



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

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

**Eric J. Holcomb**  
*Governor*

**Brian C. Rockensuess**  
*Commissioner*

To: Interested Parties

Date: June 28, 2024

From: Jenny Acker, Chief  
Permits Branch  
Office of Air Quality

Source Name: Genesis Products, Inc., Plant 5, 8, 9 and 10

Permit Level: MSOP Administrative Amendment

Permit Number: 039-47951-00765

Source Location: 1846, 1853, 1811, and 1778 Eisenhower Drive South, Goshen, Indiana 46526

Type of Action Taken: Changes that are administrative in nature

## Notice of Decision: Approval

Please be advised that on behalf of the Commissioner of the Department of Environmental Management, I have issued a decision regarding the matter referenced above. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

The final decision is available on the IDEM website at: <http://www.in.gov/apps/idem/caats/>  
To view the document, choose Search Option **by Permit Number**, then enter permit 47951. This search will also provide the application received date and **final** permit issuance date.

The final decision is also available via IDEM's Virtual File Cabinet (VFC). Please go to: <https://www.in.gov/idem> and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria.

*(continues on next page)*

If you would like to request a paper copy of the permit document, please contact IDEM's Office of Records Management:

IDEM - Office of Records Management  
Indiana Government Center North, Room 1207  
100 North Senate Avenue  
Indianapolis, IN 46204  
Phone: (317) 232-8667  
Fax: (317) 233-6647  
Email: [IDEMFILEROOM@idem.in.gov](mailto:IDEMFILEROOM@idem.in.gov)

If you wish to challenge this decision, IC 4-21.5-3-7 requires that you file a petition for administrative review. This petition may include a request for stay of effectiveness and must be submitted to the Indiana Office of Administrative Law Proceedings, 100 N. Senate Avenue Suite N802, Indianapolis, IN 46204, **within eighteen (18) calendar days from 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 Indiana Office of Administrative Law Proceedings (OALP)
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OALP 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 OALP 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.



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**Eric J. Holcomb**  
Governor

**Brian C. Rockensuess**  
Commissioner

June 28, 2024

Ms. Tori Patterson  
Genesis Products, Inc., Plant 5, 8, 9 and 10  
1853 Eisenhower Drive South  
Goshen, IN 46526

Re: 039-47951-00765  
Administrative Amendment to  
MSOP No. M039-42977-00765

Dear Ms. Patterson:

Genesis Products, Inc., Plant 5, 8, 9, and 10 was issued a Minor Source Operating Permit (MSOP) No. M039-42977-00765 on August 14, 2020 for a stationary wood counter tops manufacturing plant located at 1846, 1853, 1811, and 1778 Eisenhower Drive South, Goshen, Indiana 46526. On June 13, 2024, the Office of Air Quality (OAQ) received an application from the source relating to the addition of new emission units, constructed under the provisions of 326 IAC 2-1.1-3 (Exemptions).

Pursuant to the provisions of 326 IAC 2-6.1-6(d), the permit is hereby administratively amended as described in the attached Technical Support Document.

All other conditions of the permit shall remain unchanged and in effect.

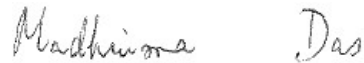
Please find attached the entire MSOP as amended.

A copy of the permit is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>. A copy of the application and permit is also available via IDEM's Virtual File Cabinet (VFC). To access VFC, please go to: <https://www.in.gov/idem/> and enter VFC in the search box. You will then have the option to search for permit documents using a variety of criteria. For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: <https://www.in.gov/idem/airpermit/public-participation/>; and the Citizens' Guide to IDEM on the Internet at: <https://www.in.gov/idem/resources/citizens-guide-to-idem/>.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5.

If you have any questions regarding this matter, please contact Tori Tamburrino, 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) 233-0043 or (800) 451-6027, and ask for Tori Tamburrino or (317) 233-0043.

Sincerely,

Handwritten signature of Madhurima D. Moulik in cursive script.

Madhurima D. Moulik, Ph.D., Section Chief  
Permits Branch  
Office of Air Quality

Attachment(s): Updated Permit and Technical Support Document

cc: File - Elkhart County  
Elkhart County Health Department  
U.S. EPA, Region 5  
Compliance and Enforcement Branch  
IDEM Northern Regional Office



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Eric J. Holcomb  
Governor

Brian C. Rockensuess  
Commissioner

**Minor Source Operating Permit  
OFFICE OF AIR QUALITY**

**Genesis Products, Inc., Plant 5, 8, 9, and 10  
1846, 1853, 1811 and 1778 Eisenhower Drive South  
Goshen, Indiana 46526**

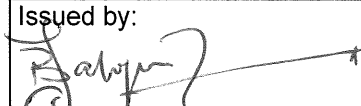
(herein known as the Permittee) is hereby authorized to operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this permit.

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

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard, except for the requirement to obtain a MSOP under 326 IAC 2-6.1.

Operation Permit No.: M039-42977-00765	
Master Agency Interest ID: 14510	
Issued by: Original Signed by:  Madhurima D. Moulik, Ph.D., Section Chief Permits Branch Office of Air Quality	Issuance Date: August 14, 2020  Expiration Date: August 14, 2025

Minor Permit Revision No. 039-43203-00765, issued on October 13, 2020.  
Significant Permit Revision No. 039-44567-00765, issued on December 13, 2021.  
Administrative Amendment No. 039-45797-00765, issued on October 13, 2022.

Administrative Amendment No. 039-47951-00765	
Issued by:   Madhurima D. Moulik, Ph.D., Section Chief Permits Branch Office of Air Quality	Issuance Date: June 28, 2024  Expiration Date: August 14, 2025

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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 wood counter tops manufacturing plant.

Source Address:	1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526
General Source Phone Number:	(574) 266-8292
SIC Code:	2499 (Wood Products, Not Elsewhere Classified)
County Location:	Elkhart
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Minor Source Operating Permit Program Minor Source, under PSD Rules Minor Source, Section 112 of the Clean Air Act Not 1 of 28 Source Categories

### A.2 Source Definition

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This stationary wood counter tops manufacturing plant consists of four (4) plants:

- (a) Plant 5, located at 1846 Eisenhower Drive South, Goshen, Indiana 46526;
- (b) Plant 8, located at 1853 Eisenhower Drive South, Goshen, Indiana 46526;
- (c) Plant 9, located at 1811 Eisenhower Drive South, Goshen, Indiana 46526;
- (d) Plant 10, located at 1778 Eisenhower Drive South, Goshen, Indiana 46526.

Since the four (4) plants have common ownership, have the same two-digit Standard Industrial Classification (SIC) Code, and are located on contiguous or adjacent properties, they will be considered one (1) source, effective from the date of issuance of this permit.

### A.3 Emission Units and Pollution Control Equipment Summary

---

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

#### Plant 5

- (a) Two (2) adhesive spray booths, identified as Spray Booth 1 (SB1) and Spray Booth 2 (SB2), constructed in 2015, modified in 2017, each equipped with one (1) air assisted airless applicator and having a maximum throughput capacity of 0.6 gal/hour of adhesive, each, using dry filter systems for control and exhausting through stacks SB1S and SB2S to the atmosphere, respectively;
- (b) Two (2) adhesive spray booths, identified as Spray Booth 3 (SB3) and Spray Booth 4 (SB4), constructed in 2017, each equipped with one (1) air assisted airless applicator and having a maximum throughput capacity of 0.6 gal/hour of adhesive, each, using dry filter systems for control and exhausting indoors;



- (c) Two (2) adhesive spray booths, identified as Spray Booth 5 (SB5) and Spray Booth 6 (SB6), constructed in 2018, each equipped with one (1) air assisted airless applicator and having a maximum throughput capacity of 0.6 gal/hour of adhesive, each, using dry filter systems for control and exhausting indoors;
- (d) One (1) adhesive spray booth, identified as Spray Booth 7 (SB7), constructed in 2020, with a maximum capacity of 0.6 gal/hour of adhesive, using dry filter systems as control, and exhausting indoors.
- (e) One (1) adhesive spray booth, identified as Spray Booth 8 (SB8), constructed in 2020, equipped with one (1) air assisted airless applicator and having a maximum throughput capacity of 0.6 gal/hour of adhesive, using dry filter systems for control and exhausting to stack SB8S;
- (f) Woodworking Operations, identified as WW1, constructed in 2015, including CNC Routing and sanding activities, with a maximum throughput capacity of 2552 pounds of wood per hour, using one (1) integral baghouse dust collector, identified as DC1, for control and exhausting indoors;
- (g) Natural gas-fired combustion sources with heat input equal to or less than ten million (10,000,000) British thermal units per hour, including:
  - (1) One (1) natural gas-fired, air makeup unit, identified as AM1, constructed in 2015, with a maximum heat input capacity of 0.28 MMBtu/hr, uncontrolled and exhausting indoors;
  - (2) One (1) natural gas-fired forced air furnace, identified as OH1, constructed in 2015, with a maximum heat input capacity of 0.75 MMBtu/hr, uncontrolled and exhausting to stack OH1S; and
  - (3) Five (5) natural gas-fired radiant space heaters, identified as RTH1 through RTH5, constructed in 2015, with a maximum heat input capacity of 0.50 MMBtu/hr, each, uncontrolled and exhausting to stacks RTH1S through RTH5S, respectively.
- (h) Paved roads and parking lots with public access;
- (i) Fifteen (15) wood sanding down draft tables, identified as ST1 through ST15, constructed in 2018, with a maximum throughput capacity of 200 lbs/hr, each, using dust collectors STF1- STF15 for control, and exhausting indoors.

