



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

TO: Interested Parties / Applicant

DATE: January 22, 2013

RE: IDI Fabrication, Inc.

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



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We Protect Hoosiers and Our Environment.

Michael R. Pence
Governor

Thomas W. Easterly
Commissioner

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Indianapolis, Indiana 46204
(317) 232-8603
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Mr. Scott Doll, General Manager
IDI Fabrication, Inc.
14444 Herriman Boulevard
Noblesville, IN 46060

January 22, 2013

Re: **057-32397-00080**
First Administrative Amendment to
M057-31049-00080

Dear Mr. Doll:

IDI Fabrication, Inc. was issued a Minor Source Operating Permit (MSOP) No. M057-31049-00080 on February 13, 2012, for a stationary insulating plastic materials and films plant located at 14444 Herriman Boulevard, Noblesville, Indiana. On October 9, 2012, the Office of Air Quality (OAQ) received an application from the source requesting the following:

- (a) to revise the maximum capacity, raw materials used, mixing time per batch and ventilation description for existing Mixer 1.
- (b) to add a new hydraulic compression mold press,
- (c) to identify individually a cleaning solvent, and
- (d) to add (2) two post cure ovens and small punch presses.

On January 14, 2013, the source submitted revised calculations for the facility and a request to also add a sanding machine to the list of units at the source.

1. Pursuant to 326 IAC 2-6.1(d)(2)(A), the following change to the permit is considered an administrative amendment because the permit is amended to change the descriptive information concerning the source of emissions unit, where the revision will not trigger a new application requirement.

The description for Mixer 1 has been changed as follows:

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) Liquid Composite Molding (LCM) Mixer, identified as Mixer 1, ~~approved for construction~~ **constructed in 2011 and approved for modification in 2013**, with a maximum throughput capacity of ~~1,489.29~~ **707.04** pounds per hour of compounds which are in liquid **and some in dry powder** form, using ~~no controls~~, **with a small hood equipped with filters to capture any dust generated due to the addition and mixing of the dry powder material**, and exhausting indoors **to the atmosphere**. The closed mixer will mix three (3) different resin formulations at a rate of 24 ~~46.4~~ minutes per batch, but has the capability to mix only one formulation at a time. The blended materials are poured out of the mixer by wand.

2. Pursuant to 326 IAC 2-6.1-6(d)(11), these changes to the permit are considered as an administrative amendment because the permit is amended to add emissions units, subject to 326 IAC 2-1.1-3 (Exemptions), at the request of the applicant.

The following are the emissions units:

- (d) **One (1) hydraulic compression mold press, identified as Press 1, constructed in 2013, used in the mixer process, with a maximum capacity of 58.14 lbs/hour of formulation compounds, where the liquid paste is poured from the mixer via wand and the paste material is spread on an open flat surface mold, with no controls.**

The VOC emissions potential is <1 tpy and were determined using the factors for compression molding of LCM which are based on a research document. Documentation for the source of the emission factors were provided in the application and are referenced in Appendix A.

3. Pursuant to 326 IAC 2-6.1(d)(2)(A), the following change to the permit is considered an administrative amendment because the permit is amended to change the descriptive information concerning the source of emissions unit, where the revision will not trigger a new application requirement.

The source requested that the following process/activity be added to more accurately reflect the operations at the source:

- (e) **Cleaning solvent (ShipShape Resin Cleaner) used to manually clean equipment.**

Note: The VOC emissions from this product have already been included as Part of Mixer 1 calculations.

The use of this cleaner is less than 1 tpy of VOC emissions, so no increase in PTE as a result.

- (f) **Two (2) electric post-cure ovens.**
(g) **Small punch presses, using no chemicals in the process (e.g. stamping or lube oil).**
(h) **Sanding Machine, controlled by a dust collector identified as BH1.**

SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

- (a) One (1) Liquid Composite Molding (LCM) Mixer, identified as Mixer 1, ~~approved for construction~~ **constructed** in 2011 **and modified in 2013**, with a maximum throughput capacity of ~~4,489.29~~ **707.04** pounds per hour of compounds which are in liquid **and some in dry powder** form, ~~using no controls,~~ **with a small hood equipped with filters to capture any dust generated due to the addition and mixing of the dry powder material**, and exhausting ~~indoors~~ **to the atmosphere**. The closed mixer will mix three (3) different resin formulations at a rate of ~~24~~ **46.4** minutes per batch, but has the capability to mix only one formulation at a time. The blended materials are poured out of the mixer by wand.
- (b) Natural gas-fired facility heating units, ~~approved for construction~~ **constructed** in 2011, with a combined maximum heat input capacity of 1.0 MMBtu/hr, using no controls, and exhausting indoors.

- (c) One (1) deflashing operation, using a hand-held device, and using no controls. This operation has negligible particulate emissions.
 - (d) **One (1) hydraulic compression mold press, identified as Press 1, constructed in 2013, used in the mixer process, with a maximum capacity of 58.14 lbs/hour of formulation compounds, where the liquid paste is poured from the mixer via wand and the paste material is spread on an open flat surface mold, with no controls.**
 - (e) **Cleaning solvent (ShipShape Resin Cleaner) used to manually clean equipment.**
 - (f) **Two (2) electric post-cure ovens.**
 - (g) **Small punch presses, using no chemicals in the process (e.g. stamping or lube oil).**
 - (h) **Sanding Machine, controlled by a dust collector identified as BH1.**
- (The information describing the process contained in this emissions unit description box is descriptive information and does not constitute enforceable conditions.)

