



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

TO: Interested Parties / Applicant

DATE: March 12, 2013

RE: Vahala Foam, Inc. / 039 - 32605 - 00574

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

Notice of Decision: Approval - Effective Immediately

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the enclosed matter. Pursuant to IC 13-15-5-3, this permit is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, 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 and IC 13-15-6-1 require that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

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
FNPER.dot12/03/07



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March 12, 2013

Mr. Daniel P. Vahala
Vahala Foam, Inc.
930 Herman St.
P.O. Box 2602
Elkhart, Indiana 46515

Re: 039-32605-00574
First Significant Revision to
M039-25349-00574

Dear Mr. Vahala:

Vahala Foam, Inc was issued a Minor Source Operating Permit (MSOP) Renewal No. M039-25349-00574 on March 11, 2008 for a stationary foam part assembly source located at 930 Herman Street, Elkhart, IN 46515. On December 7, 2012, the Office of Air Quality (OAQ) received an application from the source requesting construct and operate two surface adhesive lines and to modify the existing surface coating adhesive line. The attached Technical Support Document (TSD) provides additional explanation of the changes to the source/permit. Pursuant to the provisions of 326 IAC 2-6.1-6, these changes to the permit are required to be reviewed in accordance with the Significant Permit Revision (SPR) procedures of 326 IAC 2-6.1-6(i). Pursuant to the provisions of 326 IAC 2-6.1-6, a significant permit revision to this permit is hereby approved as described in the attached Technical Support Document (TSD).

The following construction conditions are applicable to the proposed project:

1. General Construction Conditions
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).
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 (Revocation), 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.

Pursuant to 326 IAC 2-6.1-6, this permit shall be revised by incorporating the significant permit revision into the permit. All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire 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 Ms. Renee Traivaranon, of my staff, at 317-234-5615 or 1-800-451-6027, and ask for extension 4-5615.

Sincerely,



Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

Attachments: Technical Support Document and revised permit
IC/rt

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



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Minor Source Operating Permit Renewal OFFICE OF AIR QUALITY

Vahala Foam, Inc.
930 Herman Street
Elkhart, Indiana 46515

(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.

This permit is issued to the above mentioned company under the provisions of 326 IAC 2-1.1, 326 IAC 2-6.1 and 40 CFR 52.780, with conditions listed on the attached pages.

Indiana statutes from IC 13 and rules from 326 IAC, quoted 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 MSOP under 326 IAC 2-6.1.

Operation Permit No.: M039-25349-00574	
Issued by: <i>Original signed by:</i> Chrystal A. Wagner, Section Chief Permits Branch Office of Air Quality	Issuance Date: March 11, 2008 Expiration Date: March 11, 2018

Significant Permit Revision No. M039-32605-00574	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: March 12, 2013 Expiration Date: March 11, 2018

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SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ). The information describing the source contained in conditions A.1 and A.2 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 2-5.1-3(c)][326 IAC 2-6.1-4(a)]

The Permittee owns and operates a stationary foam part assembly source.

Source Address:	930 Herman Street, Elkhart, Indiana 46515
General Source Phone Number:	(574) 293-1287
SIC Code:	3086 (Plastics Foam Products)
County Location:	Elkhart
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD and Emission Offset Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) surface coating adhesive line, consisting of twenty-four (24) glue stations (twelve (12) booths) and twenty-four (24) spray guns, identified as EU-1, with a maximum capacity of 77.4 fabricated foam parts per hour, using dry filters as control, constructed in 2002, and exhausting to Stack 1 A-K.
- (b) One (1) surface coating adhesive line, identified as EU-2, consisting of three (3) glue stations and six (6) spray guns, with a maximum capacity of 30 fabricated foam parts per hour, using dry filters for overspray control, approved for construction in 2013, and exhausting to Stack L.
- (c) One (1) surface coating adhesive line, identified as EU-3, consisting of four (4) glue stations and eight (8) spray guns, with a maximum capacity of 50 fabricated foam parts per hour, using dry filters for overspray control, approved for construction in 2013, and exhausting to Stack M.
- (d) Twelve (12) natural gas-fired radiant tube heaters, identified as R1 through R12, each rated at 0.2 million British thermal units per hour, and constructed in 2002.

SECTION B GENERAL CONDITIONS

B.1 Definitions [326 IAC 2-1.1-1]

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 2-1.1-1) shall prevail.

B.2 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]

-
- (a) This permit, M 039-25349-00574, is issued for a fixed term of ten (10) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, 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

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

B.5 Severability

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

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

B.7 Duty to Provide Information

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

B.8 Annual Notification [326 IAC 2-6.1-5(a)(5)]

- (a) An annual notification shall be submitted by an authorized individual to the Office of Air Quality stating whether or not the source is in operation and in compliance with the terms and conditions contained in this permit.
- (b) The annual notice shall be submitted in the format attached no later than March 1 of each year to:

Indiana Department of Environmental Management
Compliance and Enforcement Branch, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) The notification shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

B.9 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) A Preventive Maintenance Plan meets the requirements of 326 IAC 1-6-3 if it includes, at a minimum:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.The Permittee shall implement the PMPs.
- (b) If required by specific condition(s) in Section D of this permit where no PMP was previously required, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this permit or ninety (90) days after initial start-up, whichever is later, including the following information on each facility:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions; and
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If, due to circumstances beyond the Permittee's control, the PMPs cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

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

The Permittee shall implement the PMPs.

- (c) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.
- (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.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]

- (a) All terms and conditions of permits established prior to M 039-25349-00574 and issued pursuant to permitting programs approved into the state implementation plan have been either:
 - (1) incorporated as originally stated,
 - (2) revised, or
 - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

B.11 Termination of Right to Operate [326 IAC 2-6.1-7(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 one hundred twenty (120) days prior to the date of expiration of the source's existing permit, consistent with 326 IAC 2-6.1-7.

B.12 Permit Renewal [326 IAC 2-6.1-7]

- (a) The application for renewal shall be submitted using the application form or forms prescribed by IDEM, OAQ and shall include the information specified in 326 IAC 2-6.1-7. Such information shall be included in the application for each emission unit at this source. The renewal application does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

Request for renewal shall be submitted to:

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

- (b) A timely renewal application is one that is:
 - (1) Submitted at least one hundred twenty (120) days prior to the date of the expiration of this permit; and
 - (2) If the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the

document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

- (c) If the Permittee submits a timely and complete application for renewal of this permit, the source's failure to have a permit is not a violation of 326 IAC 2-6.1 until IDEM, OAQ takes final action on the renewal application, except that this protection shall cease to apply if, subsequent to the completeness determination, the Permittee fails to submit by the deadline specified, pursuant to 326 IAC 2-6.1-4(b), in writing by IDEM, OAQ any additional information identified as being needed to process the application.

B.13 Permit Amendment or Revision [326 IAC 2-5.1-3(e)(3)][326 IAC 2-6.1-6]

- (a) Permit amendments and revisions are governed by the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to amend or modify this permit.
- (b) Any application requesting an amendment or modification of this permit shall be submitted to:

Indiana Department of Environmental Management
Permit Administration and Support Section, Office of Air Quality
100 North Senate Avenue
MC 61-53 IGCN 1003
Indianapolis, Indiana 46204-2251
- (c) The Permittee shall notify the OAQ no later than thirty (30) calendar days of implementing a notice-only change. [326 IAC 2-6.1-6(d)]

B.14 Source Modification Requirement

A modification, construction, or reconstruction is governed by the requirements of 326 IAC 2.

**B.15 Inspection and Entry
[326 IAC 2-5.1-3(e)(4)(B)][326 IAC 2-6.1-5(a)(4)][IC 13-14-2-2][IC 13-17-3-2][IC 13-30-3-1]**

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

- (a) Enter upon the Permittee's premises where a permitted 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, at reasonable times, 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, at reasonable times, 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, at reasonable times, 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.16 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]

- (a) The Permittee must comply with the requirements of 326 IAC 2-6.1-6 whenever the Permittee seeks to change the ownership or operational control of the source and no other change in the permit is necessary.
- (b) Any application requesting a change in the ownership or operational control of the source shall contain a written agreement containing a specific date for transfer of permit responsibility, coverage and liability between the current and new Permittee. The application shall be submitted to:

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

The application which shall be submitted by the Permittee does require an affirmation that the statements in the application are true and complete by an "authorized individual" as defined by 326 IAC 2-1.1-1(1).