#### Plant 8

- (j) Five (5) indirect, natural gas-fired thermocyclers, identified as HTC1 through HTC5, constructed in 2017, with a maximum heat input capacity of 0.72 MMBtu/hr, each, uncontrolled and exhausting indoors.
- (k) Woodworking Operations, identified as WW2, constructed in 2017, with a maximum throughput capacity of 3000 pounds of wood per hour, using one (1) integral baghouse DC2 for control, with a maximum air flow rate of 57,000 cfm, and exhausting indoors;

- (l) Various woodworking equipment, controlled by seven (7) baghouses, exhausting indoors, described as follows:

Control Device ID	Year Installed	Air Flow Rate (cfm)	Equipment / Capacity
INBH1	2017	1900	one (1) router and one (1) saw, 1000lbs/hr
INBH2	2017	1200	one (1) chop saw, 500lbs/hr
INBH3	2017	1900	miscellaneous woodworking, 2000,lb/hr
INBH4	2021	5000	one (1) laminator, 3500 feet/hr
INBH20	2021	5000	one (1) laminator, 3500 feet/hr
INBH21	2021	5000	one (1) laminator, 3500 feet/hr
INBH22	2022	5000	one (1) laminator, 3500 feet/hr

- (m) Six (6) hot melt adhesive machines, identified as HM1 through HM6, constructed in 2017, with a maximum capacity of 2.7 gal/hr, each, uncontrolled and exhausting indoors.
- (n) Two (2) natural gas-fired ovens, identified as OV1 and OV2, constructed in 2024, with a maximum capacity of 0.27 MMBtu/hr, each, using no control, and exhausting OVS1 and OVS2, respectively.

Plant 9

- (o) One (1) surface coating booth, identified as SB11, constructed in 2019, with a maximum capacity of 0.25 gal/hr, using dry filter systems as control, and exhausting to stack SB11S.
- (p) Four (4) indirect, natural gas-fired thermocyclers, identified as HTC6 through HTC9, constructed in 2019, with a maximum heat input capacity of 0.72 MMBtu/hr, each, uncontrolled and exhausting indoors.
- (q) Woodworking Operations, identified as WW3, constructed in 2019, with a maximum throughput capacity of 3000 pounds of wood per hour, using one (1) integral baghouse DC3 for control, with a maximum air flow rate of 57,000 cfm, and exhausting indoors;
- (r) Various woodworking equipment, controlled by fifteen (15) baghouses, exhausting indoors, described as follows:

Control Device ID	Year Installed	Air Flow Rate (cfm)	Equipment / Capacity
INBH5	2019 - 2021	5000	two (2) chop saws and two (2) routers, 1000lbs/hr
INBH6	2019 - 2021	5000	four (4) saws, 1500 lbs/hr
INBH7	2019 - 2021	5000	one (1) saw, 500 lbs/hr,
INBH8	2019 - 2021	5000	two (2) edge banders, 500feet/hr
INBH9	2019 - 2021	5000	one (1) edge bander, 500 feet/hr
INBH10	2019 - 2021	5000	one (1) edge bander, 500 feet/hr
INBH11	2019 - 2021	5000	one (1) edge bander, 500 feet/hr
INBH12	2019 - 2021	5000	one (1) edge bander, 500 feet/hr
INBH13	2019 - 2021	5000	one (1) edge bander, 500 feet/hr
INBH14	2019 - 2021	5000	one (1) edge bander, 500 feet/hr
INBH15	2019 - 2021	5000	one (1) router and two (2) table saws, 1000lbs/hr
INBH16	2019 - 2021	5000	one (1) edge bander, 500 feet/hr
INBH17	2019	1200	one (1) router, 200lbs/hr
INBH18	2019	1200	one (1) router, 200lbs/hr
INBH19	2019	1200	one (1) router, 200lbs/hr

## Plant 10

- (s) Woodworking Operations, identified as WW4, constructed in 2022, with a maximum throughput capacity of 3000 pounds of wood per hour, using one (1) integral baghouse DC4 for control, with a maximum air flow rate of 57,000 cfm, and exhausting indoors.

## **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 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, M039-42977-00765, 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.3 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.4 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.5 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.6 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.7 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.8 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.9 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.10 Prior Permits Superseded [326 IAC 2-1.1-9.5]**

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- (a) All terms and conditions of permits established prior to M039-42977-00765 and issued pursuant to permitting programs approved into the state implementation plan have been either:
- (1) incorporated as originally stated,
  - (2) revised, or
  - (3) deleted.
- (b) All previous registrations and permits are superseded by this permit.

**B.11 Termination of Right to Operate [326 IAC 2-6.1-7(a)]**

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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.12 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.13 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.14 Source Modification Requirement**

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

**B.15 Inspection and Entry**

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[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.16 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.17 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 317-233-8590 (ask for OAQ, Billing, Licensing, and Training Section), to determine the appropriate permit fee.

**B.18 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 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(c).
- (d) The notice to be submitted shall include the information enumerated in 326 IAC 14-10-3(d).

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. The analog instrument shall be capable of measuring values outside of the normal range.

- (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, startups or shutdowns of any emission unit or emission control equipment, that results in violations of applicable air pollution control regulations or applicable emission limitations must be kept and retained for a period of three (3) years and 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 emission unit or emission control equipment occurs that lasts more than one (1) hour, the condition shall be reported to OAQ, using the Malfunction Report Forms (2 pages). Notification must be made by telephone or other electronic means, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of the occurrence.
- (c) Failure to report a malfunction of any emission unit or emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information on the scope and expected duration of the malfunction must be provided, including the items specified in 326 IAC 1-6-2(c)(3)(A) through (E).
- (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]**

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- (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:

#### Plant 5

- (a) Two (2) adhesive spray booths, identified as Spray Booth 1 (SB1) and Spray Booth 2 (SB2), constructed in 2015, modified in 2017, each equipped with one (1) air assisted airless applicator and having a maximum throughput capacity of 0.6 gal/hour of adhesive, each, using dry filter systems for control and exhausting through stacks SB1S and SB2S to the atmosphere, respectively;
- (b) Two (2) adhesive spray booths, identified as Spray Booth 3 (SB3) and Spray Booth 4 (SB4), constructed in 2017, each equipped with one (1) air assisted airless applicator and having a maximum throughput capacity of 0.6 gal/hour of adhesive, each, using dry filter systems for control and exhausting indoors;
- (c) Two (2) adhesive spray booths, identified as Spray Booth 5 (SB5) and Spray Booth 6 (SB6), constructed in 2018, each equipped with one (1) air assisted airless applicator and having a maximum throughput capacity of 0.6 gal/hour of adhesive, each, using dry filter systems for control and exhausting indoors;
- (d) One (1) adhesive spray booth, identified as Spray Booth 7 (SB7), approved in 2020 for construction, with a maximum capacity of 0.6 gal/hour of adhesive, using dry filter systems as control, and exhausting indoors.
- (e) One (1) adhesive spray booth, identified as Spray Booth 8 (SB8), approved in 2020 for construction, equipped with one (1) air assisted airless applicator and having a maximum throughput capacity of 0.6 gal/hour of adhesive, using dry filter systems for control and exhausting to stack SB8S;

#### Plant 9

- (n) One (1) surface coating booth, identified as SB11, constructed in 2019, with a maximum capacity of 0.25 gal/hr, using dry filter systems as control, and exhausting to stack SB11S.

(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 Emission Limitations [326 IAC 6-3-2(d)]

- (a) Particulate from the eight (8) adhesive spray booths (Spray Booth 1 (SB1) through Spray Booth 8 (SB8) and one (1) surface coating booth SB11 shall be controlled by dry particulate filters and the Permittee shall operate the control device in accordance with manufacturer's specifications.
- (b) If overspray is visibly detected at the exhaust or accumulates on the ground, the Permittee shall inspect the control device and do either of the following no later than four (4) hours after such observation:
  - (1) Repair control device so that no overspray is visibly detectable at the exhaust or accumulates on the ground.

- (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumulates on the ground.
- (c) If overspray is visibly detected, the Permittee shall maintain a record of the action taken as a result of the inspection, any repairs of the control device, or change in operations, so that overspray is not visibly detected at the exhaust or accumulates on the ground. These records must be maintained for five (5) years.

**D.1.2 Preventive Maintenance Plan [326 IAC 1-6-3]**

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

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

**D.1.3 Record Keeping Requirements**

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- (a) To document the compliance status with Condition D.1.1(c), the Permittee shall maintain a record of any actions taken if overspray is visibly detected.
- (b) Section C - General Record Keeping Requirements contains the Permittee's obligations with regard to the records required by this condition.



**SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS**

**Emissions Unit Description:**

Plant 5

- (f) Woodworking Operations, identified as WW1, constructed in 2015, including CNC Routing and sanding activities, with a maximum throughput capacity of 2552 pounds of wood per hour, using one (1) integral baghouse dust collector, identified as DC1, for control and exhausting indoors;

Plant 8

- (k) Woodworking Operations, identified as WW2, constructed in 2017, with a maximum throughput capacity of 3000 pounds of wood per hour, using one (1) integral baghouse DC2 for control, with a maximum air flow rate of 57,000 cfm, and exhausting indoors;
- (l) Various woodworking equipment, controlled by seven (7) baghouses, exhausting indoors, described as follows:

Control Device ID	Year Installed	Air Flow Rate (cfm)	Equipment / Capacity
INBH1	2017	1900	one (1) router and one (1) saw, 1000lbs/hr
INBH2	2017	1200	one (1) chop saw, 500lbs/hr
INBH3	2017	1900	miscellaneous woodworking, 2000,lb/hr
INBH4	2021	5000	one (1) laminator, 3500 feet/hr
INBH20	2021	5000	one (1) laminator, 3500 feet/hr
INBH21	2021	5000	one (1) laminator, 3500 feet/hr
INBH22	2022	5000	one (1) laminator, 3500 feet/hr

Plant 9

- (p) Woodworking Operations, identified as WW3, constructed in 2019, with a maximum throughput capacity of 3000 pounds of wood per hour, using one (1) integral baghouse DC3 for control, with a maximum air flow rate of 57,000 cfm, and exhausting indoors;
- (q) Various woodworking equipment, controlled by fifteen (15) baghouses, exhausting indoors, described as follows:

Control Device ID	Year Installed	Air Flow Rate (cfm)	Equipment / Capacity
INBH5	2019 - 2021	5000	two (2) chop saws and two (2) routers, 1000lbs/hr
INBH6	2019 - 2021	5000	four (4) saws, 1500 lbs/hr
INBH7	2019 - 2021	5000	one (1) saw, 500 lbs/hr,
INBH8	2019 - 2021	5000	two (2) edge banders, 500feet/hr
INBH9	2019 - 2021	5000	one (1) edge bander, 500 feet/hr
INBH10	2019 - 2021	5000	one (1) edge bander, 500 feet/hr
INBH11	2019 - 2021	5000	one (1) edge bander, 500 feet/hr
INBH12	2019 - 2021	5000	one (1) edge bander, 500 feet/hr
INBH13	2019 - 2021	5000	one (1) edge bander, 500 feet/hr
INBH14	2019 - 2021	5000	one (1) edge bander, 500 feet/hr
INBH15	2019 - 2021	5000	one (1) router and two (2) table saws, 1000lbs/hr
INBH16	2019 - 2021	5000	one (1) edge bander, 500 feet/hr
INBH17	2019	1200	one (1) router, 200lbs/hr
INBH18	2019	1200	one (1) router, 200lbs/hr
INBH19	2019	1200	one (1) router, 200lbs/hr

Plant 10

- (r) Woodworking Operations, identified as WW4, constructed in 2022, with a maximum throughput capacity of 3000 pounds of wood per hour, using one (1) integral baghouse DC4 for control, with a maximum air flow rate of 57,000 cfm, and exhausting indoors.

(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.2.1 Particulate Matter (PM) [326 IAC 6-3-2][326 IAC 2-6.1]**

In order to assure that the woodworking operations (WW1, WW2, WW3, WW4, and INBH1 - INBH22) are, each, exempt from the requirements of 326 IAC 6-3-2, and in order to assure that the source maintains its MSOP status under 326 IAC 2-6.1, particulate from the woodworking operations (WW1, WW2, WW3, WW4, and INBH1 - INBH22) shall be controlled by the associated integral baghouses.

Compliance with this condition, combined with the potential to emit PM<sub>2.5</sub> and PM<sub>10</sub> from all other emission units at the source, shall assure the PM<sub>2.5</sub> and PM<sub>10</sub> emissions from the entire source are less than 100 tons per twelve (12) consecutive month period.

**D.2.2 Preventive Maintenance Plan [326 IAC 1-6-3]**

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

**Compliance Determination Requirements [326 IAC 2-6.1-5(a)(2)]**

**D.2.3 Particulate Control**

In order to assure compliance with Condition D.2.1, the associated integral baghouses shall operate according to manufacturer's specifications and control particulate emissions from the woodworking operations (WW1, WW2, WW3, WW4, and INBH1 - INBH22) at all times that any of the woodworking equipment is in operation.

### SECTION D.3 EMISSIONS UNIT OPERATION CONDITIONS

#### Emissions Unit Description:

##### Plant 8

- (j) Five (5) indirect, natural gas-fired thermocyclers, identified as HTC1 through HTC5, constructed in 2017, with a maximum heat input capacity of 0.72 MMBtu/hr, each, uncontrolled and exhausting indoors.

##### Plant 9

- (o) Four (4) indirect, natural gas-fired thermocyclers, identified as HTC6 through HTC9, constructed in 2019, with a maximum heat input capacity of 0.72 MMBtu/hr, each, uncontrolled and exhausting indoors.

(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.3.1 Particulate Matter (PM) Emissions [326 IAC 6-2-4]

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Pursuant to 326 IAC 6-2-4 (Particulate Emission Limitations for Sources of Indirect Heating), particulate matter emissions from each of the following sources of indirect heating shall not exceed 0.6 pound per MMBtu heat input.

##### D.3.2 Preventive Maintenance Plan [326 IAC 1-6-3]

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

**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>	Genesis Products, Inc., Plant 5, 8, 9, and 10
<b>Source Address:</b>	1846, 1853, 1811 and 1778 Eisenhower Drive South
<b>City:</b>	Goshen, Indiana 46526
<b>Phone #:</b>	(574) 266-8292
<b>MSOP #:</b>	M039-42977-00765

I hereby certify that Genesis Products, Inc., Plant 5, 8, 9, and 10 is:  still in operation.  
 no longer in operation.  
I hereby certify that Genesis Products, Inc., Plant 5, 8, 9, and 10 is:  in compliance with the requirements of MSOP M039-42977-00765.  
 not in compliance with the requirements of MSOP M039-42977-00765.

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

Technical Support Document (TSD) for an Administrative Amendment to a  
Minor Source Operating Permit (MSOP)

**Source Description and Location**

<b>Source Name:</b>	<b>Genesis Products, Inc., Plant 5, 8, 9, and 10</b>
<b>Source Location:</b>	<b>1846, 1853, 1811, and 1778 Eisenhower Drive South, Goshen, Indiana 46526</b>
<b>County:</b>	<b>Elkhart</b>
<b>SIC Code:</b>	<b>2499 (Wood Products, Not Elsewhere Classified)</b>
<b>Operation Permit No.:</b>	<b>M039-42977-00765</b>
<b>Operation Permit Issuance Date:</b>	<b>August 14, 2020</b>
<b>Administrative Amendment No.:</b>	<b>039-47951-00765</b>
<b>Permit Reviewer:</b>	<b>Tori Tamburrino</b>

**Source Definition**

This stationary wood counter tops manufacturing plant consists of four (4) plants:

- (a) Plant 5, located at 1846 Eisenhower Drive South, Goshen, Indiana 46526;
- (b) Plant 8, located at 1853 Eisenhower Drive South, Goshen, Indiana 46526;
- (c) Plant 9, located at 1811 Eisenhower Drive South, Goshen, Indiana 46526;
- (d) Plant 10, located at 1778 Eisenhower Drive South, Goshen, Indiana 46526.

Since the four (4) plants have common ownership, have the same two-digit Standard Industrial Classification (SIC) Code, and are located on contiguous or adjacent properties, they will be considered one (1) source, effective from the date of issuance of this permit.

This determination was initially made under MSOP Administrative Amendment No. 039-45797-00765, issued on October 13, 2022.

**Existing Approvals**

The source was issued MSOP No. M039-42977-00765 on August 14, 2020. The source has since received the following approvals:

Permit Type	Permit Number	Issuance Date
MSOP Minor Permit Revision	039-43203-00765	October 13, 2020
MSOP Significant Permit Revision	039-44567-00765	December 13, 2021
MSOP Administrative Amendment	039-45797-00765	October 13, 2022

**County Attainment Status**

The source is located in Elkhart County.

Pursuant to amendments to Indiana Code IC 13-17-3-14, effective July 1, 2023, a federal regulation that classifies or amends a designation of attainment, nonattainment, or unclassifiable for any area in Indiana under the federal Clean Air Act is effective and enforceable in Indiana on the effective date of the federal regulation.

**326 IAC 1-4-21 Elkhart County**

Pollutant	Designation
SO <sub>2</sub>	Unclassifiable or attainment effective April 9, 2018, for the 2010 primary 1-hour SO <sub>2</sub> standard. Better than national secondary standards effective March 3, 1978.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Unclassifiable or attainment effective August 3, 2018, for the 2015 8-hour ozone standard.
PM <sub>2.5</sub>	Unclassifiable or attainment effective April 15, 2015, for the 2012 annual PM <sub>2.5</sub> standard.
PM <sub>2.5</sub>	Unclassifiable or attainment effective December 13, 2009, for the 2006 24-hour PM <sub>2.5</sub> standard.
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Unclassifiable or attainment effective January 29, 2012, for the 2010 NO <sub>2</sub> standard.
Pb	Unclassifiable or attainment effective December 31, 2011, for the 2008 lead standard.

- (a) **Ozone Standards**  
 Volatile organic compounds (VOC) and Nitrogen Oxides (NO<sub>x</sub>) 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 NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to ozone. Elkhart County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements of Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM<sub>2.5</sub>**  
 Elkhart County has been classified as attainment for PM<sub>2.5</sub>. Therefore, direct PM<sub>2.5</sub>, SO<sub>2</sub>, and NO<sub>x</sub> emissions were reviewed pursuant to the requirements of Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (c) **Other Criteria Pollutants**  
 Elkhart County has been classified as attainment or unclassifiable in Indiana for all the other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

**Fugitive Emissions**

Since this type of operation is not one (1) of the twenty-eight (28) listed source categories under 326 IAC 2-2-1(ff)(1), 326 IAC 2-3-2(g), or 326 IAC 2-7-1(22)(B), and there is no applicable New Source Performance Standard or National Emission Standard for Hazardous Air Pollutants 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.

The fugitive emissions of hazardous air pollutants (HAP) are counted toward the determination of Part 70 Permit (326 IAC 2-7) and MSOP (326 IAC 2-6.1) applicability and source status under Section 112 of the Clean Air Act (CAA).



