



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
Governor

*Thomas W. Easterly*  
Commissioner

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

TO: Interested Parties / Applicant

DATE: November 16, 2010

RE: Aisin Chemical Indiana, Inc. / 071-29451-00047

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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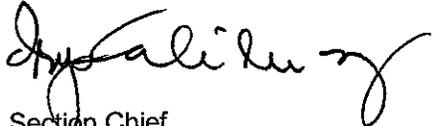
## New Source Construction and Minor Source Operating Permit OFFICE OF AIR QUALITY

**Aisin Chemical Indiana, Inc.**  
**1004 Industrial Way**  
**Crothersville, Indiana 47229**

(herein known as the Permittee) is hereby authorized to construct and 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 2-5.1, 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.: M071-29451-00047	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: November 16, 2010 Expiration Date: November 16, 2015

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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)]

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The Permittee owns and operates a stationary manufacturing of sound insulation material for automobiles.

Source Address:	1004 Industrial Way, Crothersville, Indiana 47229
General Source Phone Number:	812-793-2888
SIC Code:	2899
County Location:	Jackson
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

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

- (a) The batch mixing operation from Mixer SG MIX1:
- (1) One (1) enclosed batch mixing Silent Guard Mixer, identified as SG MIX1, approved for construction in 2010, using two formulations- 423A and 411A, with a maximum material input of 13,829.3 pounds per batch, 7.5 hours per batch, or 8,076.3 tons per year, PM emissions are controlled by dust collector DCMIX1 exhausting outside through stack SMIX1.
  - (2) Waste bag storage area used for empty powder bags from SG MIX1, approved for construction in 2010, equipped with dust collector DCMIX2 for industrial hygiene and cleanliness exhausting outside through stack SMIX2.
- (b) The batch mixing operation from Mixer SG MIX2:
- (3) One (1) enclosed batch mixing Silent Guard Mixer, identified as SG MIX2, approved for construction in 2010, using two formulations- 423A and 411A, with a maximum material input of 13,829.3 pounds per batch, 7.5 hours per batch, or 8,076.3 tons per year, PM emissions are controlled by dust collector DCMIX3 exhausting outside through stack SMIX3.
  - (4) Waste bag storage area used for empty powder bags from SG MIX2, approved for construction in 2010, equipped with dust collector DCMIX4 for industrial hygiene and cleanliness exhausting outside through stack SMIX4.
- (c) Two (2) identical water based wash stations for washing, cleaning, and degreasing drums utilizing spray bottle, identified as WS-1 and WS-2, approved for construction in 2010, with maximum capacity of 0.0375 gallons of solvent per hour each.

- (d) Two (2) 0.27MMBtu/hr each, direct-fired natural gas heat pump unit, identified as GHP-1 and GHP-2, approved for construction in 2010 and exhausting outside through stacks GHP-1 and GHP-2 respectively.

## **SECTION B GENERAL CONDITIONS**

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

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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 Revocation of Permits [326 IAC 2-1.1-9(5)]**

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Pursuant to 326 IAC 2-1.1-9(5)(Revocation of Permits), the Commissioner may revoke this permit 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.

### **B.3 Affidavit of Construction [326 IAC 2-5.1-3(h)] [326 IAC 2-5.1-4]**

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This document shall also become the approval to operate pursuant to 326 IAC 2-5.1-4 when prior to the start of operation, the following requirements are met:

- (a) The attached Affidavit of Construction shall be submitted to the Office of Air Quality (OAQ), verifying that the emission units were constructed as proposed in the application or the permit. The emission units covered in this permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM if constructed as proposed.
- (b) If actual construction of the emission units differs from the construction proposed in the application, the source may not begin operation until the permit has been revised pursuant to 326 IAC 2 and an Operation Permit Validation Letter is issued.
- (c) The Permittee shall attach the Operation Permit Validation Letter received from the Office of Air Quality (OAQ) to this permit.

### **B.4 Permit Term [326 IAC 2-6.1-7(a)][326 IAC 2-1.1-9.5][IC 13-15-3-6(a)]**

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- (a) This permit, M071-29451-00047, is issued for a fixed term of five (5) years from the issuance date of this permit, as determined in accordance with IC 4-21.5-3-5(f) and IC 13-15-5-3. Subsequent revisions, modifications, or amendments of this permit do not affect the expiration date of this permit.
- (b) If IDEM, OAQ, upon receiving a timely and complete renewal permit application, fails to issue or deny the permit renewal prior to the expiration date of this permit, this existing permit shall not expire and all terms and conditions shall continue in effect, until the renewal permit has been issued or denied.

### **B.5 Term of Conditions [326 IAC 2-1.1-9.5]**

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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.6 Enforceability**

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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.7 Severability**

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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.8 Property Rights or Exclusive Privilege**

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

**B.9 Duty to Provide Information**

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- (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.10 Annual Notification [326 IAC 2-6.1-5(a)(5)]**

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- (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.11 Preventive Maintenance Plan [326 IAC 1-6-3]**

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- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall 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.

- (b) A copy of the PMPs shall be submitted to IDEM, OAQ upon request and within a reasonable time, and shall be subject to review and approval by IDEM, OAQ. IDEM, OAQ may require the Permittee to revise its PMPs whenever lack of proper maintenance causes or is the primary contributor to an exceedance of any limitation on emissions.
- (c) To the extent the Permittee is required by 40 CFR Part 60/63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

**B.12 Prior Permits Superseded [326 IAC 2-1.1-9.5]**

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- (a) All terms and conditions of permits established prior to M071-29451-00047 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.13 Termination of Right to Operate [326 IAC 2-6.1-7(a)]**

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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.14 Permit Renewal [326 IAC 2-6.1-7]**

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

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- (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.16 Source Modification Requirement**

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

**B.17 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]**

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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.18 Transfer of Ownership or Operational Control [326 IAC 2-6.1-6]**

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- (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.19 Annual Fee Payment [326 IAC 2-1.1-7]**

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- (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.20 Credible Evidence [326 IAC 1-1-6]**

