066	0.00253	0.01108	0.0000127	0.00005	0.00021	0.00279	0.01065	0.04664	0.00263	0.01004	0.04397	0.00158	0.00603	0.02641

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	Butyr/isobutyraldehyde			Carbon Tetrachloride			Chlorobenzene			Chloroform			Ethane		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
				lb/MMBtu	lb/hr	tons/yr												
ATF-U2	1500	3.82	8760	0.00005	0.00019	0.00081	0.0000177	0.00007	0.00030	0.0000129	0.00005	0.00022	0.0000137	0.00005	0.00023	0.0704	0.26869	1.17687

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	Ethylbenzene			Ethylene Dibromide			Formaldehyde			Methanol			Methylene Chloride		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
				lb/MMBtu	lb/hr	tons/yr												
ATF-U2	1500	3.82	8760	0.00002	0.00009	0.00041	0.0000213	0.00008	0.00036	0.0205	0.07824	0.34270	0.00306	0.01168	0.05115	0.0000412	0.00016	0.00069

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	Naphthalene			PAH			Styrene			Toluene			Vinyl Chloride			Xylene		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
				lb/MMBtu	lb/hr	tons/yr															
ATF-U2	1500	3.82	8760	0.00010	0.00037	0.00162	0.000141	0.00054	0.00236	0.0000119	0.00005	0.00020	0.000558	0.00213	0.00933	0.00000718	0.00003	0.00012	0.00020	0.00074	0.00326

<b>ATF-U1</b>	<b>Total Combined HAPs (tons per year)</b>	<b>0.04317</b>	<b>Worst Case Single HAP</b>	
<b>ATF-U2</b>		<b>1.72021</b>	<b>ATF-U1 - Propylene</b>	<b>0.01725</b>
			<b>ATF-U2 - Ethane</b>	<b>1.17687</b>

Notes:  
 1. Emission factors are from AP-42 (Table 3.3-2 (Speciated Organic Compound Emission Factors) (Supplement B, October 1996)  
 \*\* Totals are not accurate reflections of the PTE since only one emission unit (either ATF-U1, ATF-U2 or ATF-U3) can physically be tested at a time. Units cannot be operated simultaneously.

Emissions Calculations

Company Name: Aeero Technologies  
 Address City IN Zip: 5457 West 79th Street, Indianapolis, Indiana  
 Permit Number: MSM 097-24860-00368  
 SPM 097-24868-00368  
 Permit Reviewer: Amanda Hennessy  
 Date: June 2007

Acoustical Test Facility - HAPs  
 ATF-U3

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	Benzene			Toluene			Xylenes			Propylene			Formaldehyde		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
					lb/MMBtu	lb/hr		tons/yr	lb/MMBtu		lb/hr	tons/yr		lb/MMBtu	lb/hr		tons/yr	lb/MMBtu
ATF-U3 (D & G mix)	5	0.01	8760	0.00093	0.00001	0.00005	0.00041	0.00001	0.00002	0.00029	0.00000	0.00002	0.00258	0.00003	0.00014	0.00118	0.00002	0.00007

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	1,3-Butadiene			Acetaldehyde			Acrolein			Total PAH		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
					lb/MMBtu	lb/hr		tons/yr	lb/MMBtu		lb/hr	tons/yr		lb/MMBtu	lb/hr
ATF-U3 (D & G mix)	5	0.01	8760	0.00004	0.00000	0.00000	0.000767	0.00001	0.00004	0.0000925	0.00000	0.00001	0.000168	0.00000	0.00001

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	1,1,2,2 - Tetrachloroethane			1,1,2-Trichloroethane			1,1-Dichloroethane			1,2-Dichloroethane			1,2-Dichloropropane		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
					lb/MMBtu	lb/hr		tons/yr	lb/MMBtu		lb/hr	tons/yr		lb/MMBtu	lb/hr		tons/yr	lb/MMBtu
ATF-U3 (nat. gas)	5	0.01	8760	0.00003	0.00000	0.00000	0.0000153	0.00000	0.00000	0.0000113	0.00000	0.00000	0.0000113	0.00000	0.00000	0.000013	0.00000	0.00000

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	1,3-Butadiene			1,3-Dichloropropane			Acetaldehyde			Acrolein			Benzene		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
					lb/MMBtu	lb/hr		tons/yr	lb/MMBtu		lb/hr	tons/yr		lb/MMBtu	lb/hr		tons/yr	lb/MMBtu
ATF-U3 (nat gas)	5	0.01	8760	0.00066	0.00001	0.00004	0.0000127	0.00000	0.00000	0.00279	0.00004	0.00016	0.00263	0.00003	0.00015	0.00158	0.00002	0.00009

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	Butyr/isobutyraldehyde			Carbon Tetrachloride			Chlorobenzene			Chloroform			Ethane		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
					lb/MMBtu	lb/hr		tons/yr	lb/MMBtu		lb/hr	tons/yr		lb/MMBtu	lb/hr		tons/yr	lb/MMBtu
ATF-U3 (nat gas)	5	0.01	8760	0.00005	0.00000	0.00000	0.0000177	0.00000	0.00000	0.0000129	0.00000	0.00000	0.0000137	0.00000	0.00000	0.0704	0.00090	0.00392

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	Ethylbenzene			Ethylene Dibromide			Formaldehyde			Methanol			Methylene Chloride		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
					lb/MMBtu	lb/hr		tons/yr	lb/MMBtu		lb/hr	tons/yr		lb/MMBtu	lb/hr		tons/yr	lb/MMBtu
ATF-U3 (nat gas)	5	0.01	8760	0.00002	0.00000	0.00000	0.0000213	0.00000	0.00000	0.0205	0.00026	0.00114	0.00306	0.00004	0.00017	0.0000412	0.00000	0.00000

Equipment Description	Maximum Output Power (hp-hr)	Maximum Output Power (MMBtu/hr)	Hours of Operation (hr/year)	Naphthalene			PAH			Styrene			Toluene			Vinyl Chloride			Xylene		
				Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions		Emission Factor <sup>1</sup>	Potential Emissions	
					lb/MMBtu	lb/hr		tons/yr	lb/MMBtu		lb/hr	tons/yr		lb/MMBtu	lb/hr		tons/yr	lb/MMBtu		lb/hr	tons/yr
ATF-U3 (nat gas)	5	0.01	8760	0.00010	0.00000	0.00001	0.000141	0.00000	0.00001	0.0000119	0.00000	0.00000	0.000558	0.00001	0.00003	7.18E-06	0.00000	0.00000	0.000195	0.00000	0.00001

ATF-U3                                      **Total Combined HAPs (tons per year)**                                      **Worst Case Single HAP**  
 0.00609                                      **Ethane**                                      0.003923

Note: ATF-U3 gas mixture is 90% natural gas, 5% diesel, and 5% gasoline. Emission factors from Table 3.2-3 (4-stroke Rich Burn)