3. During the review period, the source submitted information and revised calculations that increased the total batch mixing time from 21 minutes to 46.42 minutes. The 21 minutes that was used in the previous permit only represented the time that the mixer itself was turned on and the source was only using liquid materials. The source uses dry material as well.

The facility has measured the time it takes to run the batches for each product formula and has developed written procedures for the steps in the mixing process, keeping in mind that only one formula can be mixed at a time. The processing time involved remains approximately the same for all three formulas. A new batch is not generated every 46.42 minutes because of down time between batches to clean up the mixer and scales used to weigh components and time to prepare the next barrel for a mixture.

Mixing time includes the total amount of time to make a batch, which includes batch prep, mixing and testing (mixer is not running), assuming that VOC and Styrene emissions from the resin and components can be emitted during the entire mixing cycle.

The PM emissions are generated when dry raw materials (fillers and powders) are manually fed into the mixer. The handling of the bags containing dry materials and emptying the bags into the mixer creates the dust. Once the dry materials are added to the liquid and mixing occurs, dust is no longer generated. Only 8 minutes of the total 46.42 minutes, based on measurements by the facility, is the time that this step (adding dry materials) takes, which is 17% of the total mixing time.

Based on changes to the mixing time, Mixer 1 PM emissions are being accounted for and the VOC and HAP emissions were reduced at the source.

Process/ Emission Unit	PTE of Proposed Modification (tons/year)									
	PM	PM10	PM2.5	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e	Total HAPs	Worst Single HAP
Mixer 1 (worst case)	2.81	2.81	2.81	0.00	0.00	15.64 7.60	0.00	0.00	7.06 4.01	5.57 2.52 (Styrene)
Hydraulic Compression Molding Press (Press 1) (Worst Case)	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.03	0.03 (Styrene)
Cleaning Solvent	0.00	0.00	0.00	0.00	0.00	negl.	0.00	0.00	0.00	

Process/ Emission Unit	PTE of Proposed Modification (tons/year)									
	PM	PM10	PM2.5	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e	Total HAPs	Worst Single HAP
Two (2) electric post-cure ovens	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Small punch presses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sanding Machine	0.93	0.93	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Proposed Modification	3.74	3.74	3.74	0.00	0.00	7.63	0.00	0.00	4.04	2.52
negl. = negligible										

State Rule Applicability - Individual Facilities

Mixer 1 Operation

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

Pursuant to 326 IAC 6-3-2, the particulate matter (PM) from Mixer 1 operation shall not exceed 1.78 pounds per hour when operating at a process weight rate of 0.29 tons per hour. The Process Weight Rate of the use of Formula 1 in Mixer 1 results in the most stringent pound per hour limit of the three formulas under 326 IAC 6-3-2.

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

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

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

Process Throughput (ton/hour)	Allowable PM Emissions (lb/hr)	PM PTE (lb/hr) Before Control
0.32	1.91	0.62
0.29	1.78	0.52
0.35	2.04	0.64

Based upon the table above, Mixer 1 can meet the pound per hour limitations under 326 IAC 6-3-2, without a control device.

Mold Press 1

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

Although constructed after January 1, 1980 applicability date for this rule, the Mold Press 1 is not subject to the requirements of 326 IAC 8-1-6 because the potential VOC emissions from this facility is less than twenty-five (25) tons per year.

There are no other 326 IAC 8 Rules that are applicable to the facility.

Sanding Machine

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

Pursuant to 326 IAC 6-3-2(e)(2), the allowable particulate emissions rate from the sanding machine shall not exceed 0.551 pounds per hour.

PM = 0.93 tons/year * 2000lb/8760hours = 0.21 lb/hr.

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

This PTE table is from the Appendix A to TSD of MSOP No. 057-31049-00080, issued on February 13, 2012.

Process/ Emission Unit	Potential To Emit of the Entire Source Prior to Modification (tons/year)									
	PM	PM10	PM2.5	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
Mixer 1 (Worst Case)	0.00	0.00	0.00	0.00	0.00	15.64	0.00	0.00	7.06 E+00	5.57E+00 (Styrene)
Combustion Sources	0.01	0.03	0.03	0.00	0.44	0.02	0.37	528.80	8.27 E-03	7.88E-03 (Hexane)
Deflashing Operation***	negl.	negl.	negl.	0.00	0.00	0.00	0.00	0.00	0.00 E+00	0.00E+00
Fugitive Sources	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00 E+00	0.00E+00
Total PTE of Entire Source	0.04	0.04	0.03	0.00	0.44	15.67	0.37	528.80	5.58	5.58
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
 *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".
 **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.
 *** Deflashing operations are performed using a handheld trimmer, and trim large pieces, with negligible particulate.

Based on the above changes, the source could be exempt or at the registration level. The source is currently operating under the MOSOP level and would like to remain at that level to allow for future growth or changes.