**Greenhouse Gas (GHG) Emissions**

On June 23, 2014, in the case of *Utility Air Regulatory Group v. EPA*, cause no. 12-1146, (available at [http://www.supremecourt.gov/opinions/13pdf/12-1146\\_4g18.pdf](http://www.supremecourt.gov/opinions/13pdf/12-1146_4g18.pdf)) the United States Supreme Court ruled that the U.S. EPA does not have the authority to treat greenhouse gases (GHGs) as an air pollutant for the purpose of determining operating permit applicability or PSD Major source status. On July 24, 2014, the U.S. EPA issued a memorandum to the Regional Administrators outlining next steps in permitting decisions in light of the Supreme Court’s decision. U.S. EPA’s guidance states that U.S. EPA will no longer require PSD or Title V permits for sources “previously classified as ‘Major’ based solely on greenhouse gas emissions.”

The Indiana Environmental Rules Board adopted the GHG regulations required by U.S. EPA at 326 IAC 2-2-1(zz), pursuant to Ind. Code § 13-14-9-8(h) (Section 8 rulemaking). A rule, or part of a rule, adopted under Section 8 is automatically invalidated when the corresponding federal rule, or part of the rule, is invalidated. Due to the United States Supreme Court Ruling, IDEM, OAQ cannot consider GHG emissions to determine operating permit applicability or PSD applicability to a source or modification.

**Source Status - Existing Source**

This table reflects the unrestricted potential emissions of the source prior to the administrative amendment. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

	Source-Wide Emissions Prior to Administrative Amendment (tons/year)							
	PM <sup>1</sup>	PM <sub>10</sub> <sup>1</sup>	PM <sub>2.5</sub> <sup>1,2</sup>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs
<b>Total PTE of Entire Source Excluding Fugitives*</b>	81.16	81.41	81.41	0.03	4.30	0.36	3.61	0.11
Title V Major Source Thresholds	--	100	100	100	100	100	100	25
<b>Total PTE of Entire Source Including Source-Wide Fugitives*</b>	83.59	81.89	81.52	0.03	4.30	0.36	3.61	0.11
MSOP Thresholds	25	25	25	25	25	25	< 100	< 25

<sup>1</sup>Under the Part 70 Permit program (40 CFR 70), PM<sub>10</sub> and PM<sub>2.5</sub>, not particulate matter (PM), are each considered as a "regulated air pollutant."

<sup>2</sup>PM<sub>2.5</sub> listed is direct PM<sub>2.5</sub>.

\*Fugitive HAP emissions are always included in the source-wide emissions.

The potential to emit particulate matter from the woodworking operations were calculated after consideration of the controls.

- (a) This existing source is not a major stationary source, under PSD (326 IAC 2-2), because no PSD regulated pollutant is emitted at a rate of two hundred fifty (250) tons per year or more and it is not one of the twenty-eight (28) listed source categories, as specified in 326 IAC 2-2-1(ff)(1).
- (b) This existing source is not a major source of HAP, as defined in 40 CFR 63.2, because HAP emissions are less than ten (10) tons per year for any single HAP and less than twenty-five (25) tons per year of a combination of HAPs.
- (c) These emissions are based on the TSD of MSOP Administrative Amendment No. 039-45797-00765, issued on October 13, 2022.

**Emission Units and Pollution Control Equipment  
Constructed Under the Provisions of 326 IAC 2-1.1-3 (Exemptions)**

As part of this permitting action, the source requested to add the following existing emission unit(s) constructed under the provisions of 326 IAC 2-1.1-3 (Exemptions):

- (a) Two (2) natural gas-fired ovens, identified as OV1 and OV2, constructed in 2024, with a maximum capacity of 0.27 MMBtu/hr, each, using no control, and exhausting OVS1 and OVS2, respectively.

The total potential to emit of the emission unit(s) is less than levels specified at 326 IAC 2-1.1-3(e)(1)(A) through (G) and the addition of the emission unit(s) did not require the source to transition to a higher operation permit level. Therefore, pursuant to 326 IAC 2-1.1-3(e), the permit revision requirements under 326 IAC 2-6.1-6, including the requirement to submit an application, do not apply to the emission unit(s). See Appendix A of this Technical Support Document for detailed emission calculations.

**Description of Amendment**

The Office of Air Quality (OAQ) has reviewed an application, submitted by Genesis Products, Inc., Plant 5, 8, 9, and 10 on June 13, 2024, relating to the addition of the new emission units, constructed under the provisions of 326 IAC 2-1.1-3 (Exemptions).

**“Integral Part of the Process” Determination**

In October 1993 a Final Order Granting Summary Judgment was signed by Administrative Law Judge (“ALJ”) Garrettson resolving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, the potential to emit particulate matter from the woodworking operations was calculated after control for purposes of determining permitting level and applicability of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and 326 IAC 2-2 (Prevention of Significant Deterioration (PSD)).

**Enforcement Issues**

There are no pending enforcement actions related to this administrative amendment.

**Emission Calculations**

See Appendix A of this Technical Support Document for detailed emission calculations.

**Permit Level Determination – MSOP Administrative Amendment**

Pursuant to 326 IAC 2-1.1-1(12), Potential to Emit is defined as “the maximum capacity of a stationary source or emission unit to emit any air pollutant under its physical and operational design. Any physical or operational limitation on the capacity of a source to emit an air pollutant, including air pollution control equipment and restrictions on hours of operation or type or amount of material combusted, stored, or processed shall be treated as part of its design if the limitation is enforceable by the U. S. EPA, IDEM, or the appropriate local air pollution control agency.”

The following table is used to determine the appropriate permit level under 326 IAC 2-6.1-6. This table reflects the PTE before controls of the administrative amendment. If the control equipment has been

determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

Process / Emission Unit	PTE Before Controls of the New Emission Units (ton/year)								
	PM	PM <sub>10</sub>	PM <sub>2.5</sub> <sup>1</sup>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Single HAP <sup>2</sup>	Total HAPs
Oven (OV1)	0.00	0.01	0.01	0.00	0.12	0.01	0.10	0.002	0.002
Oven (OV2)	0.00	0.01	0.01	0.00	0.12	0.01	0.10	0.002	0.002
<b>Total PTE Before Controls of the New Emission Units:</b>	<b>0.00</b>	<b>0.02</b>	<b>0.02</b>	<b>0.00</b>	<b>0.23</b>	<b>0.01</b>	<b>0.19</b>	<b>0.00</b>	<b>0.00</b>

<sup>1</sup>PM<sub>2.5</sub> listed is direct PM<sub>2.5</sub>.  
<sup>2</sup>Single highest HAP is hexane.

Appendix A of this TSD reflects the detailed potential emissions of the administrative amendment.

Pursuant to 326 IAC 2-6.1-6(d)(11), this change to the permit is considered 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.

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

The table below summarizes the uncontrolled/unlimited potential to emit of the entire source. If the control equipment has been determined to be integral, the table reflects the potential to emit (PTE) after consideration of the integral control device.

	Source-Wide Emissions after Issuance (ton/year) (Uncontrolled/Unlimited)							
	PM <sup>1</sup>	PM <sub>10</sub> <sup>1</sup>	PM <sub>2.5</sub> <sup>1,2</sup>	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs
<b>Total PTE of Entire Source Excluding Fugitive Emissions*</b>	81.16	81.42	81.42	0.03	4.53	0.37	3.81	0.11
Title V Major Source Thresholds	--	100	100	100	100	100	100	25
<b>Total PTE of Entire Source Including Source-Wide Fugitives*</b>	83.59	81.91	81.54	0.03	4.53	0.37	3.81	0.11
MSOP Thresholds	25	25	25	25	25	25	< 100	< 25
PSD Major Source Thresholds	250	250	250	250	250	250	250	--

<sup>1</sup>Under the Part 70 Permit program (40 CFR 70), PM<sub>10</sub> and PM<sub>2.5</sub>, not particulate matter (PM), are each considered as a "regulated air pollutant."  
<sup>2</sup>PM<sub>2.5</sub> listed is direct PM<sub>2.5</sub>.  
 \*Fugitive HAP emissions are always included in the source-wide emissions.

Appendix A of this TSD reflects the detailed unlimited/uncontrolled emissions of the source.

- (a) This existing Title V minor stationary source will continue to be minor under 326 IAC 2-7 because the uncontrolled/unlimited potential to emit regulated air pollutants and HAPs from the entire source will continue to be less than the Title V major source threshold levels. Therefore, the

source is subject to the provisions of 326 IAC 2-6.1 (MSOP) and is an area source under Section 112 of the Clean Air Act (CAA).

- (b) This existing minor PSD stationary source will continue to be minor under 326 IAC 2-2 because the potential to emit of all PSD regulated pollutants from the entire source will continue to be less than the PSD major source thresholds. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

### **Federal Rule Applicability Determination**

Due to the administrative amendment, federal rule applicability has been reviewed as follows:

#### **New Source Performance Standards (NSPS):**

- (a) The requirements of the New Source Performance Standard for Stationary Compression Ignition Internal Combustion Engines, 40 CFR 60, Subpart IIII and 326 IAC 12, are not included in the permit for the two (2) natural gas-fired ovens (OV1 and OV2), because each are not a stationary compression ignition (CI) internal combustion engine (ICE).
- (b) The requirements of the New Source Performance Standard for Stationary Spark Ignition Internal Combustion Engines, 40 CFR 60, Subpart JJJJ and 326 IAC 12, are not included in the permit for the two (2) natural gas-fired ovens (OV1 and OV2), because each are not a stationary spark ignition (SI) internal combustion engine (ICE).
- (c) There are no New Source Performance Standards (40 CFR Part 60) and 326 IAC 12 included for this administrative amendment.

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

- (a) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (40 CFR Part 63, 326 IAC 14, and 326 IAC 20) included in the permit for this administrative amendment.

#### **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 - Entire Source**

Due to this administrative amendment, state rule applicability has been reviewed as follows:

#### **326 IAC 2-6.1 (MSOP)**

MSOP applicability is discussed under the PTE of the Entire Source After Issuance of the MSOP Administrative Amendment section of this document.