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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 construct and 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]

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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]

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- (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]**

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- (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]**

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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]**

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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]**

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

## **Corrective Actions and Response Steps**

### **C.12 Response to Excursions or Exceedances**

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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**

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- (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]**

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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]**

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- (a) Records of all required monitoring data, reports and support information required by this permit shall be retained for a period of at least five (5) years from the date of monitoring sample, measurement, report, or application. These records shall be physically present or electronically accessible at the source location for a minimum of three (3) years. The records may be stored elsewhere for the remaining two (2) years as long as they are available upon request. If the Commissioner makes a request for records to the Permittee, the Permittee shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this permit, 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) The first report shall cover the period commencing on the date of issuance of this permit or the date of initial start-up, whichever is later, and ending on the last day of the reporting period. 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) The batch mixing operation from Mixer SG MIX1:
- (1) One (1) enclosed batch mixing Silent Guard Mixer, identified as SG MIX1, approved for construction in 2010, using two formulations- 423A and 411A, with a maximum material input of 13,829.3 pounds per batch, 7.5 hours per batch, or 8,076.3 tons per year, PM emissions are controlled by dust collector DCMIX1 exhausting outside through stack SMIX1.
  - (2) Waste bag storage area used for empty powder bags from SG MIX1, approved for construction in 2010, equipped with dust collector DCMIX2 for industrial hygiene and cleanliness exhausting outside through stack SMIX2.
- (b) The batch mixing operation from Mixer SG MIX2:
- (3) One (1) enclosed batch mixing Silent Guard Mixer, identified as SG MIX2, approved for construction in 2010, using two formulations- 423A and 411A, with a maximum material input of 13,829.3 pounds per batch, 7.5 hours per batch, or 8,076.3 tons per year, PM emissions are controlled by dust collector DCMIX3 exhausting outside through stack SMIX3.
  - (4) Waste bag storage area used for empty powder bags from SG MIX2, approved for construction in 2010, equipped with dust collector DCMIX4 for industrial hygiene and cleanliness exhausting outside through stack SMIX4.

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

- (a) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the batch mixing operation (SG MIX1) shall not exceed 3.88 pounds per hour when operating at a process weight rate of 0.922 tons per hour.
- (b) Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from the batch mixing operation (SG MIX2) shall not exceed 3.88 pounds per hour each when operating at a process weight rate of 0.922 tons per hour.

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

Interpolation of the data for the process weight rates up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

#### D.1.2 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for mixing operation), and their control devices.

## Compliance Determination Requirements

### D.1.3 Particulate Control

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- (a) In order to comply with Condition D.1.1, the dust cartridge collectors, DCMIX1, DCMIX2, DCMIX3 and DCMIX4 for particulate control shall be in operation at all times the silent guard mixer facilities are in operation.
- (b) In the event that dust cartridge failure is observed in a multi-compartment dust collector, if operations will continue for ten (10) days or more after the failure is observed before the failed units will be repaired or replaced, the Permittee shall promptly notify the IDEM, OAQ of the expected date the failed units will be repaired or replaced. The notification shall also include the status of the applicable compliance monitoring parameters with respect to normal, and the results of any response actions taken up to the time of notification.

## Compliance Monitoring Requirements [326 IAC 2-6.1-5(a)(2)]

### D.1.4 Broken or Failed Dust Collector Detection

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- (a) For single compartment dust collectors DCMIX1, DCMIX2, DCMIX3 and DCMIX4, controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced.
- (b) For a single compartment dust collectors DCMIX1, DCMIX2, DCMIX3 and DCMIX4, controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced. The emissions unit shall be shut down no later than the completion of the processing of the material in the line.

### D.1.5 Visible Emissions Notations

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- (a) Weekly visible emission notations of the stacks SMIX1, SMIX2 from Silent Guard Mixer SG MIX1, and stacks SMIX3 and SMIX4 from Silent Guard Mixer SGMIX2, shall be performed during normal daylight operations when exhausting to the atmosphere. A trained employee shall record whether emissions are normal or abnormal.
- (b) For processes operated continuously, "normal" means those conditions prevailing, or expected to prevail, eighty percent (80%) of the time the process is in operation, not counting startup or shut down time.
- (c) In the case of batch or discontinuous operations, readings shall be taken during that part of the operation that would normally be expected to cause the greatest emissions.
- (d) A trained employee is an employee who has worked at the plant at least one (1) month and has been trained in the appearance and characteristics of normal visible emissions for that specific process.
- (e) If abnormal emissions are observed, the Permittee shall take reasonable response steps. Section C - Response to Excursions or Exceedances contains the Permittee's obligation with regard to the reasonable response steps required by this condition. Failure to take response steps shall be considered a deviation from this permit.

### D.1.6 Dust Collector Inspections

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An inspection shall be performed each calendar quarter of all dust collectors, DCMIX1, DCMIX2, DCMIX3 and DCMIX4, controlling the mixing operations. All defective dust collectors shall be replaced.

## **Record Keeping and Reporting Requirement [326 IAC 2-6.1-5(a)(1)]**

### **D.1.7 Record Keeping Requirements**

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- (a) To document the compliance status with Condition D.1.5, the Permittee shall maintain weekly records of the visible emission notations of the stacks SMIX1, SMIX2 exhausts. The Permittee shall include in its daily record when a visible emission notation is not taken and the reason for the lack of a visible emission notation, (i.e. the process did not operate that day).
- (b) To document the compliance status with Condition D.1.6, the Permittee shall maintain records of the results of the inspections required under Condition D.1.6.
- (c) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.

**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).

<b>Company Name:</b>	Aisin Chemical Indiana, Inc.
<b>Address:</b>	1004 Industrial Way
<b>City:</b>	Crothersville, Indiana 47229
<b>Phone #:</b>	812-793-2888
<b>MSOP #:</b>	M071-29451-00047

I hereby certify that Aisin Chemical Indiana, Inc. is :

still in operation.

no longer in operation.