The uncontrolled/unlimited potential to emit of the entire source after the addition of these emission units will continue to be within the threshold levels specified in 326 IAC 2-5.1 (MSOP). The addition of the emission unit will not cause the source's potential to emit to be greater than the threshold levels specified in 326 IAC 2-2 (PSD), 326 IAC 2-3 (Emission Offset) or 326 IAC 2-7 (Part 70). (See Appendix A for the calculations).

- (a) No new state rules are applicable to this source due to the addition of the emission unit.
- (b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) or National Emission standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 20 and 40 CFR Part 61, 63) included in this administrative amendment.

PTE of the Entire Source After Issuance of the MSOP Administrative Amendment

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 Issuance of MSOP Administrative Amendment (tons/year)									
	PM	PM10*	PM2.5	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
Mixer 1 (Worst Case)	2.81	2.81	2.81	0.00	0.00	15.64 7.60	0.00	0.00	7.06 4.01	5.57 2.52 (Styrene)
Combustion Sources	0.01	0.03	0.03	0.00	0.44	0.02	0.37	528.80	8.27 E-03 0.01	7.88E-03 0.01 (Hexane)
Deflashing Operation***	negl.	negl.	negl.	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00
Fugitive Sources	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00E+00
Hydraulic Compression Molding Press (Press 1) (Worst Case)	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.03	0.03 (Styrene)
Cleaning Solvent ****	0.00	0.00	0.00	0.00	0.00	negl.	0.00	0.00	0.00	0.00
Two (2) electric post-cure ovens	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small punch presses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanding Machine	0.93	0.93	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	9.04 3.78	9.04 3.80	9.03 3.80	0.00	0.44	15.67 7.66	0.37	528.80	5.58 4.05	5.58 2.56 (worst case)
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
 *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".
 **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.
 *** Deflashing operations are performed using a handheld trimmer, and trim large pieces, with negligible particulate.
 ******Cleaning solvent emissions are from the use of Ship Shape cleaning solvent and are already accounted for in the Mixer 1 emissions.**

The table below summarizes the potential to emit of the entire source after issuance of this amendment, reflecting all limits, of the emission units. Any control equipment is considered federally enforceable only after issuance of this MSOP permit modification, 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 MSOP Administrative Amendment (tons/year)									
	PM	PM10*	PM2.5	SO ₂	NO _x	VOC	CO	GHGs as CO ₂ e**	Total HAPs	Worst Single HAP
Mixer 1 (Worst Case)	2.81	2.81	2.81	0.00	0.00	7.60	0.00	0.00	4.01	2.52 (Styrene)
Combustion Sources	0.01	0.03	0.03	0.00	0.44	0.02	0.37	528.80	0.01	0.01 (Hexane)
Deflashing Operation***	negl.	negl.	negl.	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Fugitive Sources	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Hydraulic Compression Molding Press (Press 1) (Worst Case)	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.03	0.03 (Styrene)
Cleaning Solvent ****	0.00	0.00	0.00	0.00	0.00	negl.	0.00	0.00	0.00	0.00
Two (2) electric post-cure ovens	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Small punch presses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Sanding Machine	0.93	0.93	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Total PTE of Entire Source	3.78	3.78	3.77	0.00	0.44	7.66	0.37	528.80	4.05	2.56 (worst case)
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 *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". **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. *** Deflashing operations are performed using a handheld trimmer, and trim large pieces, with negligible particulate. ****Cleaning solvent emissions are from the use of Ship Shape cleaning solvent and are already accounted for in the Mixer 1 emissions.										

All other conditions of the permit shall remain unchanged and in effect. Attached please find the entire revised permit and calculations.

A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. 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.idem.in.gov

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 Janet Mobley, of my staff, at 317-234-5373 or 1-800-451-6027, and ask for extension 4-5373.

IDI Fabrication, Inc.
Noblesville, Indiana
Permit Reviewer: Janet Mobley

Page 8 of 8
Administrative Amendment No. 057-32397-00080

Sincerely,



Iryn Calilung, Section Chief
Permits Branch
Office of Air Quality

IC/jm

Attachments: Updated Permit and Appendix A

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



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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

**IDI Fabrication, Inc.
14444 Herriman Blvd
Noblesville, Indiana 46060**

(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.: M057-31049-00080	
Issued by: Original signed by: Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: February 13, 2012 Expiration Date: February 13, 2017

First Administrative Amendment No.: 057-32397-00080	
Issued by:  Iryn Calilung, Section Chief Permits Branch Office of Air Quality	Issuance Date: January 22, 2013 Expiration Date: February 13, 2017

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

D.1. EMISSIONS UNIT OPERATION CONDITIONS..... 16

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

- D.1.1 MSOP [326 IAC 2-6.1]
- D.1.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Annual Notification 18
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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 insulating plastic materials and films plant.