- (c) The Permittee may implement notice-only changes addressed in the request for a notice-only change immediately upon submittal of the request. [326 IAC 2-6.1-6(d)(3)]

B.17 Annual Fee Payment [326 IAC 2-1.1-7]

- (a) The Permittee shall pay annual fees due no later than thirty (30) calendar days of receipt of a bill from IDEM, OAQ.
- (b) 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.18 Credible Evidence [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 2-6.1-5(a)(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 Permit Revocation [326 IAC 2-1.1-9]

Pursuant to 326 IAC 2-1.1-9 (Revocation of Permits), this permit to operate may be revoked for any of the following causes:

- (a) Violation of any conditions of this permit.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
- (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
- (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
- (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of this article.

C.3 Opacity [326 IAC 5-1]

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

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

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

The Permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1.

C.5 Incineration [326 IAC 4-2] [326 IAC 9-1-2]

The Permittee shall not operate an incinerator except as provided in 326 IAC 4-2 or in this permit. The Permittee shall not operate a refuse incinerator or refuse burning equipment except as provided in 326 IAC 9-1-2 or in this permit.

C.6 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).

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

The notice shall include a signed certification from the owner or operator that the information provided in this notification is correct and that only Indiana licensed workers and project supervisors will be used to implement the asbestos removal project.

- (e) **Procedures for Asbestos Emission Control**
The Permittee shall comply with the applicable emission control procedures in 326 IAC 14-10-4 and 40 CFR 61.145(c). Per 326 IAC 14-10-1, emission control requirements are applicable for any removal or disturbance of RACM greater than three (3) linear feet on pipes or three (3) square feet on any other facility components or a total of at least 0.75 cubic feet on all facility components.

- (f) **Demolition and Renovation**
The Permittee shall thoroughly inspect the affected facility or part of the facility where the demolition or renovation will occur for the presence of asbestos pursuant to 40 CFR 61.145(a).
- (g) **Indiana Licensed Asbestos Inspector**
The Permittee shall comply with 326 IAC 14-10-1(a) that requires the owner or operator, prior to a renovation/demolition, to use an Indiana Licensed Asbestos Inspector to thoroughly inspect the affected portion of the facility for the presence of asbestos. The requirement to use an Indiana Licensed Asbestos inspector is not federally enforceable.

Testing Requirements [326 IAC 2-6.1-5(a)(2)]

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

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

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

no later than thirty-five (35) days prior to the intended test date.
- (b) The Permittee shall notify IDEM, OAQ of the actual test date at least fourteen (14) days prior to the actual test date.
- (c) Pursuant to 326 IAC 3-6-4(b), all test reports must be received by IDEM, OAQ not later than forty-five (45) days after the completion of the testing. An extension may be granted by IDEM, OAQ if the Permittee submits to IDEM, OAQ a reasonable written explanation not later than five (5) days prior to the end of the initial forty-five (45) day period.

Compliance Requirements [326 IAC 2-1.1-11]

C.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 2-6.1-5(a)(2)]

C.10 Compliance Monitoring [326 IAC 2-1.1-11]

Compliance with applicable requirements shall be documented as required by this permit. The Permittee shall be responsible for installing any necessary equipment and initiating any required monitoring related to that equipment. All monitoring and record keeping requirements not already legally required shall be implemented when operation begins.

C.11 Instrument Specifications [326 IAC 2-1.1-11]

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

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

Corrective Actions and Response Steps

C.12 Response to Excursions or Exceedances

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

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

C.13 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall submit a description of its response actions to IDEM, OAQ, no later than seventy-five (75) days after the date of the test.
- (b) A retest to demonstrate compliance shall be performed no later than one hundred eighty (180) days after the date of the test. Should the Permittee demonstrate to IDEM, OAQ that retesting in one hundred eighty (180) days is not practicable, IDEM, OAQ may extend the retesting deadline

- (c) IDEM, OAQ reserves the authority to take any actions allowed under law in response to noncompliant stack tests.

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

C.14 Malfunctions Report [326 IAC 1-6-2]

Pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):

- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Quality (OAQ) or appointed representative upon request.
- (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
- (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
- (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

C.15 General Record Keeping Requirements [326 IAC 2-6.1-5]

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

C.16 General Reporting Requirements [326 IAC 2-1.1-11] [326 IAC 2-6.1-2] [IC 13-14-1-13]

- (a) Reports required by conditions in Section D of this permit shall be submitted to:

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

- (b) Unless otherwise specified in this permit, any notice, report, or other submission required by this permit shall be considered timely if the date postmarked on the envelope or

certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAQ on or before the date it is due.

- (c) 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.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) surface coating adhesive line, consisting of twenty-four (24) glue stations (twelve (12) booths) and twenty-four (24) spray guns, identified as EU-1, with a maximum capacity of 77.4 fabricated foam parts per hour, using dry filters as control, constructed in 2002, and exhausting to Stack 1 A-K.
- (b) One (1) surface coating adhesive line, identified as EU-2, consisting of three (3) glue stations and six (6) spray guns, with a maximum capacity of 30 fabricated foam parts per hour, using dry filters for overspray control, approved for construction in 2013, and exhausting to Stack L.
- (c) One (1) surface coating adhesive line, identified as EU-3, consisting of four (4) glue stations and eight (8) spray guns, with a maximum capacity of 50 fabricated foam parts per hour, using dry filters for overspray control, approved for construction in 2013, and exhausting to Stack M.
- (d) Twelve (12) natural gas-fired radiant tube heaters, identified as R1 through R12, each rated at 0.2 million British thermal units per hour, and constructed in 2002.

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

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

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

The total amount of VOCs delivered to the applicators at the one (1) surface coating adhesive line, identified as EU-1, shall be limited to less than twenty-five (25) tons per twelve (12) consecutive month period, with compliance determined at the end of each month.

Compliance with this limit will render the requirements of 326 IAC 8-1-6 (New facilities; general reduction requirements) not applicable.

D.1.2 Particulate Matter [326 IAC 6-3-2(d)]

- (a) Particulate from the surface coating adhesive lines, identified as EU-1, EU-2, and EU-3 shall be controlled by dry particulate filters, and the Permittee shall operate these control devices in accordance with manufacturer's specifications.
- (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:
 - (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
 - (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, is required for these facilities and their control devices. Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.

Compliance Determination Requirements

D.1.4 Volatile Organic Compounds (VOCs)

Compliance with the VOC content limitation contained in Condition D.1.1 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer.

Record Keeping and Reporting Requirements [326 IAC 2-6.1-5(a)(2)]

D.1.5 Record Keeping Requirements

- (a) To document the compliance status 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 limit established in Condition D.1.1.
- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, and material safety data sheets (MSDS) necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
 - (2) The cleanup solvent usage for each month;
 - (3) The total VOC usage for each month; and
 - (4) The weight of VOCs emitted for each compliance period.
- (b) To document the compliance status with Condition D.1.2, if overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations.
- (c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition, of this permit.

D.1.6 Reporting Requirements

A quarterly summary of the information necessary to document the compliance status with Condition D.1.1 shall be submitted, using the reporting forms located at the end of this permit, or their equivalent, not later than thirty (30) days after the end of the quarter being reported. Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.

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

MSOP Quarterly Report

Source Name: Vahala Foam, Inc.
Source Address: 930 Herman Street, Elkhart, Indiana 46515
MSOP Permit No.: M 039-25349-00574
Facility: one (1) surface coating line, identified as EU-1
Pollutant: total amount of VOCs delivered to the applicators
Limit: less than twenty-five (25) tons per twelve (12) consecutive month period

Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	Amount of VOCs Delivered to Applicators This Month	Amount of VOCs Delivered to Applicators Previous 11 Months	Amount of VOCs Delivered to Applicators 12 Month Total
Month 1			
Month 2			
Month 3			

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

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

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

**MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-6.1-5(a)(5).

Company Name:	Vahala Foam, Inc.
Address:	930 Herman Street
City:	Elkhart, Indiana 46515
Phone #:	(574) 293-1287
MSOP #:	M 039-25349-00574

I hereby certify that Vahala Foam, Inc. is:

still in operation.

no longer in operation.

I hereby certify that Vahala Foam, Inc. is:

in compliance with the requirements of MSOP M 039-25349-00574.

not in compliance with the requirements of MSOP M 039-25349-00574.