#### **326 IAC 2-2 (PSD)**

PSD applicability is discussed under the PTE of the Entire Source After Issuance of the MSOP Administrative Amendment section of this document.

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

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

#### **326 IAC 2-6 (Emission Reporting)**

This source is not subject to 326 IAC 2-6 (Emission Reporting), because it is not required to have an operating permit pursuant to 326 IAC 2-7 (Part 70), it is not located in Lake or Porter County, and its

potential to emit lead is less than 5 tons per year. Therefore, this rule does not apply.

**326 IAC 5-1 (Opacity Limitations)**

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

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

**326 IAC 6-4 (Fugitive Dust Emissions Limitations)**

Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions Limitations), the source shall not allow fugitive dust to escape beyond the property line or boundaries of the property, right-of-way, or easement on which the source is located, in a manner that would violate 326 IAC 6-4.

**326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)**

This source is not subject to the requirements of 326 IAC 6-5, because the source has potential fugitive particulate emissions of less than twenty-five (25) tons per year.

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

Pursuant to 326 IAC 6.5-1-1(a), this source (located in Elkhart County) is not subject to the requirements of 326 IAC 6.5 because it is not located in one of the following counties: Clark, Dearborn, Dubois, Howard, Marion, St. Joseph, Vanderburgh, Vigo or Wayne.

**326 IAC 6.8 (Particulate Matter Limitations for Lake County)**

Pursuant to 326 IAC 6.8-1-1(a), this source (located in Elkhart County) is not subject to the requirements of 326 IAC 6.8 because it is not located in Lake County.

**326 IAC 6.8 (Lake County: Fugitive Particulate Matter)**

Pursuant to 326 IAC 6.8-10-1, this source (located in Elkhart County) is not subject to the requirements of 326 IAC 6.8-10 because it is not located in Lake County.

<b>State Rule Applicability – Individual Facilities</b>
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Due to the administrative amendment, state rule applicability has been reviewed as follows:

Two (2) Natural Gas-Fired Ovens (OV1 and OV2)

**326 IAC 6-2-1 (Particulate Emission Limitations for Sources of Indirect Heating)**

The two (2) natural gas-fired ovens (OV1 and OV2) are each not subject to 326 IAC 6-2-1 (Particulate Emission Limitations for Sources of Indirect Heating), because each oven is not an indirect heating unit.

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

Pursuant to 326 IAC 6-3-1(b)(14), the two (2) natural gas-fired ovens (OV1 and OV2) are each not subject to the requirements of 326 IAC 6-3, since each have potential emissions that are less than five hundred fifty-one thousandths (0.551) pound per hour.

**326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)**

This emission unit is not subject to 326 IAC 326 IAC 7-1.1 because it has a potential to emit (or limited potential to emit) sulfur dioxide (SO<sub>2</sub>) of less than 25 tons per year or 10 pounds per hour.

**326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)**

Even though, the two (2) ovens (OV1 and OV2) were each constructed after January 1, 1980, each are not subject to the requirements of 326 IAC 8-1-6 because the unlimited VOC potential emissions for each oven are less than twenty-five (25) tons per year.

**326 IAC 9-1 (Carbon Monoxide Emission Limits)**

The requirements of 326 IAC 9-1 do not apply to the two (2) ovens (OV1 and OV2), because this source does not operate a catalyst regeneration petroleum cracking system or a petroleum fluid coker, grey iron cupola, blast furnace, basic oxygen steel furnace, or other ferrous metal smelting equipment.

**326 IAC 10-3 (Nitrogen Oxide Reduction Program for Specific Source Categories)**

The requirements of 326 IAC 10-3 do not apply to the two (2) ovens (OV1 and OV2), since each unit is not a blast furnace gas-fired boiler, a Portland cement kiln, or a facility specifically listed under 326 IAC 10-3-1(a)(2).

<b>Compliance Determination and Monitoring Requirements</b>
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There are no new or modified compliance requirements included with this administrative amendment.

<b>Proposed Changes</b>
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The following changes listed below are due to the proposed administrative amendment. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

- (1) Sections A.3 has been amended to incorporate the two (2) new natural gas-fired ovens (OV1 and OV2), located at Plant 8. Emission unit descriptions have been renumbered throughout the permit.
- (2) Emission unit descriptions have been amended throughout the permit for clarification purposes.

\*\*\*

**A.3 Emission Units and Pollution Control Equipment Summary**

This stationary source consists of the following emission units and pollution control devices:  
Plant 5

...

(d) One (1) adhesive spray booth, identified as Spray Booth 7 (SB7), ~~approved~~ **constructed** in 2020 ~~for construction~~, with a maximum capacity of 0.6 gal/hour of adhesive, using dry filter systems as control, and exhausting indoors.

(e) One (1) adhesive spray booth, identified as Spray Booth 8 (SB8), ~~approved~~ **constructed** in 2020 ~~for construction~~, equipped with one (1) air assisted airless applicator and having a maximum throughput capacity of 0.6 gal/hour of adhesive, using dry filter systems for control and exhausting to stack SB8S;

...

Plant 8

(n) **Two (2) natural gas-fired ovens, identified as OV1 and OV2, constructed in 2024, with a maximum capacity of 0.27 MMBtu/hr, each, using no control, and exhausting OVS1 and OVS2, respectively.**

...

Plant 9

~~(A)~~**(o)** One (1) surface coating booth, identified as SB11, constructed in 2019, with a maximum capacity of 0.25 gal/hr, using dry filter systems as control, and exhausting to stack SB11S.

~~(e)~~(p)

....

Plant 10

- ~~(#)~~(s) Woodworking Operations, identified as WW4, ~~approved~~ **constructed** in 2022 ~~for construction~~, with a maximum throughput capacity of 3000 pounds of wood per hour, using one (1) integral baghouse DC4 for control, with a maximum air flow rate of 57,000 cfm, and exhausting indoors.

...  
\*\*\*

#### SECTION D.1 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

Plant 5

...

- (d) One (1) adhesive spray booth, identified as Spray Booth 7 (SB7), ~~approved~~ **constructed** in 2020 ~~for construction~~, with a maximum capacity of 0.6 gal/hour of adhesive, using dry filter systems as control, and exhausting indoors.
- (e) One (1) adhesive spray booth, identified as Spray Booth 8 (SB8), ~~approved~~ **constructed** in 2020 ~~for construction~~, equipped with one (1) air assisted airless applicator and having a maximum throughput capacity of 0.6 gal/hour of adhesive, using dry filter systems for control and exhausting to stack SB8S;

Plant 9

- ~~(#)~~(o) One (1) surface coating booth, identified as SB11, constructed in 2019, with a maximum capacity of 0.25 gal/hr, using dry filter systems as control, and exhausting to stack SB11S.

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

...  
\*\*\*

#### SECTION D.2 EMISSIONS UNIT OPERATION CONDITIONS

Emissions Unit Description:

...

Plant 10

- ~~(#)~~(s) Woodworking Operations, identified as WW4, ~~approved~~ **constructed** in 2022 ~~for construction~~, with a maximum throughput capacity of 3000 pounds of wood per hour, using one (1) integral baghouse DC4 for control, with a maximum air flow rate of 57,000 cfm, and exhausting indoors.

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

...

#### Additional Changes

- (1) The Company Name has been amended throughout the permit to incorporate Plant 10, which was first included in the source in MSOP Administrative Amendment No. 039-45797-00765, issued on October 13, 2022. Changes are shown below. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

Company Name: ~~Genesis Products, Inc., Plant 5, 8, and 9~~  
**Genesis Products, Inc., Plant 5, 8, 9, and 10**

- (2) Section A.2 has been amended to include the plant number located at each address, for clarification purposes. Changes are shown below. Deleted language appears as ~~strikethrough~~ text and new language appears as **bold** text:

A.2 Source Definition

---

This stationary wood counter tops manufacturing plant consists of four (4) plants:

- (a) **Plant 5, located at** 1846 Eisenhower Drive South, Goshen, Indiana 46526;
- (b) **Plant 8, located at** 1853 Eisenhower Drive South, Goshen, Indiana 46526;
- (c) **Plant 9, located at** 1811 Eisenhower Drive South, Goshen, Indiana 46526;
- (d) **Plant 10, located at** 1778 Eisenhower Drive South, Goshen, Indiana 46526.

...

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

Unless otherwise stated, information used in this review was derived from the application and additional information submitted by the applicant. An application for the purposes of this review was received on June 13, 2024.

<b>IDEM Contact</b>
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- (a) If you have any questions regarding this permit, please contact Tori Tamburrino, Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCM 1003, Indianapolis, Indiana 46204-2251, or by telephone at (317) 233-0043 or (800) 451-6027, and ask for Tori Tamburrino or (317) 233-0043.
- (b) A copy of the findings is available on the Internet at: <http://www.in.gov/ai/appfiles/idem-caats/>
- (c) For additional information about air permits and how the public and interested parties can participate, refer to the IDEM Air Permits page on the Internet at: <https://www.in.gov/idem/airpermit/public-participation/>; and the Citizens' Guide to IDEM on the Internet at: <https://www.in.gov/idem/resources/citizens-guide-to-idem/>.