Source Address:	14444 Herriman Blvd, Noblesville, Indiana 46060
General Source Phone Number:	317-776-6577
SIC Code:	3087 (Custom Compounding of Purchased Resins)
County Location:	Hamilton
Source Location Status:	Nonattainment for PM2.5 standard Attainment for all other 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) Liquid Composite Molding (LCM) Mixer, identified as Mixer 1, constructed in 2011 and approved for modification in 2013, with a maximum throughput capacity of 707.04 pounds per hour of compounds which are in liquid form, and some in dry powder form, with a small hood equipped with filters to capture any dust generated due to the addition and mixing of the dry powder material, and exhausting to the atmosphere. The closed mixer will mix three (3) different resin formulations at a rate of 46.42 minutes per batch, but has the capability to mix only one formulation at a time. The blended materials are poured out of the mixer by wand.
- (b) Natural gas-fired facility heating units, constructed in 2011, with a combined maximum heat input capacity of 1.0 MMBtu/hr, using no controls, and exhausting indoors.
- (c) One (1) deflashing operation, using a hand-held device, and using no controls. This operation has negligible particulate emissions.
- (d) One (1) hydraulic compression mold press, identified as Press 1, constructed in 2013, used in the mixer process, with a maximum capacity of 58.14 lbs/hour of formulation compounds, where the liquid paste is poured from the mixer via wand and the paste material is spread on an open flat surface mold, with no controls.
- (e) Cleaning solvent (ShipShape Resin Cleaner) used to manually clean equipment.
- (f) Two (2) electric post-cure ovens.
- (g) Small punch presses, using no chemicals in the process (e.g. stamping or lube oil).
- (h) Sanding machine, controlled by a dust collector identified as BH1.

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

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]

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)]

- (a) This permit, M057-31049-00080, 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]

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

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

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

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

B.9 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.10 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.11 Preventive Maintenance Plan [326 IAC 1-6-3]

- (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]

- (a) All terms and conditions of permits established prior to M057-31049-00080 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)]

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]

- (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]

- (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

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]

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]

- (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]

- (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]

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]

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) 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) One (1) Liquid Composite Molding (LCM) Mixer, identified as Mixer 1, constructed in 2011, approved for modification in 2013, with a maximum throughput capacity of 707.04 pounds per hour of compounds which are in liquid form, and some in dry powder form, with a small hood equipped with filters to capture any dust generated due to the addition and mixing of the dry powder material, and exhausting to the atmosphere. The closed mixer will mix three (3) different resin formulations at a rate of 46.42 minutes per batch, but has the capability to mix only one formulation at a time. The blended materials are poured out of the mixer by wand.
- (b) Natural gas-fired facility heating units, constructed in 2011, with a combined maximum heat input capacity of 1.0 MMBtu/hr, using no controls, and exhausting indoors.
- (c) One (1) deflashing operation, using a hand-held device, and using no controls. This operation has negligible particulate emissions.
- (d) One (1) hydraulic compression mold press, identified as Press 1, constructed in 2013, used in the mixer process, with a maximum capacity of 58.14 lbs/hour of formulation compounds, where the liquid paste is poured from the mixer via wand and the paste material is spread on an open flat surface mold, with no controls.
- (e) Cleaning solvent (ShipShape Resin Cleaner) used to manually clean equipment.
- (f) Two (2) electric post-cure ovens.
- (g) Small punch presses, using no chemicals in the process (e.g. stamping or lube oil).
- (h) Sanding machine, controlled by a dust collector identified as BH1.

(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 MSOP [326 IAC 2-6.1]

Pursuant to 326 IAC 2-6.1, in order to confirm the MSOP permit level, the Permittee shall only mix one (1) formulation at a time in the Liquid Composite Molding (LCM) Mixer, identified as Mixer 1.

Compliance with this condition shall ensure that the potential emissions from the source conform to the Minor Source Operating Permit level.

D.1.2 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2]

Pursuant to 326 IAC 6-3-2, the allowable particulate matter (PM) emissions from Mixer 1 operation shall not exceed 1.78 pounds per hour when operating at a process weight rate of 0.29 tons per hour.

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

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

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

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

**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:	IDI Fabrication, Inc.
Address:	14444 Herriman Blvd
City:	Noblesville, Indiana 46060
Phone #:	317-776-6577
MSOP #:	M057-31049-00080

I hereby certify that IDI Fabrication, Inc. is:

still in operation.

I hereby certify that IDI Fabrication, Inc. is:

no longer in operation.

in compliance with the requirements of MSOP M057-31049-00080.

not in compliance with the requirements of MSOP M057-31049-00080.

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:

Mail to: Permit Administration and Support Section

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

IDI Fabrication, Inc.
14444 Herriman Blvd
Noblesville, Indiana 46060

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 IDI Fabrication, Inc. 14444 Herriman Blvd, Noblesville, Indiana 46060, completed construction of the insulating plastic materials and films on _____ in conformity with the requirements and intent of the construction permit application received by the Office of Air Quality on **Reviewer: Insert date application received at IDEM** and as permitted pursuant to New Source Construction Permit and Minor Source Operating Permit No. M057-31049-00080, Plant ID No. 057-00080 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)

**Appendix A: Emissions Calculations
Uncontrolled Emissions for Entire Source**

Company Name: IDI Fabrication, Inc.
Address City IN Zip: 14444 Herriman Blvd., Noblesville, IN 46060-4900
Permit Number: 057-32397-00080
Reviewer: Janet Mobley

Uncontrolled Emissions (tons/yr)