I hereby certify that Aisin Chemical Indiana, Inc. is :

in compliance with the requirements of MSOP M071-29451-00047.

not in compliance with the requirements of MSOP M071-29451-00047.

<b>Authorized Individual (typed):</b>
<b>Title:</b>
<b>Signature:</b>
<b>Date:</b>

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.

<b>Noncompliance:</b>

**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:

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

Aisin Chemical Indiana, Inc.  
1004 Industrial Way  
Crothersville, Indiana 47229

Affidavit of Construction

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

1. I live in \_\_\_\_\_ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
2. I hold the position of \_\_\_\_\_ for \_\_\_\_\_  
(Title) (Company Name)
3. By virtue of my position with \_\_\_\_\_, I have personal  
(Company Name)  
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of \_\_\_\_\_  
(Company Name)
4. I hereby certify that Aisin Chemical Indiana, Inc. 1004 Industrial Way, Crothersville, Indiana 47229, completed construction of the manufacturing of sound insulation material on \_\_\_\_\_ in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on July 14, 2010, and as permitted pursuant to New Source Construction Permit and Minor Source Operating Permit No. M071-29451-00047, Plant ID No. 071-00047 issued on \_\_\_\_\_.
5. **Permittee, please cross out the following statement if it does not apply:** Additional (operations/facilities) were constructed/substituted as described in the attachment to this document and were not made in accordance with the construction permit.

Further Affiant said not.

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

Signature \_\_\_\_\_  
Date \_\_\_\_\_

STATE OF INDIANA)  
)SS

COUNTY OF \_\_\_\_\_ )

Subscribed and sworn to me, a notary public in and for \_\_\_\_\_ County and State of Indiana  
on this \_\_\_\_\_ day of \_\_\_\_\_, 20\_\_\_\_. My Commission expires: \_\_\_\_\_.

Signature \_\_\_\_\_  
Name \_\_\_\_\_ (typed or printed)

**Indiana Department of Environmental Management  
Office of Air Quality  
Evansville Local Agency**

**Technical Support Document (TSD) for a New Source Construction and  
Minor Source Operating Permit (MSOP)**

**Source Description and Location**

<b>Source Name:</b>	<b>Aisin Chemical Indiana, LLC. ( Plant 2)</b>
<b>Source Location:</b>	<b>1004 Industrial Way, Crothersville, IN 47229</b>
<b>County:</b>	<b>Jackson</b>
<b>SIC Code:</b>	<b>2899</b>
<b>MSOP No.:</b>	<b>071-29451-00047</b>
<b>Permit Reviewer:</b>	<b>Swarna Prabha</b>

On July 14, 2010, Office of Air Quality (OAQ) has received an application from Aisin Chemical Indiana, LLC, related to the construction and operation of a new plant manufacturing sound insulating material for automobiles.

**Source Definition**

This source consists of the following plants:

- (a) Aisin Drive Train (hereafter referred to as ADI) is located at 1001 Industrial Way, Crothersville, IN 47229. Plant ID: 071-00030; and
- (b) Aisin Chemical Indiana (hereafter referred to as ACIN) is located at 1004 Industrial Way, Crothersville, IN 47229, Plant ID: 071-00047.

IDEM, OAQ has examined whether the ADI plant and the proposed ACIN chemical mixer plant are part of the same source. The term "source" is defined at 326 IAC 1-2-73. In order for the plants to be considered one source they must meet all three of the following criteria:

- (1) The plants must have common ownership/control;
- (2) The plants must have the same SIC code; and
- (3) The plants must be located on contiguous or adjacent properties.

Aisin Drive Train, Inc. a wholly owned subsidiary of Aisin Holdings of America, currently operates a chemical mixer for Aisin Chemical Indiana, LLC in the ADI plant. The mixer makes automotive insulation. ADI's principal product is automotive parts, none of which use the automotive insulation. ACIN will be building a new chemical mixer plant on property next to the ADI plant. Aisin Chemical Japan will own 52% of ACIN, with Aisin Holdings of America owning the remaining 48%. ACIN plans on moving the existing mixer from the ADI plant into the new chemical mixer plant by June 2011.

Until the mixer is moved from the ADI plant, 24 ACIN employees will be working in the ADI plant. IDEM is basing this source determination on ACIN's business plan to move the existing mixer to the new plant by June 2011. If the mixer is not moved, IDEM reserves the right to revisit this source determination.

ADI is 100% owned by Aisin Holdings of America. ACIN is 52% owned by Aisin Chemical Japan and 48% owned by Aisin Holdings of America. Since Aisin Holdings of America does not have at least a 50% ownership interest in ACIN, common ownership of the plants does not exist. ADI and ACIN have different presidents. Although Aisin Holdings of America is represented by 2 of the 5 board members on ACIN's board, the majority power is held by Aisin Chemical Japan. Since there is no common ownership or common control, the first part of the source definition is not met.

The plants do not have the same two-digit SIC Code. The ADI plant has the two-digit SIC Code 37, corresponding to SIC Code 3714 for Motor Vehicle Parts and Accessories. The ACIN plant has the two-digit SIC Code 28, corresponding to SIC Code 2899 for insulating compounds.

A plant is considered a support facility if at least 50% of its output is dedicated to the other plant. Neither plant will dedicate any of its capacity to another plant. Since the two plants do not have a support facility relationship they do not meet the second part of the source definition.

The plants will be located on properties that will be separated only by a roadway. There will be no dedicated connection between the plants. Since the plants are located on adjacent properties, the third element of the definition is met. Since the plants do not meet all three parts of the definition, IDEM, OAQ finds that they are not part of the same source. Each plant will be permitted as a separate source.

Therefore, based on this evaluation these plants will not be considered one (1) source, as defined by 326 IAC 2-7-1(22).

<b>County Attainment Status</b>
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The source is located in Jackson County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Attainment effective December 29, 2005, for the 8-hour ozone standard. <sup>1</sup>
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Not designated.
<sup>1</sup> Unclassifiable or attainment effective October 18, 2000, for the 1-hour ozone standard which was revoked effective June 15, 2005. Unclassifiable or attainment effective April 5, 2005, for PM <sub>2.5</sub> .	

