



TO: Interested Parties / Applicant

RE: Aearo Technologies / MSM 097-24100-00368

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 approval is effective immediately, unless a petition for stay of effectiveness is filed and granted, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

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

If you have technical questions regarding the enclosed documents, please contact the Indianapolis Office of Environmental Services, Air Permits at (317) 327-2234.

Enclosures



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



May 15, 2007

Mr. Jim Coratti
Aearo Technologies
5457 West 79th Street
Indianapolis, IN 46268

CERTIFIED MAIL: 7000 0600 0023 5187 1721

Re: **MSM 097-24100-00368**
Second Minor Source Modification to:
Part 70 Operating Permit No.: **T097-8852-00368**

Dear Mr. Coratti:

Aearo Technologies was issued Part 70 Operating Permit No. T097-8852-00368 on February 19, 2003 for a stationary plastic manufacturing operation. An application to modify the source was received on December 8, 2006, with additional information received on April 23, 2007. Pursuant to 326 IAC 2-7-10.5(d)(5), the following emission units are approved for construction at the source:

One polyurethane molding line, receiving approval to construct 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 following construction conditions are applicable to the proposed project:

General Construction Conditions

1. The data and information supplied with the application shall be considered part of this source modification approval. Prior to any proposed change in construction which may affect the potential to emit (PTE) of the proposed project, the change must be approved by the Office of Air Quality (OAQ) and the City of Indianapolis Office of Environmental Services (OES).
2. This approval to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.
3. Effective Date of the Permit
Pursuant to IC 13-15-5-3, this approval becomes effective upon its issuance.
4. Pursuant to 326 IAC 2-1.1-9 and 326 IAC 2-7-10.5(i), the Commissioner may revoke this approval if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. All requirements and conditions of this construction approval shall remain in effect unless modified in a manner consistent with procedures established pursuant to 326 IAC 2.
6. Pursuant to 326 IAC 2-7-10.5(l) the emission units constructed under this approval shall not be placed into operation prior to revision of the source's Part 70 Operating Permit to incorporate the required operation conditions.



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

The source may begin construction when the source modification has been issued. The source must comply with the requirements of 326 IAC 2-7-10.5(l)(2) and 326 IAC 2-7-12 before operation of any of the proposed emission units can begin.

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 Monica Doyle, City of Indianapolis, Office of Environmental Services, 2700 South Belmont, Indianapolis, Indiana, 46221, or call (317) 327-2846.

Sincerely,

ORIGINAL SIGNED BY

Felicia A. Robinson
Administrator
Office of Environmental Services

Attachments: Minor Source Modification Permit
Technical Support Document

FAR/md

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



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

and

INDIANAPOLIS OFFICE OF ENVIRONMENTAL SERVICES

Aearo Technologies

**5457 West 79th 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. This permit also addresses certain new source review requirements for existing equipment and is intended to fulfill the new source review procedures pursuant to 326 IAC 2-2 and 326 IAC 2-7-10.5, applicable to those conditions.

2nd Minor Source Modification, 097-24100-00368	
ORIGINAL SIGNED BY Felicia A. Robinson Administrator Office of Environmental Services	Issuance Date: May 15, 2007



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

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) 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 th Street, Indianapolis, IN 46268 Plant 3: 8001 Woodland Drive, Indianapolis, IN 46268
Mailing Address:	5457 West 79 th 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 79th 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:

Aearo Technologies 5457 West 79th Street

- (g) One (1) polyurethane molding line, receiving approval to construct 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.

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 D.4 FACILITY OPERATION CONDITIONS

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

- (b) One (1) 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 pounds per year, and exhausting to Stack SU-12. The raw materials used do not meet the definitions of polyurethane under 40 CFR Part 63, Subpart III.
- (c) One (1) 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.
- (d) One (1) 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).

**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, IN 46268
8001 Woodland Drive, Indianapolis, IN 46268
5457 West 79th Street, Indianapolis, IN 46268
Mailing Address: 5457 West 79th 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, IN 46268
8001 Woodland Drive, Indianapolis, IN 46268
5457 West 79th Street, Indianapolis, IN 46268
Mailing Address: 5457 West 79th 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 ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by:

Title / Position:

Date:

Phone:

A certification is not required for this report.

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY, COMPLIANCE DATA SECTION
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 79th Street, Indianapolis, IN 46268
Mailing Address: 5457 West 79th Street, Indianapolis, IN 46268
Part 70 Permit No.: T097-8852-00368
Facility: Emission Unit 909
Parameter: VOC Emissions
Limit: Input is less than 25 tons per twelve (12) consecutive month period.