Emission Units	PM	PM10	PM2.5	SO2	NOx	VOC	CO	GHG, as CO2e	Total HAPS	Worst HAP	
Mixer 1 (Worst Case)	2.81	2.81	2.81	0.00	0.00	7.60	0.00	0.00	4.01	2.52	Styrene
Combustion Sources	0.01	0.03	0.03	0.00	0.44	0.02	0.37	528.80	0.01	0.01	Hexane
Deflashing Operation*	negl.	negl.	negl.	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Fugitive Sources	0.03	0.01	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Hydraulic Compression Molding Press (Press 1)(Worst Case)	0.00	0.00	0.00	0.00	0.00	0.03	0.00	0.00	0.03	0.03	Styrene
Cleaning Solvent **	0.00	0.00	0.00	0.00	0.00	negl.	0.00	0.00	0.00	0.00	
Two (2) electric post-cure ovens	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Small punch presses	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
Sanding Machine	0.93	0.93	0.93	0.00	0.00	0.00	0.00	0.00	0.00	0.00	
TOTAL UNCONTROLLED EMISSIONS	3.78	3.78	3.77	0.00	0.44	7.66	0.37	528.80	4.05	2.56	Total Styrene (Worst Case)

* Deflashing operations are performed using a handheld trimmer, and trim large pieces, with negligible particulate.

** Cleaning solvent emissions are from the use of Ship Shape cleaning solvent and are already accounted for in Mixer 1 emissions.

Appendix A: Emissions Calculations
Mixer Operations

Page 2 of 7 TSD App A

Uncontrolled VOC & HAP Emissions
Company Name: IDI Fabrication, Inc.
Address City IN Zip: 14444 Heritman Blvd., Noblesville, IN 46080-4900
Permit Number: 067-32357-00080
Reviewer: Janet Mobley

FORMULA 1

Raw Material	VOC Content (wt. %)	Percent of Total Mixture	Maximum Throughput (lb/hr)	Potential VOC Emissions (lb/hr)	PTE VOC Emissions (tpy)	HAP Flash-Off %	PTE HAP (lb/hr)	PTE HAP (tpy)	
Formula Weight (lbs)	493.99		Mixing Time (min)	46.4					
Ship Shape Cleaner	100.0%	0.00%	0.22	0.22	0.98				
Resin Component 1	33.0%	18.22%	118.34	0.38	1.68				
Resin Component 2	67.0%	18.22%	118.34	0.78	3.41				
Styrene	100.0%	5.09%	32.31	0.32	1.42	1.0%	32.31	1.40	Styrene
Modifier H	75.0%	0.11%	0.70	0.01	0.02				
Polymerization Initiator 1	75.0%	0.51%	3.28	0.02	0.11				
Polymerization Initiator 2	0.0%	0.35%	2.23	0.00	0.00				
Polymerization Initiator 3	0.0%	0.03%	0.00	0.00	0.00				
Powder Component 1	0.0%	0.61%	3.69	0.00	0.00				
Filler Component	0.0%	56.28%	359.35	0.00	0.00				
Colorant Component	0.0%	0.61%	3.69	0.00	0.00				
Total FORMULA 1	99.97%		838.53		7.80			1.40	

FORMULA 2

Raw Material	VOC Content (wt. %)	Percent of Total Mixture	Maximum Throughput (lb/hr)	Potential VOC Emissions (lb/hr)	PTE VOC Emissions (tpy)	HAP Flash-Off %	PTE HAP (lb/hr)	PTE HAP (tpy)	
Formula Weight (lbs)	449.92		Mixing Time (min)	46.4					
Ship Shape Cleaner	100.0%	0.00%	0.22	0.22	0.98				
Resin Component	33.0%	38.87%	213.25	0.70	3.03				
Styrene	100.0%	3.59%	20.70	0.21	0.91	1.0%	20.70	0.90	Styrene
Modifier H	75.0%	0.11%	0.64	0.00	0.02				
Polymerization Initiator 1	0.0%	0.27%	1.57	0.00	0.00				
Polymerization Initiator 2	0.0%	0.44%	2.58	0.00	0.00				
Polymerization Initiator 3	0.0%	0.00%	0.00	0.00	0.00				
Colorant Component	0.0%	0.67%	3.90	0.00	0.00				
Powder Component 1	0.0%	0.00%	0.00	0.00	0.00				
Filler Component	0.0%	53.34%	310.19	0.00	0.00				
Styrene	100.0%	4.00%	23.26	0.23	1.02	1.0%	23.26	1.01	Styrene
Total FORMULA 2	99.06%		576.30		5.99			1.91	

FORMULA 3

Raw Material	VOC Content (wt. %)	Percent of Total Mixture	Maximum Throughput (lb/hr)	Potential VOC Emissions (lb/hr)	PTE VOC Emissions (tpy)	HAP Flash-Off %	PTE HAP (lb/hr)	PTE HAP (tpy)	
Formula Weight (lbs)	521.25		Mixing Time (min)	46.4					
Ship Shape Cleaner	100.0%	0.00%	0.22	0.22	0.98				
Resin Component 1	33.0%	25.89%	174.43	0.68	2.52				
Resin Component 2	30.0%	8.63%	58.14	0.17	0.78				
Styrene	100.0%	8.63%	58.14	0.68	2.56	1.0%	58.14	2.52	Styrene
Polymerization Initiator 1	75.0%	0.25%	1.65	0.01	0.06				
Polymerization Initiator 2	0.0%	0.41%	2.78	0.00	0.00				
Modifier H	75.0%	0.50%	0.00	0.00	0.00				
Polymerization Initiator 3	0.0%	0.00%	0.00	0.00	0.00				
Flame Retardant Component	0.0%	2.30%	15.50	0.00	0.00				
Powder Component 1	0.0%	0.76%	5.12	0.00	0.00				
Powder Component 2	0.0%	52.67%	354.18	0.00	0.00				
Colorant Component	0.0%	0.38%	2.56	0.00	0.00				
Antimony Compounds	99.6%	0.00%	34.29	0.00	0.00	1.0%	34.29	1.49	Antimony
Total FORMULA 3	89.82%		707.04		6.85			4.01	