- (a) **Ozone Standards**  
 Volatile organic compounds (VOC) and Nitrogen Oxides (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. Jackson 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) Jackson County has been classified as attainment for PM<sub>2.5</sub>. On May 8, 2008 U.S. EPA promulgated the requirements for Prevention of Significant Deterioration (PSD) for PM<sub>2.5</sub> emissions. These rules became effective on July 15, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC 2-2, to include those requirements. The May 8, 2008 rule revisions require IDEM to regulate PM10 emissions as a surrogate for PM<sub>2.5</sub> emissions until 326 IAC 2-2 is revised.
- (c) **Other Criteria Pollutants**  
 Jackson County has been classified as attainment or unclassifiable in Indiana for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

<b>Fugitive Emissions</b>
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- (a) The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-6.1 (Minor Source Operating Permits) applicability.

- (b) Based on the SIC code of 2899, this source is classified as a chemical process plant, but it does not belong to any of the stationary source categories listed under one of the twenty-eight (28) operations and it is not a chemical processing plant. Therefore, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.
- (c) Since this type of operation is not one of the twenty-eight (28) listed source categories under 326 IAC 2-2, 326 IAC 2-3, or 326 IAC 2-7, and there is no applicable New Source Performance Standard that was in effect on August 7, 1980, fugitive emissions are not counted toward the determination of PSD, Emission Offset, and Part 70 Permit applicability.

### Background and Description of Permitted Emission Units

The Office of Air Quality (OAQ) has reviewed a Minor Source Operating Permit application, submitted by Aisin Chemical Indiana, LLC, on July 14, 2010, relating to the construction and operation of a new plant that manufactures sound insulating material.

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

- (a) The batch mixing operation, Mixer SG MIX1:
  - (1) One (1) enclosed batch mixing Silent Guard Mixer, identified as SG MIX1, approved for construction in 2010, using two formulations- 423A and 411A, with a maximum material input of 13,829.3 pounds per batch, 7.5 hours per batch, or 8,076.3 tons per year, PM emissions are controlled by dust collector DCMIX1 exhausting outside through stack SMIX1.
  - (2) Waste bag storage area used for empty powder bags from SG MIX1, approved for construction in 2010, equipped with dust collector DCMIX2 for industrial hygiene and cleanliness exhausting outside through stack SMIX2.

NOTE: VOC and PM emissions are generated during the manual loading of solvents and powder materials. The mixer is under vacuum during manual loading. The VOC and PM emissions are ducted through stack SMIX1. This mixer SG MIX 1 is relocated from 1001 Industrial Way, Crothersville, IN 47229.

- (b) The batch mixing operation, Mixer SG MIX2:
  - (3) One (1) enclosed batch mixing Silent Guard Mixer, identified as SG MIX2, approved for construction in 2010, using two formulations- 423A and 411A, with a maximum material input of 13,829.3 pounds per batch, 7.5 hours per batch, or 8,076.3 tons per year, PM emissions are controlled by dust collector DCMIX3 exhausting outside through stack SMIX3.
  - (4) Waste bag storage area used for empty powder bags from SG MIX2, approved for construction in 2010, equipped with dust collector DCMIX4 for industrial hygiene and cleanliness exhausting outside through stack SMIX4.

NOTE: VOC and PM emissions are generated during the manual loading of solvents and powder materials. The mixer is under vacuum during manual loading. The VOC and PM emissions are ducted through stack SMIX3.

- (c) Two (2) identical water based wash stations for washing, cleaning, and degreasing drums utilizing spray bottle, identified as WS-1 and WS-2, approved for construction in 2010, with maximum capacity of 0.0375 gallons of solvent per hour each.

- (d) Two (2) 0.27MMBtu/hr each, direct-fired natural gas heat pump unit, identified as GHP-1 and GHP-2, approved for construction in 2010 and exhausting outside through stacks GHP-1 and GHP-2 respectively.

**Enforcement Issues**

There are no pending enforcement actions related to this source.

**Emission Calculations**

See Appendix A of this TSD for detailed emission calculations.

Since there are 2 different formulations of products being mixed, PTE was calculated for each formulations, and the worst case was used to determine the permit level.

**Permit Level Determination – MSOP**

The following table reflects the unlimited potential to emit (PTE) of the entire source before controls. Control equipment is not considered federally enforceable until it has been required in a federally enforceable permit.

Pollutant	Potential To Emit (tons/year)
PM	49.8
PM10 <sup>(1)</sup>	49.82
PM2.5	49.82
SO <sub>2</sub>	0.0
NO <sub>x</sub>	0.0
VOC	12.26
CO	0.0

(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". US EPA has directed states to regulate PM10 emissions as surrogate for PM2.5 emissions.

HAPs	Potential To Emit (tons/year)
Xylenes	negligible
Ethylbenzene	negligible
Methyl ethyl ketone	negligible
Benzene	negligible
Dichlorobenzene	negligible
Formaldehyde	negligible
n-Hexane	negligible
Toluene	negligible
Lead	negligible
Cadmium	negligible
Chromium	negligible
Manganese	negligible
Phenol	negligible
Nickel	negligible
<b>TOTAL HAPs</b>	negligible

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of PM, PM2.5 and PM10 are each less than one hundred (100) tons per year, but greater than or equal to twenty-five (25) tons per year. The PTE of all other regulated criteria pollutants are less than twenty-five (25) tons per

year. Therefore, the source is subject to the provisions of 326 IAC 2-6.1. A Minor Source Operating Permit (MSOP) and New Source Construction will be issued.

- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1(16)) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is 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.

### **Federal Rule Applicability Determination**

#### New Source Performance Standards (NSPS)

There are no New Source Performance Standards (NSPS)(40 CFR Part 60) included in the permit.