Authorized Individual (typed):
Title:
Signature:
Date:

If there are any conditions or requirements for which the source is not in compliance, provide a narrative description of how the source did or will achieve compliance and the date compliance was, or will be achieved.

Noncompliance:

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT OFFICE OF AIR QUALITY COMPLIANCE AND ENFORCEMENT BRANCH FAX NUMBER: (317) 233-6865

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE IT HAS POTENTIAL TO EMIT 25 TONS/YEAR PARTICULATE MATTER ?_____, 25 TONS/YEAR SULFUR DIOXIDE ?_____, 25 TONS/YEAR NITROGEN OXIDES?_____, 25 TONS/YEAR VOC ?_____, 25 TONS/YEAR HYDROGEN SULFIDE ?_____, 25 TONS/YEAR TOTAL REDUCED SULFUR ?_____, 25 TONS/YEAR REDUCED SULFUR COMPOUNDS ?_____, 25 TONS/YEAR FLUORIDES ?_____, 100 TONS/YEAR CARBON MONOXIDE ?_____, 10 TONS/YEAR ANY SINGLE HAZARDOUS AIR POLLUTANT ?_____, 25 TONS/YEAR ANY COMBINATION HAZARDOUS AIR POLLUTANT ?_____, 1 TON/YEAR LEAD OR LEAD COMPOUNDS MEASURED AS ELEMENTAL LEAD ?_____, OR IS A SOURCE LISTED UNDER 326 IAC 2-5.1-3(2) ?_____. EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION _____.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC _____ OR, PERMIT CONDITION # _____ AND/OR PERMIT LIMIT OF _____

THIS INCIDENT MEETS THE DEFINITION OF "MALFUNCTION" AS LISTED ON REVERSE SIDE ? Y N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ? Y N

COMPANY: _____ PHONE NO. () _____
LOCATION: (CITY AND COUNTY) _____
PERMIT NO. _____ AFS PLANT ID: _____ AFS POINT ID: _____ INSP: _____
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: _____

DATE/TIME MALFUNCTION STARTED: ____/____/20____ _____ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION: _____

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE ____/____/20____ _____ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO2, VOC, OTHER: _____

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: _____

MEASURES TAKEN TO MINIMIZE EMISSIONS: _____

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL* SERVICES: _____

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: _____

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: _____

INTERIM CONTROL MEASURES: (IF APPLICABLE) _____

MALFUNCTION REPORTED BY: _____ TITLE: _____
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: _____ DATE: _____ TIME: _____

*SEE PAGE 2

Please note - This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6 and to qualify for the exemption under 326 IAC 1-6-4.

326 IAC 1-6-1 Applicability of rule

Sec. 1. This rule applies to the owner or operator of any facility required to obtain a permit under 326 IAC 2-5.1 or 326 IAC 2-6.1.

326 IAC 1-2-39 "Malfunction" definition

Sec. 39. Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner.

***Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

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

**MINOR SOURCE OPERATING PERMIT (MSOP)
CERTIFICATION**

Source Name: Vahala Foam, Inc.
Source Address: 930 Herman Street, Elkhart, Indiana 46515
MSOP No.: M039-25349-00574

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

Please check what document is being certified:

Annual Compliance Notification

- Test Result (specify) _____
- Report (specify) _____
- Notification (specify) _____
- Affidavit (specify) _____
- Other (specify) _____

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

Signature:

Printed Name:

Title/Position:

Date:

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

Technical Support Document (TSD) for a Significant Permit Revision to a
Minor Source Operating Permit (MSOP)

Source Description and Location

Source Name: Vahala Foam, Inc.
Source Location: 930 Herman Street, Elkhart, IN 46515
County: Elkhart
SIC Code: 3086 (Plastics Foam Products)
Operation Permit Renewal No.: M039-25349-00574
Operation Permit Issuance Date: March 11, 2008
Significant Permit Revision No.: M 039-32605-00574
Permit Reviewer: Renee Traivaranon

On December 7, 2012, the Office of Air Quality (OAQ) received an application from Vahala Foam, Inc. related to a modification to an existing stationary foam part assembly source.

Existing Approvals

The source was issued MSOP Renewal No. M039-25349-00574 on March 11, 2008. There is no other approval issued for this source since then.

County Attainment Status

The source is located in Elkhart County.

Pollutant	Designation
SO ₂	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O ₃	Attainment effective July 19, 2007, for the 8-hour ozone standard. ¹
PM ₁₀	Unclassifiable effective November 15, 1990.
NO ₂	Cannot be classified or better than national standards.
Pb	Not designated.

¹Attainment effective October 18, 2000, for the 1-hour ozone standard for the South Bend-Elkhart area, including Elkhart County, and is a maintenance area for the 1-hour National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X*. The 1-hour standard was revoked effective June 15, 2005.

Unclassifiable or attainment effective April 5, 2005, for PM_{2.5}.

- (a) **Ozone Standards**
 Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to ozone. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM_{2.5}**
 Elkhart County has been classified as attainment for PM_{2.5}. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM_{2.5}

emissions. These rules became effective on July 15, 2008. On May 4, 2011 the air pollution control board issued an emergency rule establishing the direct PM_{2.5} significant level at ten (10) tons per year. This rule became effective, June 28, 2011. Therefore, direct PM_{2.5} and SO₂ emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability – Entire Source section.

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

Fugitive Emissions

The fugitive emissions of criteria pollutants, hazardous air pollutants, and greenhouse gases are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.

Status of the Existing Source

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

The following PTE table is from the TSD or Appendix A of 039-25349-00574, issued on March 11, 2008.

Process/ Emission Unit	Potential To Emit of the Entire Source Prior to Revision (tons/year)						
	PM	PM ₁₀	SO ₂	VOCs	CO	NO _x	HAPs
Surface coating adhesive line (EU-1)	0.40	---	---	24.0*	---	---	---
Tube Heaters (R1 through R12)	negl.	negl.	negl.	negl.	0.87	1.03	negl.
Total Emissions	0.40	negl.	negl.	24.0	0.87	1.03	negl.

*Limited to less than 25 tons per twelve (12) consecutive month period so that the requirements of 326 IAC 8-1-6 do not apply.

Description of Proposed Revision

The Office of Air Quality (OAQ) has reviewed an application, submitted by Vahala Foam, Inc. on December 7, 2012, requests to construct and operate two surface adhesive lines and to modify the existing surface coating adhesive line to the existing manufacturing operations.

The following is a list of the new and modified emission units and pollution control devices:

- (a) One (1) surface coating adhesive line, consisting of twenty-four (24) glue stations (twelve (12) booths) and twenty-four (24) spray guns, identified as EU-1, with a maximum capacity of 77.4 fabricated foam parts per hour, using dry filters as control, constructed in 2002, and exhausting to Stack 1 A-K.
- (b) **One (1) surface coating adhesive line, identified as EU-2, consisting of three (3) glue stations and six (6) spray guns, with a maximum capacity of 30 fabricated foam parts per hour, using dry filters for overspray control, approved for construction in 2013, and exhausting to Stack L.**
- (c) **One (1) surface coating adhesive line, identified as EU-3, consisting of four (4) glue stations and eight (8) spray guns, with a maximum capacity of 50 fabricated foam parts per**

hour, using dry filters for overspray control, approved for construction in 2013, and exhausting to Stack M.

Enforcement Issues

There are no pending enforcement actions related to this revision.

Emission Calculations

See Appendix A of this TSD for detailed emission calculations.

Permit Level Determination – MSOP Revision

The following table is used to determine the appropriate permit level under 326 IAC 2-6.1-6. This table reflects the PTE before controls of the proposed revision. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Process/ Emission Unit	PTE of the Revision (tons/year)									
	PM	PM10	PM2.5	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e	Total HAPs	Worst Single HAP
Surface coating adhesive line (EU-2)	5.51	5.51	5.51	0.00	0.00	24.53	0.00	0.00	0.00	0.00
Surface coating adhesive line (EU-3)	5.11	5.11	5.11	0.00	0.00	23.75	0.00	0.00	4.23	5.64
Total PTE of Proposed Revision	10.61	10.61	10.61	0.00	0.00	48.29	0.00	0.00	4.23	5.64

Pursuant to 326 IAC 2-6.1-6(i)(1)(E), this MSOP is revised through Significant Permit Revision because the revision is not an Administrative Amendment or Minor Permit Revision and the proposed revision involves the construction of new emission units - with a potential to emit VOC greater than twenty-five (25) tons per year.