QUARTER:

YEAR:

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

No deviation occurred in this 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 OPERATING PERMIT
QUARTERLY DEVIATION AND COMPLIANCE MONITORING REPORT**

Source Name: Aeero Technologies
Source Address: 7911 Zionsville Road, Indianapolis, IN 46268
8001 Woodland Drive, Indianapolis, IN 46268
5457 West 79th Street, Indianapolis, IN 46268
Mailing Address: 5457 West 79th 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**.

9 NO DEVIATIONS OCCURRED THIS REPORTING PERIOD.

9 THE FOLLOWING DEVIATIONS OCCURRED THIS REPORTING PERIOD

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

Permit Requirement (specify permit condition #)

Date of Deviation:

Duration of Deviation:

Number of Deviations:

Probable Cause of Deviation:

Response Steps Taken:

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

Form Completed By:

Title/Position:

Date:

Phone:

Attach a signed certification to complete this report.

Mail to: City of Indianapolis, Air Permits
2700 S. Belmont Avenue
Indianapolis, IN 46221

Permit Administration & Development Section
Office Of Air Quality, MC 61-53 ICN 1003
100 North Senate Avenue
Indianapolis, Indiana 46204

Aearo Technologies
5457 West 79th Street
Indianapolis, Indiana 46268

Affidavit of Construction

I, _____, being duly sworn upon my oath, depose and say:
(Name of the Authorized Representative)

1. I live in _____ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of _____ for _____ .
(Title) (Company Name)
3. By virtue of my position with _____, I have personal
(Company Name)
knowledge of the representations contained in this affidavit and am authorized to make
these representations on behalf of _____ .
(Company Name)
4. I hereby certify that Aearo Technologies, 5457 West 79th Street, Indianapolis, Indiana, 46268, completed construction of the polyurethane molding line, identified as Emission Unit 909 on _____ in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on December 8, 2006 and as permitted pursuant to the **Part 70 Minor Source Modification, 097-24100-00368, Plant ID No. 097-00368** issued on _____ .

Further Affiant said not.

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Signature

Date

STATE OF INDIANA)

)SS

COUNTY OF _____)

Subscribed and sworn to me, a notary public in and for _____ County and State of Indiana on
this _____ day of _____, 20_____ .

My Commission expires:

Signature

Name (typed or printed)

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

Technical Support Document (TSD) for a Minor Source Modification
to a Part 70 Operating Permit

Source Background and Description

Source Name:	Aearo Technologies
Source Location:	Plant 1: 7911 Zionsville Road, Indianapolis, IN 46268 Plant 2: 5457 West 79th Street, Indianapolis, IN 46268 Plant 3: 8001 Woodland Drive, Indianapolis, IN 46268
County:	Marion
SIC Code:	3086, 3842 (NAICS Code 326150)
Operation Permit No.:	T 097-8852-00368
Operation Permit Issuance Date:	February 19, 2003
Minor Source Modification No.:	MSM 097-24100-00368
Permit Reviewer:	Monica Doyle

The Indianapolis Office of Environmental Services (OES) and Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) have reviewed an application from Aearo Technologies relating to the construction of a new polyurethane molding line, to be identified as Emissions Unit 909, located at Plant 2.

History

On December 8, 2006, an application for a Minor Source Modification was received requesting construction and operation approval for a new polyurethane molding line, 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.

Existing Approvals

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.

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

Enforcement Issue

There are no enforcement actions pending regarding this proposed modification.

Emission Calculations

See Appendix A of this document for emission calculations (Page 1 of 1).

Potential to Emit of Emission Unit 909 and Justification

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as “the maximum capacity of a stationary source or emissions 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, the department, or the appropriate local air pollution control agency.”

Pollutant	Potential to Emit (tons/yr)
PM	negligible
PM-10	negligible
SO ₂	0
VOC	30.30
CO	0
NO _x	0

HAPs	Potential to Emit (tons/yr)
Single HAP	< 1
Combined HAP	< 1

- (a) This proposed modification does require a minor source modification under 326 IAC 2-7-10.5(d)(3)(B) and 326 IAC 2-7-10.5 (d)(6) because the modification has the potential to emit more than ten (10) tons per year of VOC and will be limited to less than 25 tons per year of VOC.
- (b) The modification will be incorporated into the existing Part 70 Operating Permit through a significant permit modification issued pursuant to 326 IAC 2-7-12(d), because it does not qualify as a minor permit modification. The modification involves significant changes to recordkeeping and reporting conditions and requires a case-by-case emission limitation.

County Attainment Status

The source is located in Marion County.

Pollutant	Status
PM-2.5	nonattainment
PM-10	attainment
SO ₂	maintenance attainment
NO ₂	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 PM_{2.5} in 70 FR 943 dated January 5, 2005. Until U.S. EPA adopts specific New Source Review rules for PM_{2.5} emissions, it has directed states to regulate PM₁₀ emissions as a surrogate for PM_{2.5} 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, SO₂, 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:

Pollutant	Emissions (tons/year)
PM	<100
PM ₁₀	<100
SO ₂	<100
VOC	>100
CO	<100
NO _x	<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 precursor to ozone, a nonattainment regulated pollutant is emitted at a rate of 100 tons per year or more.