#### National Emission Standards for Hazardous Air Pollutants (NESHAP)

- (a) The requirements of 40 CFR 60, Subpart VVVVVV (National emission Standards for Hazardous Air Pollutants (NESHAP) for chemical manufacturing Area sources) are not applicable to this source because this source does not use feedstocks, generate byproducts, or produces as products any of the hazardous air pollutants (HAP) listed in Table 1 to this subpart (Table 1 HAP).
- (b) This source is not subject to the requirements of the 40 CFR Subpart T (63.460 Through 63.470), NESHAP for for Halogenated Solvent Cleaning, because this operation does not use a degreasing solvent that contains any of the halogenated compounds listed in 40 CFR 63.460(a).
- (c) There are no other National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the permit.

#### Compliance Assurance Monitoring (CAM)

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 source:

- (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 source is not a major stationary source, under PSD (326 IAC 2-2), because the potential to emit of all attainment regulated pollutants are less than 250 tons per year, and this source is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(gg)(1). Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.
- (c) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))  
The potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is 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 2-4.1.
- (d) 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.

- (e) 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 thirty 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 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute non-overlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
- (f) 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.
- (g) Pursuant to 326 IAC 1-7 ( Stack Height Provision) , this source is not subject to this rule, because the potential to emit particulates are less than twenty five (25) tons per year each stack.

#### **State Rule Applicability - Mixer operations SG MIX 1 and SG MIX 2**

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

- (a) The allowable particulate emission rate from the batch mixing operation (SG MIX1) shall not exceed 3.88 pounds per hour each when operating at a process weight rate of 0.922 tons per hour.
- (b) The allowable particulate emission rate from the batch mixing operation (SG MIX2) shall not exceed 3.88 pounds per hour each when operating at a process weight rate of 0.922 tons per hour.

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

Interpolation of the data for the process weight rates up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

The dust collectors DC-1 and DC-2 shall be in operation at all times that powder material is being loaded in to the batch mixers SG MIX1 and SG MIX2 respectively, in order to comply with this limit.

NOTE; The process weight rate from SGMIX1 and SGMIX2 each was arrived using maximum process weight rate of 8076.31 tons/yr from formulation 411A, because the process rate from formulation 411A is greater than 423A.

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

The potential VOC emissions from each of the mixers are below the twenty-five (25) tons per year applicability threshold therefore, each mixer is not subject to the requirements of 326 IAC 8-1-6.

#### **State Rule Applicability – Natural Gas Combustion Sources GHP-1 and GHP-2**

326 IAC 6-2 (Particulate Emissions from Indirect Heating Units)

The natural gas-fired heat pumps, are not subject to 326 IAC 6-2 as they are not sources of indirect heating.

**326 IAC 7-1 (Sulfur dioxide emission limitations: applicability)**

The natural gas-fired heat pump units each are not subject to the requirements of 326 IAC 7-1, because the potential and the actual emissions are less than twenty-five (25) tons per year and ten (10) pounds per hour respectively.

**State Rule Applicability - Wash Stations WS-1 and WS-2**

**326 IAC 8-3-2**

The wash stations are not subject to the requirements of 326 IAC 8-3-2, because this cleaning operation does not meet the definition of the cold cleaner degreaser. The cleaning operation is performed utilizing handheld spray bottles and the VOC is less than three (3) pounds per hour each.

**326 IAC 20-6-1 (Halogenated Solvent Cleaning)**

This source is not subject to the requirements of the 326 IAC 20-6-1, since the degreasing operations do not use a solvent that contains any of the halogenated compounds listed in 326 IAC 20-6-1(a).

<b>Compliance Determination, Monitoring and Testing Requirements</b>
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- (a) The compliance determination and monitoring requirements applicable to this source are as follows:

Unit -Control, stack	Parameter	Frequency	Range	Excursions and Exceedances
SGMIX1-DCMIX1, stack (SMIX1)	Visible Emissions	*Weekly	Normal-Abnormal	Response Steps
SGMIX1-DCMIX2, stack (SMIX2)	Visible Emissions	*Weekly	Normal-Abnormal	Response Steps
SGMIX1 -DCMIX3 , stack SMIX3	Visible Emissions	*Weekly	Normal-Abnormal	Response Steps
SGMIX2, -DCMIX4 stack SMIX4	Visible Emissions	*Weekly	Normal-Abnormal	Response Steps

\* Upon consultation with the Compliance Data Section of OAQ, weekly visual emission is sufficient and there is no need for pressure drop reading.

- (b) For single compartment dust collectors DCMIX1, DCMIX2, DCMIX3 and DCMIX4, controlling emissions from a process operated continuously, a failed unit and the associated process shall be shut down immediately until the failed unit has been repaired or replaced.
- (c) For single compartment dust collectors DCMIX1, DCMIX2, DCMIX3 and DCMIX4, controlling emissions from a batch process, the feed to the process shall be shut down immediately until the failed unit has been repaired or replaced.

NOTE: Upon consultation with the Compliance Data Section of OAQ, there is no testing required because the uncontrolled particulate emissions are less than fifty tons per year from both mixers and only require less than 40% control efficiency in order to comply with 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes).

### Conclusion and Recommendation

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant on August 9, 2010, August 11, 2010, and September 9, 2010. An application for the purposes of this review was received on July 14, 2010.

The construction and operation of this source shall be subject to the conditions of the attached proposed New Source Review and MSOP No. 071-29451-00047. The staff recommends to the Commissioner that this New Source Review and MSOP be approved.

### IDEM Contact

- (a) Questions regarding this proposed permit can be directed to Swarna Prabha 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) 234-5376 or toll free at 1-800-451-6027 extension (45376).
- (b) A copy of the findings is available on the Internet at: [www.in.gov/idem/permits/air/pending.html](http://www.in.gov/idem/permits/air/pending.html).
- (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/permits/guide/](http://www.in.gov/idem/permits/guide/).