**Appendix A: Emissions Calculations  
Summary Emissions**

**Company Name: Genesis Products, Inc., Plant 5, 8 and 9**  
**Source Address: 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526**  
**Permit Number: 039-47951-00765**  
**Reviewer: Tori Tamburrino**

Uncontrolled Potential to Emit (tons/yr)									
Emission Unit	PM	PM10	PM2.5*	SO <sub>2</sub>	NOx	VOC	CO	Total HAPs	Single HAP
<b>Plant 5</b>									
Eight (8) Adhesive Spray Booths (SB1-SB8)	29.19	29.19	29.19	-	-	-	-	-	
Woodworking (WW1)**	2.14	2.14	2.14	-	-	-	-	-	
Natural Gas Combustion	0.03	0.12	0.12	0.01	1.52	0.08	1.27	0.03	
Wood Sanding Tables (ST1 - ST15)	18.00	18.00	18.00						
<b>Plant 8</b>									
Adhesive Hot Melting Machines (HM1 - HM6)	0.00	0.00	0.00						
Laminators (LAM1-LAM4)	0.00	0.00	0.00	-	-	0.00	-	0.001	
Internal Baghouses (INBH20-INBH22)	4.51	4.51	4.51	-	-	-	-	-	
Woodworking (WW2)**	2.14	2.14	2.14						
Internal Baghouses (INBH1 - INBH4)	2.06	2.06	2.06						
Natural Gas Combustion (HTC1 - HTC5)	0.03	0.12	0.12	0.01	1.55	0.09	1.30	0.03	
Ovens (OV1 & OV2)	0.00	0.02	0.02	0.00	0.23	0.01	0.19	0.00	
<b>Plant 9</b>									
Surface Coating Booth (SB11)	0.33	0.33	0.33			0.12		0.03	
Woodworking (WW3)**	2.14	2.14	2.14						
Internal Baghouses (INBH5 - INBH19)	18.43	18.43	18.43						
Natural Gas Combustion (HTC6-HTC9)	0.02	0.09	0.09	0.01	1.24	0.07	1.04	0.02	
<b>Plant 10</b>									
Woodworking (WW4)**	2.14	2.14	2.14	-	-	-	-	-	
<b>TOTAL (excluding fugitives):</b>	<b>81.16</b>	<b>81.42</b>	<b>81.42</b>	<b>0.03</b>	<b>4.53</b>	<b>0.37</b>	<b>3.81</b>	<b>0.11</b>	<b>&lt;10</b>
Paved Roads (Plant 5)	0.59	0.12	0.03	-	-	-	-	-	
Paved Roads (Plant 8)	0.88	0.18	0.04	-	-	-	-	-	
Paved Roads (Plant 9)	0.96	0.19	0.05	-	-	-	-	-	
<b>Total Fugitives:</b>	<b>2.43</b>	<b>0.49</b>	<b>0.12</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	
<b>TOTAL (including fugitives):</b>	<b>83.59</b>	<b>81.91</b>	<b>81.54</b>	<b>0.03</b>	<b>4.53</b>	<b>0.37</b>	<b>3.81</b>	<b>0.11</b>	

\* PM2.5 listed is direct PM2.5

\*\*In October 1993 a Final Order Granting Summary Judgment was signed by Administrative Law Judge ("ALJ") Garrettson resolving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, the potential to emit particulate matter from the woodworking operations were calculated after consideration of the controls for determining operating permit level and for determining the applicability of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and Prevention of Significant Deterioration (PSD)

**Emissions Calculations  
AA Emissions**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

Uncontrolled Potential to Emit of New Units (tons/yr)									
Emission Unit	PM	PM10	PM2.5*	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Single HAP**
<b>Plant 8</b>									
OV1	0.00	0.01	0.01	0.00	0.12	0.01	0.10	0.002	0.002
OV2	0.00	0.01	0.01	0.00	0.12	0.01	0.10	0.002	0.002
<b>Total Unlimited PTE of New Units</b>	0.00	0.02	0.02	0.00	0.23	0.01	0.19	0.00	0.00

\* PM2.5 listed is direct PM2.5

\*\*Single Highest HAP is hexane.

*\*\*In October 1993 a Final Order Granting Summary Judgment was signed by Administrative Law Judge ("ALJ") Garretson resolving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, the potential to emit particulate matter from the woodworking operations were calculated after consideration of the controls for determining operating permit level and for determining the applicability of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and Prevention of Significant Deterioration (PSD)*

**Appendix A: Emissions Calculations  
Natural Gas Combustion ( ≤ 100 MMBtu/hr)**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

Unit ID	MMBtu/hr
OV1	0.27
OV2	0.27

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
0.54	1020	4.6

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	0.00	0.02	0.02	0.00	0.23	0.01	0.19

\*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 = 32

**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/1,020 MMBtu  
 Potential Emission (tons/yr) = Potential Throughput (MMCF/yr) x Emission Factor (lb/MMCF)/2,000 lb/ton

**Hazardous Air Pollutants (HAPs)**

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
Emission Factor in lb/MMcf	2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03
Potential Emission in tons/yr	4.9E-06	2.8E-06	1.7E-04	4.2E-03	7.9E-06

\*\*In October 1993 a Final Order Granting Summary Judgment was signed by Administrative Law Judge ("ALJ") Garrettsen resolving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, the potential to emit particulate matter from the woodworking operations were calculated after consideration of the controls for determining operating permit level and for determining the applicability of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and Prevention of Significant Deterioration (PSD)

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03
Potential Emission in tons/yr	1.2E-06	2.6E-06	3.2E-06	8.8E-07	4.9E-06

<b>Potential Emission of Combined HAPs (tons/yr)</b>	<b>4.4E-03</b>
<b>Potential Emission of Highest Single HAP (tons/yr)</b>	<b>4.2E-03</b> Hexane

**Methodology**

Methodology is the same as above.  
 The five highest organic and metal HAPs emission factors are provided above.  
 Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Emissions Calculations  
Surface Coating Operations, VOC and PM  
Lam1 - Lam4**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

**Volatile Organic Compound (VOC) and Particulate (PM/PM10/PM2.5) Emissions**

Material	Density (lb/gal)	Weight % Volatile (H <sub>2</sub> O & Organics)	Weight % Water & Exempt Solvents	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Maximum throughput (gal/hour)	Maximum (gal/day)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	PTE VOC (lbs/hour)	PTE VOC (lbs/day)	PTE VOC (tons/year)	PTE Solids (lbs/gal)	PTE PM/PM10/PM2.5 (lbs/hour)	PTE PM/PM10/PM2.5 (tons/year)	*Transfer Efficiency	
PUR 5013GP	10.43	0.00%	0.00%	0.00%	0.00%	100.00%	24.0	576.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%	
<b>Potential Emission Rate</b>											<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>--</b>

**METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)  
Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)  
PTE VOC (pounds/hour) = Pounds of VOC/Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)  
PTE VOC (pounds/day) = Pounds of VOC/Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)  
PTE VOC (tons/year) = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)  
PTE PM/PM10 (tons/year) = Max. (units/hour) \* Gal of Mat (gal/unit) \* Density (lbs/gal) \* (1-Weight % Volatile) \* (1-Transfer efficiency) \* 8760 hours/year \* 1ton/2000 lbs  
PTE PM/PM10 (lbs/hour) = Max. (units/hour) \* Gal of Mat (gal/unit) \* Density (lbs/gal) \* (1-Weight % Volatile) \* (1-Transfer efficiency)  
Emission Rates After Controls = Emission Rate Before Controls (lb/hr or tons/yr) \* (1 - Control Efficiency)

**Appendix A: Emissions Calculations  
Hazardous Air Pollutants (HAPs)  
From Surface Coating Operations**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

Lam1 - Lam4									
Material	Weight % MDI	Process Temp	Vpmdi	Mw	Tproc	u	SA	tTF	Kmdi
PUR 5013GP	5.00%	266 degrees F	3.411 X 10 <sup>-6</sup> atm.	250.26	403.15 Degree K	5m/sec ^ 0.78	4088 M <sup>2</sup>	5 sec	0.415
Process Rate: 44,000 Ft <sup>2</sup> /day									

MDI emitted	
1.600906	gr/day
0.003522	lb/day
1.29	lb/year
0.00064	ton/year

**METHODOLOGY - Open Process Stack Emissions**

**Calculating Stack Emissions**

1. Determine partial pressure of MDI at "tack-free" time
2. Determine exposed area
3. Determine evaporation rate
4. Apply adjustment factor

The open process losses are determined by multiplying the evaporation losses per day by the number of days the process is in  
 The evaporation rate (in gr/day) is determined from the following expression:

$$W = 25.4 * VPmdi * (Mw/Tproc) * (u)^{0.78} * SA * tTF * Kmdi$$

Where:

W represents the evaporation losses from the open process in gr/day  
 VPmdi is the vapor pressure of MDI in atm. at process temperature  
 Tproc is the process temperature in degree K. This is the maximum temperature of the MDI "tack Free" time.  
 Mw = 250.26 (this is the molecular weight of MDI)  
 u is the airflow speed in m/sec; air flow in the vicinity of the process  
 SA is the exposed surface area in M<sup>2</sup> (surface area determined from the dimensions of the boardstock)  
 tTF is the "tack-free" time in seconds; default is 5 sec.  
 Kmdi is the adjustment factor to the vapor pressure that is a function of MDI concentration in the feedstock and the temperature.