Worst Case Total VOC: 7.80
Worst Case Total HAP: 4.01
Total Styrene (Worst Case): 2.52

WORST CASE EMISSIONS FOR VOC, HAPs

Notes: The previous calculations for 067-31049-00080 used 21 minutes as the mixing time (only the time the mixer ran). The mixing time is revised in this AA. Since only one formula can be mixed at a time, PTE is based on the worst case emissions. Mixing time (min) provided by facility and is based upon actual measurements of the total amount of time to make a batch (includes batch prep, mixing and testing). It is assumed that VOC and Styrene emissions from the resins and other formulation components can be emitted during the entire mixing cycle. VOC Content supplied by source from Material Safety Data Sheets (MSDS) Percent of Total Mixture and Formula Weight supplied by source.

*There are no AP-42 emission factors for flash-off for this closed process. IDEM has recognized the use of this emission factor in a letter dated 6/6/1988 from Eugene C. Paik, IDEM, as the best information currently available.

Methodology for all Formulation Calculations Above:

Maximum throughput (lbs per hour) = Formula Weight (lbs) x 60 minutes/hr / mixing time (minutes) x % of total mixture
Potential VOC emissions (lb/hr) = Maximum throughput (lb/hr) x VOC Content (wt %)
Potential VOC emissions (tpy) = Potential VOC emissions x 8760 (hrs/yr) / 2000 (lbs/ton)
Potential HAP emissions (lb/hr) = Maximum throughput (lb/hr) x % Content (wt %) x Flash-off (%)
Potential HAP emissions (tpy) = Potential HAP emissions x 8760 (hrs/yr) / 2000 (lbs/ton)

IDI Fabrication, Inc.
PM Emission Calculations - Mixer 1

Appendix A: Emissions Calculations

Company Name: IDI Fabrication, Inc.
Address City IN Zip: 14444 Herriman Blvd., Noblesville, IN 46060-4900
Permit Number: 057-32397-00080
Reviewer: Janet Mobley

Emission Unit Description	Maximum Process Throughput (lb/hr)	Weight % Fillers and Powders	PM Emission Factor	Potential PM Emissions (ton/yr)	Dry Filters Control Efficiency	Actual PM Emissions (ton/yr)	Determination of Whether Controls Required			
							Process Throughput ton/hour	State Allowable PM lb/hr	Actual lb/hr Without Factoring in Controls	Control Device Needed?
Mixer 1										
Formula 1	638.63	56.89%	1.00%	2.70	95.00%	0.14	0.32	1.91	0.62	FALSE
Formula 2	576.30	53.34%	1.00%	2.29	95.00%	0.11	0.29	1.78	0.52	FALSE
Formula 3	707.04	53.33%	1.00%	2.81	95.00%	0.14	0.35	2.04	0.64	FALSE
Worst Case Total PM (ton/yr)				2.81						

Notes:

Maximum Process Throughput values for each formulation processed in Mixer 1 obtained from Mixer Operations spreadsheet.

Weight % Fillers and Powders based upon the amount of dry material added as part of the 3 formulations processed in Mixer 1 provided by facility.

PM Emission Factor obtained from AP-42, Chapter 6.4, Table 6.4-1

Dry Filters Control Efficiency based upon estimation for type of filters used.

Compliance with PM emission limit for Mixer 1 is based upon the Process Weight Rate Rule in 326 IAC 6-3 (TRUE = filter control required to comply, FALSE = filter control not required to comply).

Based upon measurements obtained by the facility, only 8 minutes of the total 46.42 minutes for the complete mixer cycle involves the addition of dry raw materials (pigment and filler powders), which is the only time that dust can be generated.

Therefore, PM emissions are only generated for 17% of the total mixing time (8 mins/46.42 mins x 100).

Assume PM= PM10=PM2.5

Methodology:

Potential PM Emissions (ton/yr) = Throughput (lb/hr) x Weight % Fillers and Powders x PM Emission Factor % x (8760 hr/yr) x (1 ton/2000 lb) * 17% of total mixing cycle.