PTE of the Entire Source After Issuance of the MSOP Revision

The table below summarizes the potential to emit of the entire source, with updated emissions shown as **bold** values and previous emissions shown as ~~strikethrough~~ values.

Process/ Emission Unit	Potential To Emit of the Entire Source to accommodate the Revision (tons/year)									
	PM	PM10 ⁽¹⁾	PM2.5	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e ⁽²⁾	Total HAPs	Worst Single HAP
Surface coating adhesive line (EU-1)	0.40 7.95⁽³⁾	--- 7.95	7.95	---	---	24.0*	---	0.00	0.00	---
Surface coating adhesive line (EU-2)	5.51	5.51	5.51	0.00	0.00	24.53	0.00	0.00	0.00	0.00
Surface coating adhesive line (EU-3)	5.11	5.11	5.11	0.00	0.00	23.75	0.00	0.00	5.64	4.23 (Hexane)
Tube Heaters (R1 through R12)	negl. 0.02	negl. 0.08	0.08	negl.	1.03 1.05	negl.	0.87 0.88	1269.12	negl.	negl.
Vehicle Traffic	0.11	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	0.40 18.70	negl. 18.67	18.67	negl. 0.01	1.03 1.05	24.0 72.34⁽⁴⁾	0.87 0.88	1269.12	5.66	negl. 4.25 (Hexane)
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000	NA	NA
negl. = negligible ⁽¹⁾ Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant". ⁽²⁾ The 100,000 CO ₂ e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD. ⁽³⁾ PM, PM10 and PM2.5 limits are not required for this unit. *Limited to less than 25 tons per twelve (12) consecutive month period so that the requirements of 326 IAC 8-1-6 do not apply. ⁽⁴⁾ The unlimited VOC PTE of the entire source is 84.87 tons/year, which is less than 100 tons/year.										

The table below summarizes the potential to emit of the entire source after issuance of this revision, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this MSOP permit revision, and only to the extent that the effect of the control equipment is made practically enforceable in the permit. (Note: the table below was generated from the above table, with bold text un-bolded and strikethrough text deleted)

Process/ Emission Unit	Potential To Emit of the Entire Source After Issuance of Revision (tons/year)									
	PM	PM10 ⁽¹⁾	PM2.5	SO ₂	NOx	VOC	CO	GHGs as CO ₂ e ⁽²⁾	Total HAPs	Worst Single HAP
Surface coating adhesive line (EU-1)	7.95 ⁽³⁾	7.95	7.95	---	---	24.0*	---	0.00	0.00	---
Surface coating adhesive line (EU-2)	5.51	5.51	5.51	0.00	0.00	24.53	0.00	0.00	0.00	0.00
Surface coating adhesive line (EU-3)	5.11	5.11	5.11	0.00	0.00	23.75	0.00	0.00	5.64	4.23 (Hexane)
Tube Heaters (R1 through R12)	0.02	0.08	0.08	negl.	1.05	negl.	0.88	1269.12	negl.	negl.
Vehicle Traffic	0.11	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	18.70	18.67	18.67	0.01	1.05	72.34⁽⁴⁾	0.88	1269.12	5.66	4.25 (Hexane)
Title V Major Source Thresholds	NA	100	100	100	100	100	100	100,000	25	10
PSD Major Source Thresholds	250	250	250	250	250	250	250	100,000	NA	NA

negl. = negligible
⁽¹⁾Under the Part 70 Permit program (40 CFR 70), particulate matter with an aerodynamic diameter less than or equal to a nominal 10 micrometers (PM10), not particulate matter (PM), is considered as a "regulated air pollutant".
⁽²⁾The 100,000 CO₂e threshold represents the Title V and PSD subject to regulation thresholds for GHGs in order to determine whether a source's emissions are a regulated NSR pollutant under Title V and PSD.
⁽³⁾PM, PM10 and PM2.5 limits are not required for this unit.
 *Limited to less than 25 tons per twelve (12) consecutive month period so that the requirements of 326 IAC 8-1-6 do not apply.
⁽⁴⁾ The unlimited VOC PTE of the entire source is 84.87 tons/year, which is less than 100 tons/year.

MSOP Status

- (a) This revision to an existing minor stationary source will not change the minor status, because the uncontrolled/unlimited potential to emit criteria pollutants from the entire source will still be limited to less than the Title V major source threshold levels. Therefore, the source will still be subject to the provisions of 326 IAC 2-6.1 (MSOP).
- (b) This revision will not change the minor status of the source, because the uncontrolled/unlimited potential to emit of any single HAP will still be less than ten (10) tons per year and the PTE of a combination of HAPs will still be less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.
- (c) This revision will not change the minor status of the source, because the uncontrolled/unlimited potential to emit greenhouse gases (GHGs) will still be less than the Title V subject to regulation threshold of one hundred thousand (100,000) tons of CO₂ equivalent emissions (CO₂e) per year. Therefore, the source is not subject to the provisions of 326 IAC 2-7.

Federal Rule Applicability Determination

New Source Performance Standards (NSPS)

- (a) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included for this proposed revision.

National Emission Standards for Hazardous Air Pollutants (NESHAP)

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

Compliance Assurance Monitoring (CAM)

- (c) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the permit, because the unlimited potential to emit of the source is less than the Title V major source thresholds and the source is not required to obtain a Part 70 or Part 71 permit.

State Rule Applicability Determination

The following state rules are applicable to the proposed revision:

- (a) 326 IAC 2-6.1 (Minor Source Operating Permits (MSOP))
MSOP applicability is discussed under the Permit Level Determination – MSOP section above.
- (b) 326 IAC 2-2 (Prevention of Significant Deterioration(PSD))
This modification to an existing PSD minor stationary source will not change the PSD minor status, because the potential to emit of all attainment regulated pollutants from the entire source will continue to be less than the PSD major source threshold levels. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply. See PTE of the Entire Source After Issuance of the MSOP Revision Section above.
- (c) 326 IAC 2-3 (Emission Offset)
The Emission Offset requirements do not apply, since this source is located in attainment for ozone.
- (d) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))
The revision is not subject to the requirements of 326 IAC 2-4.1, since the unlimited potential to emit of HAPs from the new units is 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.
- (e) 326 IAC 2-6 (Emission Reporting)
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (f) 326 IAC 5-1 (Opacity Limitations)
Pursuant to 326 IAC 5-1-2 (Opacity Limitations), except as provided in 326 IAC 5-1-3 (Temporary Alternative Opacity Limitations), opacity shall meet the following, unless otherwise stated in this permit:
- (1) Opacity shall not exceed an average of forty percent (40%) in any one (1) six (6) minute averaging period as determined in 326 IAC 5-1-4.

- (2) 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.
- (g) 326 IAC 6-4 (Fugitive Dust Emissions Limitations)
Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source 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.
- (h) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)
The source is not subject to the requirements of 326 IAC 6-5, because the potential fugitive particulate emissions from this source is less than 25 tons per year.
- (i) 326 IAC 12 (New Source Performance Standards)
See Federal Rule Applicability Section of this TSD.
- (j) 326 IAC 20 (Hazardous Air Pollutants)
See Federal Rule Applicability Section of this TSD.

Surface Coating Adhesive Operations (EU-2 and EU-3)

- (a) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)
Particulate from the each surface coating adhesive line, identified as EU-2 and EU-3, shall be controlled by dry particulate filters and the Permittee shall operate this control device in accordance with manufacturer's specifications.

If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do the following no later than four (4) hours after such observation:

- (1) repair the control device so that no overspray is visibly detectable at the exhaust and no overspray accumulates on the ground; or
- (2) operate equipment so that no overspray is visibly detectable at the exhaust and no overspray accumulates on the ground.

If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, including any repairs of the control device or changes in operations so that no overspray is visibly detectable at the exhaust and no overspray accumulates on the ground. These records must be maintained for five (5) years.

- (b) 326 IAC 8-1-6 (New Facilities; General Reduction Requirements)
The total amount of VOCs delivered to the applicators at each surface coating adhesive line, identified as EU-2 and EU-3, is less than twenty-five (25) tons per twelve (12) consecutive month period. Therefore, the requirements of 326 IAC 8-1-6 (New facilities; general reduction requirements) do not apply.
- (c) There are no other 326 IAC 8 Rules that are applicable to the surface coating adhesive lines, EU-2 and EU-3.