Category	Uncontrolled Potential Emissions (tons/year)				
	Emissions Generating Activity				
	Pollutant	Mixer Formulation SGMIX1, SGMIX2	Combustion GHP-1, GHP-2	Degreasing WS-1,WS-2	TOTAL
Criteria Pollutants	PM	49.80	0.000	0.00	49.80
	PM10	49.80	0.02	0.00	49.82
	PM2.5	49.80	0.02	0.00	49.82
	SO2	0.00	0.001	0.00	0.001
	NOx	0.00	0.24	0.00	0.24
	VOC	10.06	0.01	2.19	12.26
	CO	0.00	0.20	0.00	0.20
Hazardous Air Pollutants	Benzene	0.00	5.0E-06	0.00	5.0E-06
	Dichlorobenzene	0.00	2.8E-06	0.00	2.8E-06
	Formaldehyde	0.00	1.77E-04	0.00	1.77E-04
	n-Hexane	0.00	4.26E-03	0.00	4.26E-03
	Toluene	0.00	8.0E-06	0.00	8.04E-06
	Lead	0.00	1.2E-06	0.00	1.2E-06
	Cadmium	0.00	2.6E-06	0.00	2.6E-06
	Chromium	0.00	3.3E-06	0.00	0.00
	Manganese	0.00	9.0E-07	0.00	9.0E-07
	Nickel	0.00	5.0E-06	0.00	5.0E-06
	<b>Totals</b>	<b>0.00</b>	<b>4.46E-03</b>	<b>Total HAPs</b>	<b>4.46E-03</b>
			<b>Worst Single HAP</b>	<b>4.26E-03</b>	

Category	Controlled Potential Emissions (tons/year)				
	Emissions Generating Activity				
	Pollutant	Mixer Formulation SGMIX1, SGMIX2	Combustion GHP-1, GHP-2	Degreasing WS-1,WS-2	TOTAL
Criteria Pollutants	PM	49.80	0.00	0.00	49.80
	PM10	49.80	0.02	0.00	49.82
	PM2.5	49.80	0.00	0.00	49.80
	SO2	0.00	0.00	0.00	0.00
	NOx	0.00	0.24	0.00	0.24
	VOC	10.06	0.01	2.19	12.26
	CO	0.00	0.20	0.00	0.20
Hazardous Air Pollutants	Benzene	0.00	5.0E-06	0.0	5.0E-06
	Dichlorobenzene	0.00	2.8E-06	0.0	2.8E-06
	Formaldehyde	0.00	1.77E-04	0.00	1.77E-04
	n-Hexane	0.00	4.26E-03	0.00	4.26E-03
	Toluene	0.00	8.0E-06	0.00	8.04E-06
	Lead	0.00	1.2E-06	0.00	1.2E-06
	Cadmium	0.00	2.6E-06	0.00	2.6E-06
	Chromium	0.00	3.3E-06	0.00	3.3E-06
	Manganese	0.00	9.0E-07	0.00	9.0E-07
	Nickel	0.00	5.0E-06	0.00	5.0E-06
	<b>Totals</b>				<b>4.46E-03</b>
			<b>Worst Single HAP</b>	<b>4.26E-03</b>	

Total emissions based on rated capacity at 8,760 hours/year.

1. On May 8, 2008 U. S. EPA promulgated the new requirements for Prevention Of Significant Deterioration (PSD) for PM 2.5 emissions, and the effective date of these rules was July 15th, 2008. Indiana has three years from the publication of these rules to revise its PSD rules, 326 IAC2-2, to include those requirements.

U.S. EPA has not yet established the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 for PM2.5 emissions.

Therefore, until the U.S. EPA adopts specific provisions for PSD review for PM2.5 emissions, it has directed states to regulate PM10 emissions as a surrogate for PM2.5 emissions.

2. There are no emission factors in AP42 for PM2.5, PM10 = PM2.5

**Appendix A: Emissions Calculations  
VOC and Particulate  
From Two Formulation Mixer Operation**

**Company Name: AISIN Chemical Indiana, LLC  
Address City IN Zip: 1004 Industrial Way, Crothersville, IN 47229  
MSOP NO. 071-29451-00047  
Reviewer: Swarna Prabha**

**Emission Unit MIXER SG MIX 1  
Complete Batch Time = 7.5 hours**

**Potential Emissions Summary for "Silent Guard AD-411A-US3" Process**

Material Name	Lbs chemical per batch	Throughput Tons/yr <sup>1</sup>	% solid	Tons solid/yr	**PM/PM <sub>10</sub> Emissions (tons/yr) <sup>2,3</sup>	PM/PM <sub>10</sub> Emissions (lbs/hr) <sup>2,3</sup>	PM/PM <sub>10</sub> Collection Efficiency	PM/PM <sub>10</sub> Control Efficiency <sup>5</sup>	Controlled PM/PM <sub>10</sub> Emissions (tons/yr)	VOC wt%	Tons VOC/yr	VOC Emissions (tons/yr) <sup>2,4</sup>
Chemical A	1036	605.02	0.00%							0.00%	0.00	0.00
Chemical B	1534	895.86	0.00%							0.00%	0.00	0.00
Chemical C	1470	858.48	0.00%							0.00%	0.00	0.00
Chemical D	652	380.77	0.00%							0.02%	0.08	0.00
Chemical E	166	96.94	0.00%							100.00%	96.94	1.94
Chemical F	15	8.76	0.00%							22.71%	1.99	0.04
Chemical G	32	18.69	0.00%							0.00%	0.00	0.00
Chemical H	250	146.00	100.00%	146.00	0.73	0.17	99.5%	99.999%	0.00	0.00%	0.00	0.00
Chemical I	192	112.13	100.00%	112.13	0.56	0.13	99.5%	99.999%	0.00	0.00%	0.00	0.00
Chemical J	51	29.78	0.00%							3.50%	1.04	0.02
Chemical K	51	29.78	0.00%							0.00%	0.00	0.00
Chemical L	70	40.88	0.00%							100.00%	40.88	0.82
Chemical M	70	40.88	0.00%							100.00%	40.88	0.82
Chemical N	38	22.19	0.00%							0.00%	0.00	0.00
Chemical O	6	3.50	100.00%	3.50	0.02	0.00	99.5%	99.999%	0.00	0.00%	0.00	0.00
Chemical P	63	36.79	70.00%	25.75	0.13	0.03	99.5%	99.999%	0.00	20.00%	7.36	0.15
Chemical Q	45	26.28	75.00%	19.71	0.10	0.02	99.5%	99.999%	0.00	18.00%	4.73	0.09
Chemical R	450	262.80	100.00%	262.80	1.31	0.30	99.5%	99.999%	0.01	0.00%	0.00	0.00
Chemical S	1850	1080.40	100.00%	1080.40	5.40	1.23	99.5%	99.999%	0.03	0.00%	0.00	0.00
Chemical T	5700	3328.80	100.00%	3328.80	16.64	3.80	99.5%	99.999%	0.08	0.00%	0.00	0.00
Chemical U	62.7	36.62	0.00%							0.00%	0.00	0.00
Chemical V	25.6	14.95	0.00%							0.00%	0.00	0.00
	13829.3	8076.31			<b>24.90</b>	<b>5.68</b>			<b>0.12</b>			<b>3.88</b>