Actual PM Emissions (ton/yr) = Potential PM Emissions (ton/yr) x (1-Baghouse Control Efficiency %)

Appendix A: Emissions Calculations
Natural Gas Combustion Only
MM BTU/HR <100

Company Name: IDI Fabrication, Inc.
Address City IN Zip: 14444 Herriman Blvd., Noblesville, IN 46060-4900
Permit Number: 057-32397-00080
Reviewer: Janet Mobley

Heat Input Capacity	HHV	Potential Throughput
MMBtu/hr	mmBtu	MMCF/yr
	mmscf	
110	1000	8.8

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100 **see below	5.5	84
Potential Emission in tons/yr	0.01	0.03	0.03	0.00	0.44	0.02	0.37

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.
 PM2.5 emission factor is filterable and condensable PM2.5 combined.
 **Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation =

Methodology

All emission factors are based on normal firing.
 MMBtu = 1,000,000 Btu
 MMCF = 1,000,000 Cubic Feet of Gas
 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.
 Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MM
 Emission (tons/yr) = Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

Emission Factor in lb/MMcf	HAPs - Organics					Totals
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	
	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	
Potential Emission in tons/yr	9.198E-06	5.256E-06	3.285E-04	7.884E-03	1.489E-05	8.24E-03

Emission Factor in lb/MMcf	HAPs - Metals					Totals
	Lead	Cadmium	Chromium	Manganese	Nickel	
	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	
Potential Emission in tons/yr	2.190E-06	4.818E-06	6.132E-06	1.664E-06	9.198E-06	2.40E-05
	Totals					8.27E-03

The five highest organic and metal HAPs emission factors are provided above.
 Additional HAPs emission factors are available in AP-42, Chapter 1.
 See next page for Greenhouse Gas calculations.

updated 7/11

Emission Factor in lb/MMcf	Greenhouse Gas		
	CO2	CH4	N2O
	120,000	2.3	2.2
Potential Emission in tons/yr	526	0.0	0.0
Summed Potential Emissions in tons/yr	526.6		
CO2e Total in tons/yr	526.6		

Methodology

The N2O Emission Factor for uncontrolled is 2.2. The N2O Emission Factor for low Nox 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 1-03-006-03.
 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 GWP (21)

updated 7/11

**Appendix A: Emissions Calculations
Fugitive Emissions - Paved Roads**

Company Name: IDI Fabrication, Inc.
Address City IN Zip: 14444 Herriman Blvd., Noblesville, IN 46060-4900
Permit Number: 057-32397-00080
Reviewer: Janet Mobley

Paved Roads Fugitive Dust

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 (miles/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Passenger Vehicles entering plants	30.0	1.0	30.0	2.5	75.0	500	0.095	2.8	1036.9
Passenger Vehicle leaving plants	30.0	1.0	30.0	2.5	75.0	500	0.095	2.8	1036.9
Truck entering plants	2.5	1.0	2.5	17.5	43.8	500	0.095	0.2	86.4
Truck leaving plants	2.5	1.0	2.5	17.5	43.8	500	0.095	0.2	86.4
Total			65.0		237.5			6.2	2246.7

Average Vehicle Weight Per Trip = 3.7 tons/trip
Average Miles Per Trip = 0.09 miles/trip

Unmitigated Emission Factor, Ef = $[k * (sl)^{0.91} * (W)^{1.02}]$ (Equation 1 from AP-42 13.2.1.3 (12/2011))

	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 =	3.7	3.7	3.7	tons = average vehicle weight (provided by source)
sl =	0.6	0.6	0.6	g/m ² = Ubiquitous Baseline Silt Loading Values of paved roads (Table 13.2.1-2)

Taking natural mitigation due to precipitation into consideration, Mitigated Emission Factor, Eext = $E * [1 - (p/4N)]$

Mitigated Emission Factor, Eext = $Ef * [1 - (p/4N)]$
where p = 125 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, Ef =	0.03	0.01	0.00	lbs/mile
Mitigated Emission Factor, Eext =	0.02	0.00	0.00	lbs/mile

Process	Unmitigated PTE of PM (tpy)	Unmitigated PTE of PM10 (tpy)	Unmitigated PTE of PM2.5 (tpy)	Mitigated PTE of PM (tpy)	Mitigated PTE of PM10 (tpy)	Mitigated PTE of PM2.5 (tpy)
Passenger Vehicles entering plants	0.01	0.00	0.00	0.01	0.00	0.00
Passenger Vehicle leaving plants	0.01	0.00	0.00	0.01	0.00	0.00
Truck entering plants	0.00	0.00	0.00	0.00	0.00	0.00
Truck leaving plants	0.00	0.00	0.00	0.00	0.00	0.00
	0.029	0.006	0.001	0.03	0.01	0.00

Methodology

Total Weight driven per day (ton/day) = Maximum Weight Loaded (tons/trip) x Maximum trips per day (trip/day)
Maximum one-way distance (miles/trip) = Maximum one-way distance (feet/trip) / 5,280 ft per mile
Maximum one-way miles (miles/day) = Maximum trips per year (trip/day) x Maximum one-way distance (miles/trip)
Average Vehicle Weight Per Trip (ton/trip) = Σ (Total Weight driven per day [ton/day]) / Σ (Maximum trips per day [trip/day])
Average Miles Per Trip (miles/trip) = Σ (Maximum one-way miles [miles/day]) / Σ (Maximum trips per year [trip/day])
Unmitigated PTE (tpy) = Maximum one-way miles (miles/yr) x Unmitigated Emission Factor (lbs/mile) / 2,000 lbs per ton
Mitigated PTE (tpy) = Maximum one-way miles (miles/yr) x Mitigated Emission Factor (lbs/mile) / 2,000 lbs per ton