\*\*In October 1993 a Final Order Granting Summary Judgment was signed by Administrative Law Judge ("ALJ") Garretson resolving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, the potential to emit particulate matter from the woodworking operations were calculated after consideration of the controls for determining operating permit level and for determining the applicability of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and Prevention of Significant Deterioration (PSD)

**Emissions Calculations  
Surface Coating Operations, HAPs  
SB11 - Plant 9**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

Material	Density (Lb/Gal)	Gallons of Material (gal/hour)	Weight % Xylene	Weight % Toluene	Weight % Ethylbenzene	Weight % Methanol
<b>Open Line (3 assembly lines)</b>						
FH-17918 Black Stain	8.57	0.250	0.00%	0.00%	0.00%	0.00%
Acetone	6.59	0.001	0.00%	0.00%	0.00%	0.00%
Isopropyl Alcohol	6.59	0.001	0.00%	0.00%	0.00%	0.00%
Lacquer thinner	7.09	0.001	8.25%	74.63%	0.75%	8.25%
			Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Ethylbenzene Emissions (ton/yr)	Methanol Emissions (ton/yr)
<b>Open Line (3 assembly lines)</b>						
FH-17918 Black Stain			0.00	0.00	0.00	0.00
Acetone			0.00	0.00	0.00	0.00
Isopropyl Alcohol			0.00	0.00	0.00	0.00
Lacquer thinner			0.0026	0.0232	0.0002	0.0026

Highest Single HAP:                      0.003                      **0.023**                      0.000                      0.003  
 Total HAPs:                                      **0.03**

**METHODOLOGY**

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

**Emissions Calculations  
Surface Coating Operations, VOC and PM  
SB11 - Plant 9**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

**Volatile Organic Compound (VOC) and Particulate (PM/PM10/PM2.5) Emissions**

Material	Density (lb/gal)	Weight % Volatile (H <sub>2</sub> O & Organics)	Weight % Water & Exempt Solvents	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Maximum throughput (gal/hour)	Maximum (gal/day)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	PTE VOC (lbs/hour)	PTE VOC (lbs/day)	PTE VOC (tons/year)	PTE Solids (lbs/gal)	PTE PM/PM10/PM2.5 (lbs/hour)	PTE PM/PM10/PM2.5 (tons/year)	*Transfer Efficiency	
FH-17918 Black Stain	8.57	89.93%	89.29%	0.64%	91.15%	7.82%	0.25	6.0	0.62	0.05	0.01	0.33	0.06	0.70	0.08	0.33	65%	
Acetone*	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	
Isopropyl Alcohol	6.59	100.00%	0.29%	99.71%	0.00%	0.00%	0.0010	0.024	6.57	6.57	0.01	0.16	0.03	-	0.00	0.00	100%	
Lacquer thinner	7.09	100.00%	0.00%	100.00%	0.00%	0.00%	0.0010	0.024	7.09	7.09	0.01	0.17	0.03	-	0.00	0.00	100%	
<b>Potential Emission Rate - Before Controls</b>													<b>0.12</b>		<b>0.08</b>	<b>0.33</b>		
<b>Control Efficiency</b>																<b>99.00%</b>	<b>99.00%</b>	
<b>Potential Emission Rate - After Controls</b>																<b>0.0008</b>	<b>0.0033</b>	

Coating applied using HVLP guns

\* Acetone is exempt compound

**METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

PTE VOC (pounds/hour) = Pounds of VOC/Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

PTE VOC (pounds/day) = Pounds of VOC/Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

PTE VOC (tons/year) = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

PTE PM/PM10 (tons/year) = Max. (units/hour) \* Gal of Mat (gal/unit) \* Density (lbs/gal) \* (1- Weight % Volatile) \* (1-Transfer efficiency) \*8760 hours/year \*1ton/2000 lbs

PTE PM/PM10 (lbs/hour) = Max. (units/hour) \* Gal of Mat (gal/unit) \* Density (lbs/gal) \* (1- Weight % Volatile) \* (1-Transfer efficiency)

Emission Rates After Controls = Emission Rate Before Controls (lb/hr or tons/yr) \* (1 - Control Efficiency)

**Emissions Calculations  
Plant 9 - Internal Baghouses  
INBH5-INBH19**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

Control Device ID	Control Device	Outlet Grain Loading (gr/dscf)	Maximum Air Flow Rate (scfm)	Control Efficiency (%)	PTE of PM/PM10/PM2.5 after Baghouse (lbs/hr)	PTE of PM/PM10/PM2.5 after Baghouse (tons/yr)	PTE of PM/PM10/PM2.5 prior to Baghouse (lbs/hr)	PTE of PM/PM10/PM2.5 prior to Baghouse (tons/yr)
INBH5	Baghouse	0.008	5000	99.00%	0.34	1.50	34.29	150.17
INBH6	Baghouse	0.008	5000	99.00%	0.34	1.50	34.29	150.17
INBH7	Baghouse	0.008	5000	99.00%	0.34	1.50	34.29	150.17
INBH8	Baghouse	0.008	5000	99.00%	0.34	1.50	34.29	150.17
INBH9	Baghouse	0.008	5000	99.00%	0.34	1.50	34.29	150.17
INBH10	Baghouse	0.008	5000	99.00%	0.34	1.50	34.29	150.17
INBH11	Baghouse	0.008	5000	99.00%	0.34	1.50	34.29	150.17
INBH12	Baghouse	0.008	5000	99.00%	0.34	1.50	34.29	150.17
INBH13	Baghouse	0.008	5000	99.00%	0.34	1.50	34.29	150.17
INBH14	Baghouse	0.008	5000	99.00%	0.34	1.50	34.29	150.17
INBH15	Baghouse	0.008	5000	99.00%	0.34	1.50	34.29	150.17
INBH16	Baghouse	0.008	5000	99.00%	0.34	1.50	34.29	150.17
INBH17	Baghouse	0.003	1200	99.00%	0.03	0.14	3.09	13.52
INBH18	Baghouse	0.003	1200	99.00%	0.03	0.14	3.09	13.52
INBH19	Baghouse	0.003	1200	99.00%	0.03	0.14	3.09	13.52
<b>Total</b>					<b>4.21</b>	<b>18.43</b>	<b>420.69</b>	<b>1842.60</b>

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**Methodology**

PM10 and PM2.5 emissions assumed equal to PM emissions.

PTE of PM/PM10/PM2.5 after Control (lbs/hr) = Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 mins/hr x 1/7000 lb/gr

PTE of PM/PM10/PM2.5 after Control (tons/yr) = Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 mins/hr x 1/7000 lb/gr x 8760 hr/yr x 1 ton/2000 lbs

PTE of PM/PM10/PM2.5 before Control = PTE of PM/PM10/PM2.5 after Control / (1-Control Efficiency)



**Emissions Calculations  
Plant 9 Woodworking Operation (WW3)**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

Process Description (Unit ID)	Control Device (Unit ID)	Control Efficiency	Outlet Grain Loading (grains/dscf)	Air Flow Rate (cfm)	PM/PM10/PM2.5 before Integral Controls (lbs/hr)	PM/PM10/PM2.5 before Integral Controls (tons/yr)	PM/PM10/PM2.5 after Integral Controls (lbs/hr)	PM/PM10/PM2.5 after Integral Controls (tons/yr)
Woodworking Operation (WW3)	Baghouse (DC3)	99.00%	0.001	57,000	48.86	<b>213.99</b>	0.49	<b>2.14</b>

*In October 1993 a Final Order Granting Summary Judgment was signed by Administrative Law Judge ("ALJ") Garretson resolving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, the potential to emit particulate matter from the woodworking operations were calculated after consideration of the controls for determining operating permit level and for determining the applicability of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and Prevention of Significant Deterioration (PSD)*

**METHODOLOGY**

PM10 and PM2.5 emissions assumed equal to PM emissions.

PM/PM10/PM2.5 after Integral Controls (lbs/hr) = [Outlet Grain Loading (grains/dscf)] \* [Air Flow Rate (cfm)] \* [60 min/hr] \* [lb/7000 grains]

PM/PM10/PM2.5 after Integral Controls (tons/yr) = [PM/PM10/PM2.5 after Integral Controls (lbs/hr)] \* [8760 hr/yr] \* [ton/2000 lb]

PM/PM10/PM2.5 before Integral Controls (lbs/hr) = [PM/PM10/PM2.5 after Integral Controls (lbs/hr)] / [1 - control efficiency]

PM/PM10/PM2.5 before Integral Controls (tons/yr) = [PM/PM10/PM2.5 after Integral Controls (tons/yr)] / [1 - control efficiency]

**Emissions Calculations  
Plant 10 Woodworking Operation (WW4)**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

Process Description (Unit ID)	Control Device (Unit ID)	Control Efficiency	Outlet Grain Loading (grains/dscf)	Air Flow Rate (cfm)	PM/PM10/PM2.5 before Integral Controls (lbs/hr)	PM/PM10/PM2.5 before Integral Controls (tons/yr)	PM/PM10/PM2.5 after Integral Controls (lbs/hr)	PM/PM10/PM2.5 after Integral Controls (tons/yr)
Woodworking Operation (WW4)	Baghouse (DC4)	99.00%	0.001	57,000	48.86	213.99	0.49	2.14

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**METHODOLOGY**

PM10 and PM2.5 emissions assumed equal to PM emissions.