Compliance Determination, Monitoring and Testing Requirements
--

- (a) There are no changes to compliance determination or compliance monitoring for this revision.
- (b) The testing is not required for this proposed revision.

Proposed Changes

- (a) The following changes listed below are due to the proposed revision.
- (1) The description of Surface coating adhesive line, EU-1 has been revised and EU-2 and EU-3 have been added to the Section A.2 Emission Units and Pollution Control Equipment Summary, Section D.1 Emissions Unit Description.
 - (2) Surface coating adhesive line EU-2 and EU-3 has been added to Condition D.1.2 for Particulate Control.
- (b) Upon further review, IDEM, OAQ has decided to make the following changes to the permit.
- (1) Section A.1 of the permit and the reporting forms have been revised to remove all references to the source mailing address. IDEM, OAQ will continue to maintain records of the mailing address.
 - (2) SIC Code description has been added for clarification.
 - (3) For clarity, IDEM has changed references to the general conditions: "in accordance with Section B", "in accordance with Section C", or other similar language, to "Section C ... contains the Permittee's obligations with regard to the records required by this condition."
 - (4) IDEM has decided that the phrases "no later than" and "not later than" are clearer than "within" in relation to the end of a timeline. Therefore all timeline have been switched to "no later than" or "not later than".
 - (5) Several of IDEM's branches and sections have been renamed. Therefore, IDEM has updated the addresses listed in the permit. References to "Permit Administration and Development Section" and the "Permits Branch" have been changed to "Permit Administration and Support Section". References to "Asbestos Section", "Compliance Data Section", "Air Compliance Section", and "Compliance Branch" have been changed to "Compliance and Enforcement Branch".
 - (6) IDEM has determined that rather than having a Certification condition and various references throughout the permit as to whether a particular report, notice, or correspondence needs to include a certification, the specific conditions that require an affirmation of truth and completeness shall state so. The certification condition has been removed. All statements to whether a certification, pursuant to the former Section B - Certification, is needed or not have been removed. Section B - Credible Evidence and Section C - Asbestos Abatement Projects still require certification as the underlying rules also require certifications. Also the terminology of in the Section C - Asbestos Abatement Projects has been changed from "Accredited" to "Licensed" in order to match the rule.
 - (7) Section B -Duty to Provide Information has been revised.
 - (8) IDEM has added a new paragraph (b) to handle a future situation where the Permittee adds units that need preventive maintenance plans developed. IDEM has decided to clarify other aspects of Section B - Preventive Maintenance Plan.
 - (9) IDEM has revised the language of the Section B - Permit Renewal and Section B - Termination of Right to Operate to change the MSOP renewal application due date to one hundred twenty (120) prior to expiration of the current permit in order to match the rule.
 - (10) IDEM has revised Section B - Permit Renewal paragraph (c) to state which rule establishes the authority to set a deadline for the Permittee to submit additional information.
 - (11) IDEM has added 326 IAC 5-1-1 to the exception clause of Section C - Opacity, since 326 IAC 5-1-1 does list exceptions.

- (12) IDEM has revised Section C - Incineration to more closely reflect the two underlying rules.
- (13) IDEM has removed the first paragraph of Section C - Performance Testing as due to the fact that specific testing conditions elsewhere in the permit will specify the timeline and procedures.
- (14) IDEM has removed Section C - Monitoring Methods. The conditions that require the monitoring or testing, if required, state what methods shall be used.
- (15) IDEM has added Section C - Response to Excursions or Exceedances to the permit.
- (16) IDEM has revised Section C - Actions Related to Noncompliance Demonstrated by a Stack Test. The requirements to take response steps and minimize excess emissions have been removed because Section C - Response to Excursions or Exceedances already requires response steps related to exceedances and excess emissions minimization. The start of the timelines was switched from "the receipt of the test results" to "the date of the test." There was confusion if the "receipt" was by IDEM, the Permittee, or someone else. Since the start of the timelines has been moved up, the length of the timelines was increased. The new timelines require action within a comparable timeline; and the new timelines still ensure that the Permittee will return to compliance within a reasonable timeframe.
- (17) The voice of paragraph (b) of Section C - General Record Keeping Requirements has been change to clearly indicate that it is the Permittee that must follow the requirements of the paragraph.
- (18) Paragraph (c) of Section C - General Reporting Requirements has been removed because IDEM already states the timeline and certification needs of each report in the condition requiring the report.
- (19) The word "status" has been added to Section D - Record Keeping and Reporting Requirements. The Permittee has the obligation to document the compliance status. The wording has been revised to properly reflect this.

The permit has been revised as follows with deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

A.1 General Information [326 IAC 2-5.1-3(c)]~~[326 IAC 2-6.1-4(a)]~~

The Permittee owns and operates a stationary foam part assembly source.

Source Address: 930 Herman Street, Elkhart, Indiana 46515

~~Mailing Address: 930 Herman Street, P.O. Box 2602, Elkhart, Indiana 46514~~

....

SIC Code: 3086 **(Plastics Foam Products)**

.....

Source Status: Minor Source Operating Permit Program
Minor Source, under PSD **and Emission Offset** Rules

.....

A.2 Emission Units and Pollution Control Equipment Summary

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

- (a) One (1) surface coating adhesive line, consisting of twenty-four (24) glue stations (twelve (12) booths) and twenty-four (24) spray guns, identified as EU-1, with a maximum capacity of 77.4 fabricated foam parts per hour, using dry filters as control, constructed in 2002, and exhausting to Stack 1 A-K.
- (b) **One (1) surface coating adhesive line, identified as EU-2, consisting of three (3) glue stations and six (6) spray guns, with a maximum capacity of 30 fabricated foam parts per hour, using dry filters for overspray control, approved for**

construction in 2013, and exhausting to Stack L.

- (c) **One (1) surface coating adhesive line, identified as EU-3, consisting of four (4) glue stations and eight (8) spray guns, with a maximum capacity of 50 fabricated foam parts per hour, using dry filters for overspray control, approved for construction in 2013, and exhausting to Stack M.**
- (bd) Twelve (12) natural gas-fired radiant tube heaters, identified as R1 through R12, each rated at 0.2 million British thermal units per hour, and constructed in 2002.

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:	
(a)	One (1) surface coating adhesive line, consisting of twenty-four (24) glue stations (twelve (12) booths) and twenty-four (24) spray guns, identified as EU-1, with a maximum capacity of 77.4 fabricated foam parts per hour, using dry filters as control, constructed in 2002, and exhausting to Stack 1 A-K.
(b)	One (1) surface coating adhesive line, identified as EU-2, consisting of three (3) glue stations and six (6) spray guns, with a maximum capacity of 30 fabricated foam parts per hour, using dry filters for overspray control, approved for construction in 2013, and exhausting to Stack L.
(c)	One (1) surface coating adhesive line, identified as EU-3, consisting of four (4) glue stations and eight (8) spray guns, with a maximum capacity of 50 fabricated foam parts per hour, using dry filters for overspray control, approved for construction in 2013, and exhausting to Stack M.
(bd)	Twelve (12) natural gas-fired radiant tube heaters, identified as R1 through R12, each rated at 0.2 million British thermal units per hour, and constructed in 2002.
(The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)	

Emission Limitations and Standards [326 IAC 2-6.1-5(a)(1)]

D.1.2 Particulate Matter [326 IAC 6-3-2(d)]

- (a) Particulate from the ~~one (1)~~ surface coating adhesive lines, identified as EU-1, **EU-2, and EU-3** shall be controlled by ~~a~~ dry particulate filters, and the Permittee shall operate ~~thises~~ control devices in accordance with manufacturer's specifications.

....

D.1.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan, ~~in accordance with Section C - Preventive Maintenance Plan, of this permit, is required for the one (1) surface coating adhesive line and any control devices.~~ is required for these facilities and their control devices. **Section B - Preventive Maintenance Plan contains the Permittee's obligation with regard to the preventive maintenance plan required by this condition.**

D.1.5 Record Keeping Requirements

- (a) To document **the** compliance **status** with Condition D.1.1, the Permittee shall maintain records in accordance with (1) through (4) below.

- (b) To document **the compliance status** with Condition D.1.2, if overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations.
- (c) ~~All records shall be maintained in accordance with~~ Section C - General Record Keeping Requirements **contains the Permittee's obligations with regard to the records required by this condition**, of this permit.