**Appendix A: Emissions Calculations
Molding Press (Press 1)**

Company Name: IDI Fabrication, Inc.
Address City IN Zip: 14444 Herriman Blvd., Noblesville, IN 46060-4900
Permit Number: 057-32397-00080
Reviewer: Janet Mobley

Formula 1			LCM Factors			PTE VOC / HAP (tpy)
Raw Material/Paste Ingredient	HAP Content (wt %)	Max. Throughput (lbs/hr)	Spread Paste Factor (wt %)	Poured Paste Factor (wt %)	Overall VOC Emission Factor (wt %)	
Styrene	100.00	32.31	0.008	0.003	0.011	0.02

Formula 2			LCM Factors			PTE VOC/HAP (tpy)
Raw Material/Paste Ingredient	HAP Content (wt %)	Max. Throughput (lbs/hr)	Spread Paste Factor (wt %)	Poured Paste Factor (wt %)	Overall VOC Emission Factor (wt %)	
Styrene	100.00	43.96	0.008	0.003	0.011	0.02

Formula 3			LCM Factors			PTE VOC / HAP (tpy)
Raw Material/Paste Ingredient	HAP Content (wt %)	Max. Throughput (lbs/hr)	Spread Paste Factor (wt %)	Poured Paste Factor (wt %)	Overall VOC Emission Factor (wt %)	
Styrene	100.00	58.14	0.008	0.003	0.011	0.03 Worst Case

Notes:

Paste material is mixed in a separate mixer and then transferred to the Liquid Composite Molding Press (LCM), (Press 1) using a pouring wand to disperse the liquid mixture on an open flat surface mold

Emission Factor obtained from ANSI/ACMA/ICPA UEF-1-2011a

HAP contents and Maximum Throughput values for three formulas obtained from mixer operations spreadsheet

LCM Spread Paste Factor (% of paste weight) = 0.0072 * weight % styrene + 0.0008

LCM Poured Paste Factor (% of paste weight) = 0.0022 * weight % styrene + 0.0008

Overall VOC Emission Factor = LCM Spread Paste Factor + LCM Poured Paste Factor

Methodology

Potential VOC emissions (tpy) = max. throughput (lbs/hr) * overall VOC Emission Factor (%) * 8760 hours/year / 2,000 lbs/ton

IDI Fabrication, Inc.
PM Emission Calculations - Sanding Machine

Appendix A: Emissions Calculations
Sanding Machine

Company Name: IDI Fabrication, Inc.
Address City IN Zip: 14444 Herriman Blvd., Noblesville, IN 46060-4900
Permit Number: 057-32397-00080
Reviewer: Janet Mobley

Unit ID/Control Device	Baghouse ID	Control Efficiency (%)	Actual Quantity of Dust Collected (lbs/wk)	Maximum Quantity of Dust Collected (lb/hr)	Potential PM Emissions (tons/yr)	Actual PM Emissions (tons/yr)
Sanding Machine Dust Collector	BH1	95.00%	35.42	0.20	0.93	0.05
Total PTE					0.93	0.05

Notes:

Baghouse control efficiency value is conservatively estimated based upon equipment design.

Actual Quantity of Dust Collected is based upon actual measurements of the weight of full bags (collecting dust from the collector) obtained by the facility.

Assume PM = PM10 = PM2.5

Methodology:

Maximum Quantity of Dust Generated (lbs/hr) = Actual Quantity of Dust Collected (lbs/wk) X (1 wk/5 days) X (1 day/8 hours) X (2000 hrs/yr) X 1 yr/8760 hrs

Potential Emissions (tons/yr) = Maximum Quantity of Dust Collected (lbs/hr) X (8760 hrs/yr) X (1 ton/2000 lbs) X 1/Control efficiency %

Actual Emissions (tons/yr) = PTE Before Controls (tons/yr) X (1- Control Efficiency %)



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

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

TO: Scott Doll
IDI Fabrication, Inc.
14444 Herriman Boulevard
Noblesville, IN 46060

DATE: January 22, 2013

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

SUBJECT: Final Decision
First Administrative Amendment to MSOP
057-32397-00080

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:
Joseph VanCamp, Cornerstone Environmental
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

Mail Code 61-53

IDEM Staff	PWAY 1/22/2013 IDI Fabrication Inc. 057-32397-00080 (final)		Type of Mail: 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		Scott Doll IDI Fabrication Inc. 14444 Herriman Blvd Noblesville IN 46060-4900 (Source CAATS)										
2		Noblesville City Council and Mayors Office 16 S. 10th St. Noblesville IN 46060 (Local Official)										
3		Hamilton County Health Department 18030 Foundation Dr. #A Noblesville IN 46060-5405 (Health Department)										
4		Hamilton County Board of Commissioners One Hamilton County Square Noblesville IN 46064 (Local Official)										
5		Glidden Fence Co. 17804 Spring Mill Rd Westfield IN 46074 (Affected Party)										
6		Environmental Field Services, Inc. 40 SR 32 W Westfield IN 46074 (Affected Party)										
7		Jill Butterfield 17903 Spring Mill Rd Westfield IN 46074 (Affected Party)										
8		Steven Newman 17922 Spring Mill Rd Westfield IN 46074 (Affected Party)										
9												
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12												
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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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