**Complete Batch Time = 7.5 hours**

**Potential Emissions Summary for "Silent Guard AD-423A-US3" Process**

Material Name	Lbs chemical per batch	Throughput Tons/yr <sup>1</sup>	% solid	Tons solid/yr	PM/PM <sub>10</sub> Emissions (tons/yr) <sup>2,3</sup>	PM/PM <sub>10</sub> Emissions (lbs/hr) <sup>2,3</sup>	PM/PM <sub>10</sub> Collection Efficiency	PM/PM <sub>10</sub> Control Efficiency <sup>5</sup>	Controlled PM/PM <sub>10</sub> Emissions (tons/yr)	VOC wt%	Tons/yr VOC	*VOC Emissions (tons/yr) <sup>2,4</sup>
Chemical AA	1047	611.45	0.00%							0.00%	0.0	0.0
Chemical BB	3032	1770.69	0.00%							0.00%	0.0	0.0
Chemical CC	660	385.44	0.00%							0.02%	0.1	0.0
Chemical DD	232	135.49	0.00%							100.00%	135.5	2.7
Chemical EE	15	8.76	0.00%							22.71%	2.0	0.0
Chemical FF	32	18.69	0.00%							0.00%	0.0	0.0
Chemical GG	900	525.60	100.00%	525.60	2.63	0.60	99.5%	99.999%	0.01	0.00%	0.0	0.0
Chemical HH	129	75.34	100.00%	75.34	0.38	0.09	99.5%	99.999%	0.00	0.00%	0.0	0.0
Chemical II	52	30.37	0.00%							3.50%	1.1	0.0
Chemical JJ	52	30.37	0.00%							0.00%	0.0	0.0
Chemical KK	85	49.64	0.00%							100.00%	49.6	1.0
Chemical LL	85	49.64	0.00%							100.00%	49.6	1.0
Chemical MM	26	15.18	0.00%							0.00%	0.0	0.0
Chemical NN	6	3.50	100.00%	3.50	0.02	0.00	99.5%	99.999%	0.00	0.00%	0.0	0.0
Chemical OO	70	40.88	70.00%	28.62	0.14	0.03	99.5%	99.999%	0.00	20.00%	8.2	0.2
Chemical PP	50	29.20	75.00%	21.90	0.11	0.03	99.5%	99.999%	0.00	18.00%	5.3	0.1
Chemical QQ	350	204.40	100.00%	204.40	1.02	0.23	99.5%	99.999%	0.01	0.00%	0.0	0.0
Chemical RR	1000	584.00	100.00%	584.00	2.92	0.67	99.5%	99.999%	0.01	0.00%	0.0	0.0
Chemical SS	5150	3007.60	100.00%	3007.60	15.04	3.43	99.5%	99.999%	0.08	0.00%	0.0	0.0
Chemical TT	90	52.56	0.00%							0.00%	0.0	0.0
Chemical UU	52	30.37	0.00%							0.00%	0.0	0.0
	13115	7659.16			<b>22.25</b>	<b>5.08</b>			<b>0.11</b>			<b>5.03</b>

There are two identical mixers with equal process throughput, the PTE are calculated using 7.5 Hrs

<sup>1</sup> Throughput Tons/yr from mixer SG MIX 1 = lbs chemical /batch \* ((8760 hours/yr) / (7.5 hours/batch)) \*(1 ton / 2000 lbs)

Tons/yr VOC from mixer SG MIX 1 = lbs chemical /batch \* (VOC wt%) ((8760 hours/yr) / (7.5 hours/batch)) \*(1 ton / 2000 lbs)

NOTE: The hourly rate was determined based on the batch operation.

\*Worst Case PTE of PM/PM<sub>10</sub> for one mixer SG MIX1= 24.90 TPY

\*\*Worst Case PTE of VOC for one mixer SG MIX1 = 5.03 TPY

<sup>2</sup> AP-42 Section 6.4 "Paints and Varishes" was utilized because this mixing operation is similar

<sup>3</sup> PM emission factor before control = 0.5% of powder used, per AP-42 Section 6.4.

The lower end of the range was used due to mixer being under vacuum during manual powder loading

Combined PTE of PM/PM<sub>10</sub> from two identical mixers = [(tons/yr from mixer SG MIX 1) \*2]

PTE of PM/PM<sub>10</sub> combined from two identical mixers = 49.8 TPY

<sup>4</sup> Assumed that worst-case 2% of solvent utilized in the process will be emitted per AP-42 Section 6.4.