D.1.6 Reporting Requirements

A quarterly summary of the information necessary to document **the compliance status** with Condition D.1.1 shall be submitted ~~to the address listed in Section C - General Reporting Requirements, of this permit,~~ using the reporting forms located at the end of this permit, or their equivalent, **within not later than thirty (30) days** after the end of the quarter being reported. **Section C - General Reporting contains the Permittee's obligation with regard to the reporting required by this condition.** ~~The report submitted by the Permittee does require the a certification by an "authorized individual" as defined by 326 IAC 2-1.1-1.~~

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
 OFFICE OF AIR QUALITY
 COMPLIANCE DATA SECTION
Compliance and Enforcement Branch

MSOP Quarterly Report

Source Name: Vahala Foam, Inc.
 Source Address: 930 Herman Street, Elkhart, Indiana 46515
 Mailing Address: ~~930 Herman Street, P.O. Box 2602, Elkhart, Indiana 46514~~
 MSOP Permit No.: M039-25349-00574
 Facility: one (1) surface coating line, identified as EU-1
 Parameter: total amount of VOCs delivered to the applicators
 Limit: less than twenty-five (25) tons per twelve (12) consecutive month period

Year: _____

Month	Column 1	Column 2	Column 1 + Column 2
	Amount of VOCs Delivered to Applicators This Month	Amount of VOCs Delivered to Applicators Previous 11 Months	Amount of VOCs Delivered to Applicators 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 **AND ENFORCEMENT** BRANCH

MINOR SOURCE OPERATING PERMIT
ANNUAL NOTIFICATION

MALFUNCTION REPORT

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY
COMPLIANCE AND ENFORCEMENT BRANCH
FAX NUMBER - 317 233-6865

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR QUALITY

MINOR SOURCE OPERATING PERMIT (MSOP)
CERTIFICATION

Source Name: Vahala Foam, Inc.
Source Address: 930 Herman Street, Elkhart, Indiana 46515
~~Mailing Address: 930 Herman Street, P.O. Box 2602, Elkhart, Indiana 46514~~
MSOP No.: M039-25349-00574

...

Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application submitted by the applicant. An application for the purposes of this review was received on December 7, 2012.

The construction and operation of this proposed revision shall be subject to the conditions of the attached MSOP Significant Permit Revision No. M 039-32605-00574. The staff recommends to the Commissioner that this MSOP Significant Permit Revision be approved.

IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Ms. Renee Traivaranon at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) (234-5615) or toll free at 1-800-451-6027 extension 4-5615.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM's Guide for Citizen Participation and Permit Guide on the Internet at: www.in.gov/idem

**Appendix A: Emissions Calculations
Summary Emissions**

Company Name: Vahala Foam, Inc.
Address City IN Zip: 930 Herman Street, Elkhart, Indiana 46515
Permit Number: M 039-32605-00574
Reviewer: Renee Traivaranon
Date: January 7, 2013

POTENTIAL TO EMIT IN TONS PER YEAR

Emission Units	PM	PM10	PM2.5	SO₂	NO_x	VOC	CO	Co2e	* Highest Single HAP	Combined HAP
Adhesive Application (EU-1)**	7.95	7.95	7.95	0.00	0.00	36.52	0.00	0.00	0.00	0.00
Adhesive Application (EU-2)	5.51	5.51	5.51	0.00	0.00	24.53	0.00	0.00	0.00	0.00
Adhesive Application (EU-3)	5.11	5.11	5.11	0.00	0.00	23.75	0.00	0.00	4.23	5.64
Natural Gas Combustion (R1-R12)	0.02	0.08	0.08	0.01	1.05	0.06	0.88	1269.12	0.02	1.89E-02
Vehicular Traffic (VT)	0.11	0.02	0.02	0.00	0.00	0.00	0.00	0.00	0.00	0.00
TOTALS	18.70	18.67	18.67	0.01	1.05	84.87	0.88	1269.12	4.25	5.66

*Hexane as Determined Below

** VOC of EU-1 is limited so that the requirements of 326 IAC 8-1-6- do not apply

HAZARDOUS AIR POLLUTANTS

Emission Units	PM₁₀	Isocyanate Emissions (ton/yr)	Manganese Emissions (ton/yr)	Hexane Emissions (ton/yr)	Toluene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Total HAP Emissions (ton/yr)
Adhesive Application (EU-1)**	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adhesive Application (EU-2)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Adhesive Application (EU-3)	0.00	0.00	0.00	4.23	1.41	0.00	5.64
Natural Gas Combustion (R1-R12)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Vehicular Traffic (VT)	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total Emissions (TPY) by HAP	0.00	0.00	0.00	4.23	1.41	0.00	5.64

**Emissions Calculations
VOC/HAP and PM/PM10 Emissions
Adhesive Coating Process (EU-1)**

**Company Name: Vahala Foam, Inc.
Address City IN Zip: 930 Herman Street, Elkhart, Indiana 46515
Permit Number: M 039-32605-00574
Reviewer: Renee Traivaranon
Date: January 7, 2013**

Material	Density (lb/gal)	Weight % Volatile (H ₂ O & Organics)	Weight % Water & Exempt	Weight % Organics	Volume % Water & Exempt	Weight % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Material Usage (Lb/Hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	PTE VOC (lbs/hour)	PTE VOC (lbs/day)	PTE VOC (tons/year)	PTE PM/PM10 (tons/year)	**Transfer Efficiency	Pounds VOC/gal Solids	PTE PM/PM10 (lbs/hour)			
Adhesive Application - EU-1																					
Premium Adhesive 7870	6.81	71.00%	40.00%	31.00%	38.69%	29.00%	0.04710	77.40	24.83	3.44	2.11	7.70	184.71	33.71	7.88	75%	7.28	1.80			
Aerosol Silicone Spray SILHF	5.01	93.50%	25.00%	68.50%	18.95%	6.50%	0.00242	77.40	0.94	4.23	3.43	0.64	15.43	2.82	0.07	75%	52.80	0.02			
Cleaning Solvent												Totals for Step 1			8.34	200.13	36.52	7.95			
Cleaning Solvent 9800	7.01	100.00%	100.00%	0.00%	84.26%	1.00%	0.00410	77.40	2.22	0.00	0.00	0.00	0.00	0.00	0.00	100%	0.00	0.00			
State Potential to Emit - Worst Case Coating Stage and Cleaning Materials (Coatings are Mutually Exclusive)												8.34	200.13	36.52	7.950						

Note: The above adhesive application information is from M039-039-25349-00574-0057, issued on March 11, 2008, but cleaning solvent has been revised since this source uses 100% exempt solution for cleaning.

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
 Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
 Pounds VOC per Gallon of Solids = [Density (lb/gal) * Weight % Organics] / (Volume % Solids)
 PTE VOC (pounds/hour) = Pounds of VOC/Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
 PTE VOC (pounds/day) = Pounds of VOC/Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
 PTE VOC (tons/year) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
 PTE PM/PM10 (tons/year) = Max. (units/hour) * Gal of Mat (gal/unit) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer efficiency) *8760 hours/year *1ton/2000 lbs
 PTE PM/PM10 (lbs/hour) = Max. (units/hour) * Gal of Mat (gal/unit) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer efficiency)
 Add Worst Case Coating to Cleanup Solvents = Adhesive for VOC and for Particulate Matter

HAZARDOUS AIR POLLUTANTS

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Ethyl Benzene	Weight % Isocyanate Compounds	Weight % Methanol	Weight % MIBK	Weight % Toluene	Weight % Xylene	Ethyl Benzene Emissions (ton/yr)	Compound s Emissions (ton/yr)	Methanol Emissions (ton/yr)	MIBK Emissions (ton/yr)	Toluene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Total HAP Emissions (ton/yr)	
Adhesive Application - EU-1																	
Premium Adhesive 7870	6.81	0.04710	77.400	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Aerosol Silicone Spray SILHF	5.01	0.00242	77.400	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Cleaning Solvent											Totals for Step 1						
Cleaning Solvent 9800	7.01	0.00410	77.400	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
State Potential to Emit											0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worst Case Coating for HAP - Add Cleanup Solvent to Worst Case Coating for HAP											0.00	0.000	0.00	0.00	0.00	0.00	0.00