Federal Rule Applicability

The proposed modification does not change any Federal Rule Applicability. The raw materials used in Emission Unit 909 do not meet the definitions of polyurethane under 40 CFR Part 63, Subpart III.

State Rule Applicability

326 IAC 2-2 (PSD)

The potential to emit of PM, PM₁₀, NO_x, SO₂, CO and lead after this modification are still less than the PSD major source threshold. Therefore, this modification is not subject to the requirements of 326 IAC 2-2.

326 IAC 2-3 (Emission Offset)

Since the Potential to Emit of VOC from the source is greater than 100 tons per year and Marion County has been designated as basic nonattainment for 8-hour ozone, the source is a major source under Emission Offset Rules. The potential to emit of the proposed new unit, Emission Unit 909, is less than 40 tons per tons of VOC per year. Therefore, this modification is not subject to the requirements of 326 IAC 2-3.

According to information submitted by the source, Emission Unit 909 is independent from all other emission units at the source. Therefore, there will be no increased utilization or impact on emissions from any other unit located at the source.

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

The modification proposed by the source is not a reconstruction of a major source of HAPS. Emission Unit 909 has the potential to emit less than 1 ton per year of HAP (combined and single). Therefore, 326 IAC 2-4.1 does not apply.

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

Emission Unit 909 will be constructed after January 1, 1980. VOC input to Emission Unit 909 has been limited, such that VOC emissions are less than 25 tons per year, therefore 326 IAC 8-1-6 is not applicable.

Proposed Changes

- (a) The following changes have been made to the A.3 and D.4 sections to incorporate Emission Unit 909.

Aearo Technologies 5457 West 79th Street

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

Facility Description [326 IAC 2-7-5(15)]: Plant 2: Aearo Technologies (5457 West 79th Street)

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

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

- ~~(a) The number of earplugs produced on Emission Unit 901 is limited to 291 million pairs of earplugs per twelve (12) consecutive month period with compliance determined at the end of each month such that 326 IAC 8-1-6 is not applicable.~~
- ~~(b) VOC Emissions from Emission Unit 901 shall not exceed 171.6 pounds of VOC per million pairs of earplugs produced.~~

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.4.3~~ D.4.4 Record Keeping Requirements

~~The Permittee shall keep records of the number of earplugs produced on Emission Unit 901 each month to demonstrate compliance with D.4.2.~~

- (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 each 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.4.4~~ 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).

Recommendation

The staff recommends to the Commissioner that the Minor Source Modification No. 097-24100-00368 be approved. This recommendation is based on the following facts and conditions:

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

An application for the purposes of this review was received on December 8, 2006, with additional information received on April 23, 2007.

Conclusion

The construction of this plastics manufacturing operation shall be subject to the conditions of this Minor Source Modification 097-24100-00368.

Emissions Calculations

Company Name: Aearo Technologies
Address City IN Zip: 5457 West 79th Street, Indianapolis, Indiana
Permit Number: MSM 097-24100-00368
Permit Reviewer: Monica Doyle
Date: 26-Apr-07

Polyurethane Coating Line 909

Chemical	% of Composition	Maximum Usage (lbs/hr)	% VOC*	% HAPs*	Potential to Emit (PTE)			
					PTE VOC (lbs/hr)	PTE VOC (tons/yr)	PTE HAP (lbs/hr)	PTE HAP (tons/yr)
A	52.75%	113.12	6.00%	0.060%	3.580	15.681	0.036	0.157
B	44.42%	113.12	0.20%	0.20%	0.100	0.440	0.100	0.440
C	0.0409%	113.12	100.00%	0.00%	0.046	0.203	0.000	0.000
D	2.82%	113.12	100.00%	0.00%	3.190	13.972	0.000	0.000
Total	100%				6.917	30.30	0.136	0.60

*HAP and VOC contents do not represent actual contents of the Chemicals used at Aearo, but are representative values which are greater than those actually used to preserve the confidentiality of the company.

Methodology

PTE VOC (lbs/hr) = % Composition x Maximum Usage (lbs/hr) x % VOC

PTE VOC (tons/yr) = PTE VOC (lbs/hr) * 8760 hrs / yr * 1 ton / 2000 lbs

PTE HAP (lbs/hr) = % Composition x Maximum Usage (lbs/hr) x % HAP

PTE HAP (tons/yr) = PTE HAP (lbs/hr) * 8760 hrs / yr * 1 ton / 2000 lbs