PTE of VOC combined from two identical mixers = 10.06 TPY

<sup>5</sup> Fibra-web cartridge filter with nanofiber technology is 99.999% efficient per manufacturer

\*Used worst case VOC from formulation AD-423A

\*\*Used worst case PM/PM<sub>10</sub> from formulation AD-411A

**Appendix A: Emissions Calculations  
VOCs, Particulate, HAPs  
Natural Gas Combustion Only  
MM BTU/HR <100**

**Company Name: AISIN Chemical Indiana, LLC  
Address City IN Zip: 1004 Industrial Way, Crothersville, IN 47229  
MSOP No: 071-29451-00047  
Reviewer: Swarna Prabha**

Pollutant	PM*	PM10*	SO2	NOx**	VOC	CO	Benzene	DCB	Formaldehyde	Hexane	Toluene	Pb	Cd	Cr	Mn	Ni
Emission Factor (lb/MMCF)	1.9	7.6	0.6	100	5.5	84.0	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03

Emission Unit	Number of Units	Unit Heat Input Capacity MMBtu/hr	Combined Total Heat Input Capacity MMBtu/hr	Potential Throughput MMCF/yr	Potential Emission tons/yr															
					PM*	PM10*	SO2	NOx**	VOC	CO	Benzene	DCB	Formaldehyde	Hexane	Toluene	Pb	Cd	Cr	Mn	Ni
Two (2) heat pumps GHP-1 and GHP-2	2	0.270	0.540	4.73	0.004	0.02	0.001	0.2	0.013	0.2	5.0E-06	2.8E-06	1.8E-04	4.3E-03	8.0E-06	1.2E-06	2.6E-06	3.3E-06	9.0E-07	5.0E-06
<b>Totals</b>	<b>2</b>	<b>0.270</b>	<b>0.540</b>	<b>4.73</b>	<b>0.004</b>	<b>0.02</b>	<b>0.001</b>	<b>0.24</b>	<b>0.013</b>	<b>0.20</b>	<b>5.0E-06</b>	<b>2.8E-06</b>	<b>1.8E-04</b>	<b>4.3E-03</b>	<b>8.0E-06</b>	<b>1.2E-06</b>	<b>2.6E-06</b>	<b>3.3E-06</b>	<b>9.0E-07</b>	<b>5.0E-06</b>

\*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.  
 \*\*Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32  
 The five highest organic and metal HAPs emission factors are provided above. Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Methodology**

Potential Throughput (MMCF) = Combined Total Heat Input Capacity (MMBtu/hr) \* 8,760 hrs/yr \* 1 MMCF/1,000 MMBtu  
 Emission (tons/yr) = Throughput (MMCF/yr) \* Emission Factor (lb/MMCF) / 2,000 lb/ton  
 Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)  
 All emission factors are based on normal firing.  
 MMBtu = 1,000,000 Btu, MMCF = 1,000,000 Cubic Feet of Gas

**Abbreviations**

PM = Particulate Matter	NOx = Nitrous Oxides	DCB = Dichlorobenzene	Cr = Chromium
PM10 = Particulate Matter (<10 um)	VOC - Volatile Organic Compounds	Pb = Lead	Mn = Manganese
SO2 = Sulfur Dioxide	CO = Carbon Monoxide	Cd = Cadmium	Ni = Nickel

**Appendix A: Emissions Calculations  
VOCs  
Two (2) Degreasing Operations**

**Company Name: AISIN Chemical Indiana, LLC  
Address City IN Zip: 1004 Industrial Way, Crothersville, IN 47229  
MSOP No.: 071-29451-00047  
Reviewer: Swarna Prabha**

Process	Density (Lb/Gal)	Weight % Volatile (VOC)	Solvent Throughput (drums/hr) WS-1 and WS-2	Solvent Usage (gal/drum)	*Solvent Usage (gal/hr) WS1 And WS2	Solvent Usage (gal/day) WS1 And WS2	Solvent Usage (gal/yr) WS1 And WS2	** PTE VOC (lb/hr) WS1 And WS2	PTE VOC (lb/yr) WS1 and WS2	PTE VOC (tons/yr) WS1 and WS2
Degreasing Operations d-Limonene	7.010	95.0%	1.875	0.040	0.0750	1.80	657.00	0.50	4375.29	2.19

\* Solvent usage for each drum is 0.375 gal/hr

\*\* PTE of VOC is < 3lb/hr

**Methodology:**

Handheld bottle is used for cleaning the drums.

Solvent throughput (drums/hr) WS-1 and WS-2 = 0.9375\*2 drums/hr = 1.875 (drums/hr)

PTE VOC (tons/yr) = Solvent [Throughput (drum/hr) \* (usage (gal/drum) \* (% VOC) \* (Density lb/gal) \* 8760/ 2000] tons/yr



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

*Mitchell E. Daniels Jr.*  
**Governor**

*Thomas W. Easterly*  
**Commissioner**

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

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

TO: Mark Warren  
Aisin Chemical Indiana, LLC  
1001 Industrial Way  
Crothersville, IN 47229

DATE: November 16, 2010

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

SUBJECT: Final Decision  
New Source Construction & Minor Source Operating Permit  
071-29451-00047

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:  
Takahiro Ishikawa - President  
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 11/30/07



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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November 16, 2010

TO: Crothersville Public Library

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

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

**Applicant Name: Aisin Chemical Indiana, LLC**  
**Permit Number: 071-29451-00047**

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	GHOTOPP 11/16/2010 Aisin Chemical Indiana LLC 071-29451-00047 Final		Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender		Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Mark Warren Aisin Chemical Indiana LLC 1001 Industrial Way Crothersville IN 47229 (Source CAATS) via confirmed delivery										
2		Takahiro Ishikawa President Aisin Chemical Indiana LLC 1001 Industrial Way Crothersville IN 47229 (RO CAATS)										
3		Jackson County Commissioner Jackson County Courthouse Brownstown IN 47220 (Local Official)										
4		Mr. Randy Brown Plumbers & Steam Fitters Union, Local 136 2300 St. Joe Industrial Park Dr Evansville IN 47720 (Affected Party)										
5		Mr. Tome Earnhart 3960 N. CR 300 W. North Vernon IN 47265 (Affected Party)										
6		Jackson County Health Department 801 West 2nd Street Seymour IN 47274-2711 (Health Department)										
7		Crothersville Public Library 120 West Main Street Crothersville IN 47229 (Library)										
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<b>6</b>			