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

**Emissions Calculations
VOC/HAP and PM/PM10 Emissions
Adhesive Coating Process (EU-2)**

**Company Name: Vahala Foam, Inc.
Address City IN Zip: 930 Herman Street, Elkhart, Indiana 46515
Permit Number: M 039-32605-00574
Reviewer: Renee Traivaranon
Date: January 7, 2013**

Material	Density (lb/gal)	Weight % Volatile (H ₂ O & Organics)	Weight % Water & Exempt	Weight % Organics	Volume % Water & Exempt	Weight % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Material Usage (Lb/Hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	PTE VOC (lbs/hour)	PTE VOC (lbs/day)	PTE VOC (tons/year)	PTE PM/PM10 (tons/year)	**Transfer Efficiency	Pounds VOC/gal Solids	PTE PM/PM10 (lbs/hour)
Adhesive Application - EU-2																		
Premium Adhesive 7870	6.81	71.00%	40.00%	31.00%	38.69%	29.00%	0.08450	30.00	17.26	3.44	2.11	5.35	128.44	23.44	5.48	75%	7.28	1.25
Aerosol Silicone Spray SILHF	5.01	93.50%	25.00%	68.50%	18.95%	6.50%	0.00242	30.00	0.36	4.23	0.25	5.98	1.09	0.03	75%	52.80	0.01	
Cleaning Solvent																		
Cleaning Solvent 9800	6.55	100.00%	100.00%	0.00%	78.74%	0.00%	0.00410	30.00	0.81	0.00	0.00	0.00	0.00	0.00	0.00	100%	#DIV/0!	0.00
Totals for Step 1												5.60	134.42	24.53	5.51			
State Potential to Emit - Worst Case Coating Stage and Cleaning Materials (Coatings are Mutually Exclusive)												5.60	134.42	24.53	5.508			

Coating applied using spray application and manual (hand wiping) cleaning. Overspray controlled by dry filters.

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
 Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
 Pounds VOC per Gallon of Solids = [Density (lb/gal) * Weight % Organics] / (Volume % Solids)
 PTE VOC (pounds/hour) = Pounds of VOC/Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
 PTE VOC (pounds/day) = Pounds of VOC/Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
 PTE VOC (tons/year) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
 PTE PM/PM10 (tons/year) = Max. (units/hour) * Gal of Mat (gal/unit) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer efficiency) *8760 hours/year *1ton/2000 lbs
 PTE PM/PM10 (lbs/hour) = Max. (units/hour) * Gal of Mat (gal/unit) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer efficiency)
 Add Worst Case Coating to Cleanup Solvents = Adhesive for VOC and for Particulate Matter

HAZARDOUS AIR POLLUTANTS

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Ethyl Benzene	Weight % Isocyanate Compounds	Weight % Methanol	Weight % MIBK	Weight % Toluene	Weight % Xylene	Ethyl Benzene Emissions (ton/yr)	Compound s Emissions (ton/yr)	Methanol Emissions (ton/yr)	MIBK Emissions (ton/yr)	Toluene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Total HAP Emissions (ton/yr)	
Adhesive Application - EU-2																	
Premium Adhesive 7870	6.81	0.08450	30.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Aerosol Silicone Spray SILHF	5.01	0.00242	30.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
Cleaning Solvent																	
Cleaning Solvent 9800	6.55	0.00410	30.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Totals for Step 1											0.00	0.000	0.00	0.00	0.00	0.00	0.00
State Potential to Emit											0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worst Case Coating for HAP - Add Cleanup Solvent to Worst Case Coating for HAP											0.00	0.000	0.00	0.00	0.00	0.00	0.00

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

**Emissions Calculations
VOC/HAP and PM/PM10 Emissions
Adhesive Coating Process (EU-3)**

**Company Name: Vahala Foam, Inc.
Address City IN Zip: 930 Herman Street, Elkhart, Indiana 46515
Permit Number: M 039-32605-00574
Reviewer: Renee Traivaranon
Date: January 7, 2013**

Material	Density (lb/gal)	Weight % Volatile (H ₂ O & Organics)	Weight % Water & Exempt	Weight % Organics	Volume % Water & Exempt	Weight % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Material Usage (Lb/Hr)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	PTE VOC (lbs/hour)	PTE VOC (lbs/day)	PTE VOC (tons/year)	PTE PM/PM10 (tons/year)	**Transfer Efficiency	Pounds VOC/gal Solids	PTE PM/PM10 (lbs/hour)
Adhesive Application - EU-3																		
Premium Adhesive 7870	6.81	71.00%	40.00%	31.00%	38.69%	29.00%	0.04710	40.00	12.83	3.44	2.11	3.98	95.46	17.42	4.07	75%	7.28	0.93
Premium Adhesive 7130	6.84	72.00%	40.00%	32.00%	38.86%	28.00%	0.04710	10.00	3.22	3.58	2.19	1.03	24.74	4.52	0.99	75%	7.82	0.23
Aerosol Silicone Spray SILHF	5.01	93.50%	25.00%	68.50%	18.95%	6.50%	0.00242	50.00	0.61	4.23	3.43	0.42	9.97	1.82	0.04	75%	52.80	0.01
Cleaning Solvent																		
Cleaning Solvent 9800	6.55	100.00%	100.00%	0.00%	78.74%	0.00%	0.00410	50.00	1.34	0.00	0.00	0.00	0.00	0.00	0.00	100%	#DIV/0!	0.00
Totals for Step 1												5.42	130.16	23.75	5.11			1.17
State Potential to Emit - Worst Case Coating Stage and Cleaning Materials (Coatings are Mutually Exclusive)												5.42	130.16	23.75	5.105			1.166

Coating applied using spray application and manual (hand wiping) cleaning. Overspray controlled by dry filters.

METHODOLOGY

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) * Weight % Organics) / (1-Volume % water)
 Pounds of VOC per Gallon Coating = (Density (lb/gal) * Weight % Organics)
 Pounds VOC per Gallon of Solids = [Density (lb/gal) * Weight % Organics] / (Volume % Solids)
 PTE VOC (pounds/hour) = Pounds of VOC/Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr)
 PTE VOC (pounds/day) = Pounds of VOC/Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (24 hr/day)
 PTE VOC (tons/year) = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (8760 hr/yr) * (1 ton/2000 lbs)
 PTE PM/PM10 (tons/year) = Max. (units/hour) * Gal of Mat (gal/unit) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer efficiency) *8760 hours/year *1ton/2000 lbs
 PTE PM/PM10 (lbs/hour) = Max. (units/hour) * Gal of Mat (gal/unit) * Density (lbs/gal) * (1- Weight % Volatile) * (1-Transfer efficiency)
 Add Worst Case Coating to Cleanup Solvents = Adhesive for VOC and for Particulate Matter

HAZARDOUS AIR POLLUTANTS

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Ethyl Benzene	Weight % Isocyanate Compounds	Weight % Methanol	Weight % Hexane	Weight % Toluene	Weight % Xylene	Ethyl Benzene Emissions (ton/yr)	Compound s Emissions (ton/yr)	Methanol Emissions (ton/yr)	Hexane Emissions (ton/yr)	Toluene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Total HAP Emissions (ton/yr)	
Adhesive Application - EU-3																	
Premium Adhesive 7870	6.81	0.04710	40.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Premium Adhesive 7130	6.84	0.04710	10.000	0.00%	0.00%	0.00%	30.00%	10.00%	0.00%	0.00	0.00	0.00	4.23	1.41	0.00	5.64	
Aerosol Silicone Spray SILHF	5.01	0.00242	50.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.000	
Totals for Step 1											0.00	0.000	0.00	4.23	1.41	0.00	5.64
Cleaning Solvent 9800	6.55	0.00410	50.000	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
State Potential to Emit											0.00	0.00	0.00	0.00	0.00	0.00	0.00
Worst Case Coating for HAP - Add Cleanup Solvent to Worst Case Coating for HAP											0.00	0.000	0.00	4.23	1.41	0.00	5.64

METHODOLOGY

HAPS emission rate (tons/yr) = Density (lb/gal) * Gal of Material (gal/unit) * Maximum (unit/hr) * Weight % HAP * 8760 hrs/yr * 1 ton/2000 lbs

**Appendix A: Emission Calculations
Natural Gas Combustion Only
MM BTU/HR <100
Furnaces and Radiant Heaters**

**Company Name: Vahala Foam, Inc.
Address: 930 Herman Street, Elkhart, Indiana 46514
Permit Number: M 039-32605-00574
Reviewer: Renee Traivaranon
Date: January 7, 2013**

Heat Input (MMBtu/hr)	Unit
2.40	Radiant Space Heaters R1-R12

Total Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
2.40	21.02

Emission Factor (lb/MMSCF)	Pollutant					
	PM*	PM10*	SO ₂	NO _x	VOC	CO
	1.90	7.60	0.60	100.0 **see below	5.50	84.0
Potential to Emit (tons/yr)	0.02	0.08	0.01	1.05	0.06	0.88

*PM emission factor is filterable PM only. PM10 emission factor is condensable and filterable PM combined.

**Emission Factors for NO_x (Uncontrolled) = 100 lb/MMSCF

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (July 1998)

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMSCF = 1,000,000 Standard Cubic Feet of Gas

Methodology

Potential Throughput (MMSCF/yr) = Heat Input Capacity (MMBtu/hr) * 8,760 hrs/yr * 1 MMSCF/1,020 MMBtu

Emission (tons/yr) = Throughput (MMSCF/yr) * Emission Factor (lb/MMSCF)/2,000 lb/ton

HAP Emissions

Emission Factor (lb/MMSCF)	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.10E-03	1.20E-03	7.50E-02	1.80E+00	3.40E-03
Potential to Emit (tons/yr)	2.21E-05	1.26E-05	7.88E-04	1.89E-02	3.57E-05

HAPs - Metals

Emission Factor (lb/MMSCF)	Lead	Cadmium	Chromium	Manganese	Nickel
	5.00E-04	1.10E-03	1.40E-03	3.80E-04	2.10E-03
Potential to Emit (tons/yr)	5.26E-06	1.16E-05	1.47E-05	3.99E-06	2.21E-05

Methodology is the same as as above

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

Greenhouse Gas Emissions

Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr
2.40	21.02

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO ₂	CH ₄	N ₂ O
	120,000	2.3	2.2
Potential Emission in tons/yr	1,261	0.02	0.02
Summed Potential Emissions in tons/yr	1,261		
CO ₂ e Total in tons/yr	1,269		

METHODOLOGY

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

Emission Factors are from AP 42, Table 1.4-2 SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-Greenhouse Warming Potentials (GWP) from Table A-1 of 40 CFR Part 98 Subpart A.

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

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

Appendix A: Emission Calculations
Fugitive Dust Emissions - Paved Roads

Company Name: Vahala Foam, Inc.
Address: 930 Herman Street, Elkhart, Indiana 46514
Permit Number: M 039-32605-00574
Reviewer: Renee Traivaranon
Date: January 7, 2013

Paved Roads at Industrial Site

The following calculations determine the amount of emissions created by paved roads, based on 8,760 hours of use and AP-42, Ch 13.2.1 (1/2011).

Vehicle Information (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Vehicle (entering plant) (one-way trip)	4.0	1.0	4.0	1.0	4.0	300	0.057	0.2	83.0
Vehicle (leaving plant) (one-way trip)	4.0	1.0	4.0	1.0	4.0	300	0.057	0.2	83.0
Totals			8.0		8.0			0.5	165.9

Average Vehicle Weight Per Trip = $\frac{15.0}{0.04}$ tons/trip
 Average Miles Per Trip = $\frac{15.0}{0.04}$ miles/trip

Unmitigated Emission Factor, $E_f = [k * (sL)^{0.91} * (W)^{1.02}]$ (Equation 1 from AP-42 13.2.1)

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	15.0	15.0	15.0	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m ² = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, $E_{ext} = E * [1 - (p/4N)]$ (Equation 2 from AP-42 13.2.1)

Mitigated Emission Factor, $E_{ext} = E_f * [1 - (p/4N)]$
 where p = $\frac{125}{365}$ days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)
 N = 365 days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, $E_f =$	1.377	0.275	0.0676	lb/mile
Mitigated Emission Factor, $E_{ext} =$	1.259	0.252	0.0618	lb/mile

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Vehicle (entering plant) (one-way trip)	0.06	0.01	0.00	0.05	0.01	0.00
Vehicle (leaving plant) (one-way trip)	0.06	0.01	0.00	0.05	0.01	0.00
Totals	0.11	0.02	0.01	0.10	0.02	0.01

Methodology

Total Weight driven per day (ton/day) = [Maximum Weight Loaded (tons/trip)] * [Maximum trips per day (trip/day)]
 Maximum one-way distance (mi/trip) = [Maximum one-way distance (feet/trip)] / [5280 ft/mile]
 Maximum one-way miles (miles/day) = [Maximum trips per year (trip/day)] * [Maximum one-way distance (mi/trip)]
 Average Vehicle Weight Per Trip (ton/trip) = SUM[Total Weight driven per day (ton/day)] / SUM[Maximum trips per day (trip/day)]
 Average Miles Per Trip (miles/trip) = SUM[Maximum one-way miles (miles/day)] / SUM[Maximum trips per year (trip/day)]
 Unmitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Unmitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 Mitigated PTE (tons/yr) = [Maximum one-way miles (miles/yr)] * [Mitigated Emission Factor (lb/mile)] * (ton/2000 lbs)
 Controlled PTE (tons/yr) = [Mitigated PTE (tons/yr)] * [1 - Dust Control Efficiency]

Abbreviations

PM = Particulate Matter
 PM10 = Particulate Matter (<10 um)
 PM2.5 = Particle Matter (<2.5 um)
 PTE = Potential to Emit



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

SENT VIA U.S. MAIL: CONFIRMED DELIVERY AND SIGNATURE REQUESTED

TO: Rebecca L Stahly
Vahala Foam, Inc.
930 Herman St, PO Box 2602
Elkhart, IN 46515-2602

DATE: March 12, 2013

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

SUBJECT: Final Decision
MSOP - Significant Permit Revision
039 - 32605 - 00574

Enclosed is the final decision and supporting materials for the air permit application referenced above. Please note that this packet contains the original, signed, permit documents.

The final decision is being sent to you because our records indicate that you are the contact person for this application. However, if you are not the appropriate person within your company to receive this document, please forward it to the correct person.

A copy of the final decision and supporting materials has also been sent via standard mail to:
Daniel P Vahala, Chairman
Doug Elliott D & B Environmental Services
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 11/30/07



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
Toll Free (800) 451-6027
www.idem.IN.gov

March 12, 2013

TO: Elkhart Public Library

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

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

Applicant Name: Vahala Foam, Inc.
Permit Number: 039 - 32605 - 00574

You previously received information to make available to the public during the public comment period of a draft permit. Enclosed is a copy of the final decision and supporting materials for the same project. Please place the enclosed information along with the information you previously received. To ensure that your patrons have ample opportunity to review the enclosed permit, **we ask that you retain this document for at least 60 days.**

The applicant is responsible for placing a copy of the application in your library. If the permit application is not on file, or if you have any questions concerning this public review process, please contact Joanne Smiddie-Brush, OAQ Permits Administration Section at 1-800-451-6027, extension 3-0185.

Enclosures
Final Library.dot 11/30/07

Mail Code 61-53

IDEM Staff	LPOGOST 3/12/2013 Vahala Foam, Inc. 039 - 32605 - 00574 final)		CERTIFICATE OF MAILING ONLY	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee Remarks
1		Rebecca L Stahly Vahala Foam, Inc. 930 Herman St, PO Box 2602 Elkhart IN 46515-2602 (Source CAATS) Via confirmed delivery									
2		Daniel P Vahala Chairman Vahala Foam, Inc. 930 Herman St, PO Box 2602 Elkhart IN 46515-2602 (RO CAATS)									
3		Elkhart City Council and Mayors Office 229 South Second Street Elkhart IN 46516 (Local Official)									
4		Elkhart Public Library 300 S 2nd St Elkhart IN 46516-3184 (Library)									
5		Elkhart County Health Department 608 Oakland Avenue Elkhart IN 46516 (Health Department)									
6		Elkhart County Board of Commissioners 117 North Second St. Goshen IN 46526 (Local Official)									
7		Mr. Doug Elliott D & B Environmental Services, Inc. 401 Lincoln Way West Osceola IN 46561 (Consultant)									
8											
9											
10											
11											
12											
13											
14											
15											

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See Domestic Mail Manual R900, S913, and S921 for limitations of coverage on inured and COD mail. See International Mail Manual for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
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