PM/PM10/PM2.5 after Integral Controls (lbs/hr) = [Outlet Grain Loading (grains/dscf)] \* [Air Flow Rate (cfm)] \* [60 min/hr] \* [lb/7000 grains]

PM/PM10/PM2.5 after Integral Controls (tons/yr) = [PM/PM10/PM2.5 after Integral Controls (lbs/hr)] \* [8760 hr/yr] \* [ton/2000 lb]

PM/PM10/PM2.5 before Integral Controls (lbs/hr) = [PM/PM10/PM2.5 after Integral Controls (lbs/hr)] / [1 - control efficiency]

PM/PM10/PM2.5 before Integral Controls (tons/yr) = [PM/PM10/PM2.5 after Integral Controls (tons/yr)] / [1 - control efficiency]

**Emissions Calculations  
Natural Gas Combustion Only  
MM BTU/HR <100  
Plant 9**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

Equipment ID	Quantity	Equipment Descri	Max. Heat Input	HHV	Potential
			Capacity		Throughput
			MMBtu/hr	MMBtu/MMSCF	MMCF/yr
HTC6 - HTC9	4	Thermo Cyclers	0.72		
<b>Total</b>			<b>2.88</b>	<b>1020</b>	<b>24.7</b>

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100	5.5	84
					**see below		
Potential Emission in tons/yr	0.02	0.09	0.09	0.01	1.24	0.07	1.04

\*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 = 32

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

	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
**In October 1993 a Final Order Granting S	2.10E-03	1.20E-03	7.50E-02	1.80E+00	3.40E-03
Potential Emission in tons/yr	2.6E-05	1.5E-05	9.3E-04	2.2E-02	4.2E-05

	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
Emission Factor in lb/MMcf	5.00E-04	1.10E-03	1.40E-03	3.80E-04	2.10E-03
Potential Emission in tons/yr	6.2E-06	1.4E-05	1.7E-05	4.7E-06	2.6E-05
<b>Total HAP</b>					<b>0.02</b>

**NOTES**

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

**Emissions Calculations  
Paved Roads - Plant 9**

**Company Name: Genesis Products, Inc., Plant 5, 8 and 9**  
**Source Address: 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526**  
**Permit Number: 039-47951-00765**  
**Reviewer: Tori Tamburrino**

**Paved Roads at Industrial Site**

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

Vehicle Information (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Moving Truck (2-axle) (26' Straight Truck) - Entry and Exit	8.0	2.0	10.0	10.0	100.0	600	0.114	1.1	414.8
Freight Truck (5 axles) - Entry and Exit	8.0	2.0	10.0	40.0	400.0	600	0.114	1.1	414.8
<b>Totals</b>			<b>20.0</b>		<b>500.0</b>			<b>2.3</b>	<b>829.5</b>

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

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

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	25.0	25.0	25.0	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m <sup>2</sup> = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

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

Mitigated Emission Factor, Eext =  $Ef * [1 - (p/4N)]$   
 where p =  days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)  
 N =  days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	2.319	0.464	0.1138	lb/mile
Mitigated Emission Factor, Eext =	2.120	0.424	0.1041	lb/mile

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Moving Truck (2-axle) (26' Straight Truck) - Entry and Exit	0.48	0.10	0.02	0.44	0.09	0.02
Freight Truck (5 axles) - Entry and Exit	0.48	0.10	0.02	0.44	0.09	0.02
<b>Totals</b>	<b>0.96</b>	<b>0.19</b>	<b>0.05</b>	<b>0.88</b>	<b>0.18</b>	<b>0.04</b>

**METHODOLOGY**

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

**ABBREVIATIONS**

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

**Emissions Calculations  
Plant 8 - Internal baghouses  
INBH1-INBH4**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

Control Device ID	Control Device	Outlet Grain Loading (gr/dscf)	Maximum Air Flow Rate (scfm)	Control Efficiency	PTE of PM/PM10/PM2.5 after Baghouse (lbs/hr)	PTE of PM/PM10/PM2.5 after Baghouse (tons/yr)	PTE of PM/PM10/PM2.5 prior to Baghouse (lbs/hr)	PTE of PM/PM10/PM2.5 prior to Baghouse (tons/yr)
INBH1	Baghouse	0.003	1900	99.00%	0.05	0.21	4.89	21.40
INBH2	Baghouse	0.003	1200	99.00%	0.03	0.14	3.09	13.52
INBH3	Baghouse	0.003	1900	99.00%	0.05	0.21	4.89	21.40
INBH4	Baghouse	0.008	5000	99.00%	0.34	1.50	34.29	150.17
<b>Total</b>					<b>0.47</b>	<b>2.06</b>	<b>47.14</b>	<b>206.49</b>

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**Methodology**

PM10 and PM2.5 emissions assumed equal to PM emissions.

PTE of PM/PM10/PM2.5 after Control (lbs/hr) = Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 mins/hr x 1/7000 lb/gr

PTE of PM/PM10/PM2.5 after Control (tons/yr) = Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 mins/hr x 1/7000 lb/gr x 8760 hr/yr x 1 ton/2000 lbs

PTE of PM/PM10/PM2.5 before Control = PTE of PM/PM10/PM2.5 after Control / (1-Control Efficiency)

**Emissions Calculations  
Plant 8 - Internal baghouses  
INBH20-INBH22**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

Control Device ID	Control Device	Outlet Grain Loading (gr/dscf)	Maximum Air Flow Rate (scfm)	Control Efficiency	PTE of PM/PM10/PM2.5 after Baghouse (lbs/hr)	PTE of PM/PM10/PM2.5 after Baghouse (tons/yr)	PTE of PM/PM10/PM2.5 prior to Baghouse (lbs/hr)	PTE of PM/PM10/PM2.5 prior to Baghouse (tons/yr)
INBH20	Baghouse	0.008	5000	99.00%	0.34	1.50	34.29	150.17
INBH21	Baghouse	0.008	5000	99.00%	0.34	1.50	34.29	150.17
INBH22	Baghouse	0.008	5000	99.00%	0.34	1.50	34.29	150.17
<b>Total</b>					<b>1.03</b>	<b>4.51</b>	<b>102.86</b>	<b>450.51</b>

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**Methodology**

PM10 and PM2.5 emissions assumed equal to PM emissions.

PTE of PM/PM10/PM2.5 after Control (lbs/hr) = Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 mins/hr x 1/7000 lb/gr

PTE of PM/PM10/PM2.5 after Control (tons/yr) = Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 mins/hr x 1/7000 lb/gr x 8760 hr/yr x 1 ton/2000 lbs

PTE of PM/PM10/PM2.5 before Control = PTE of PM/PM10/PM2.5 after Control / (1-Control Efficiency)

**Emissions Calculations  
Natural Gas Combustion Only, Plant 8  
MM BTU/HR <100**

**Company Name: Genesis Products, Inc., Plant 5, 8 and 9**  
**Source Address: 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526**  
**Permit Number: 039-47951-00765**  
**Reviewer: Tori Tamburrino**

Equipment ID	Quantity	Equipment Description	Max. Heat Input	HHV	Potential
			Capacity MMBtu/hr	MMBtu/MMSCF	Throughput MMCF/yr
HTC1 - HTC5	5	Thermo Cyclers	0.72		
			3.60	1020	30.9

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100	5.5	84
					**see below		
Potential Emission in tons/yr	0.03	0.12	0.12	0.01	1.55	0.09	1.30

\*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 = 32

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

Emission Factor in lb/MMcf	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.10E-03	1.20E-03	7.50E-02	1.80E+00	3.40E-03
Potential Emission in tons/yr	3.2E-05	1.9E-05	1.2E-03	2.8E-02	5.3E-05

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Emission Factor in lb/MMcf	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
	5.00E-04	1.10E-03	1.40E-03	3.80E-04	2.10E-03
Potential Emission in tons/yr	7.7E-06	1.7E-05	2.2E-05	5.9E-06	3.2E-05
				<b>Total HAP</b>	<b>0.03</b>

**NOTES**

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

**Emissions Calculations  
Woodworking Operation (WW2), Plant 8**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

Process Description (Unit ID)	Control Device (Unit ID)	Control Efficiency	Outlet Grain Loading (grains/dscf)	Air Flow Rate (cfm)	PM/PM10/PM2.5 before Integral Controls (lbs/hr)	PM/PM10/PM2.5 before Integral Controls (tons/yr)	PM/PM10/PM2.5 after Integral Controls (lbs/hr)	PM/PM10/PM2.5 after Integral Controls (tons/yr)
Woodworking Operation (WW2)	Baghouse (DC2)	99.00%	0.001	57,000	48.86	<b>213.99</b>	0.49	<b>2.14</b>

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**METHODOLOGY**

PM10 and PM2.5 emissions assumed equal to PM emissions.

PM/PM10/PM2.5 after Integral Controls (lbs/hr) = [Outlet Grain Loading (grains/dscf)] \* [Air Flow Rate (cfm)] \* [60 min/hr] \* [lb/7000 grains]

PM/PM10/PM2.5 after Integral Controls (tons/yr) = [PM/PM10/PM2.5 after Integral Controls (lbs/hr)] \* [8760 hr/yr] \* [ton/2000 lb]

PM/PM10/PM2.5 before Integral Controls (lbs/hr) = [PM/PM10/PM2.5 after Integral Controls (lbs/hr)] / [1 - control efficiency]

PM/PM10/PM2.5 before Integral Controls (tons/yr) = [PM/PM10/PM2.5 after Integral Controls (tons/yr)] / [1 - control efficiency]



**Emissions Calculations  
Surface Coating Operations  
Six (6) hot melt surface coating lines  
HM1 - HM6 Plant 8**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

**Volatile Organic Compound (VOC) and Particulate (PM/PM10/PM2.5) Emissions**

Material	Density (lb/gal)	Weight % Volatile (H <sub>2</sub> O & Organics)	Weight % Water & Exempt Solvents	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Maximum throughput (gal/hour)	Maximum (gal/day)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	PTE VOC (lbs/hour)	PTE VOC (lbs/day)	PTE VOC (tons/year)	PTE Solids (lbs/gal)	PTE PM/PM10/PM2.5 (lbs/hour)	PTE PM/PM10/PM2.5 (tons/year)	Transfer Efficiency
2U373-1N	9.50	0.00%	0.00%	0.00%	0.00%	100.00%	12.0	288.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%
Kleiberit 711.2	9.18	0.00%	0.00%	0.00%	0.00%	100.00%	4.0	96.0	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	100%
<b>Potential Emission Rate</b>											<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	<b>0.00</b>	

**METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

PTE VOC (pounds/hour) = Pounds of VOC/Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

PTE VOC (pounds/day) = Pounds of VOC/Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

PTE VOC (tons/year) = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

PTE PM/PM10 (tons/year) = Max. (units/hour) \* Gal of Mat (gal/unit) \* Density (lbs/gal) \* (1- Weight % Volatile) \* (1-Transfer efficiency) \*8760 hours/year \*1ton/2000 lbs

PTE PM/PM10 (lbs/hour) = Max. (units/hour) \* Gal of Mat (gal/unit) \* Density (lbs/gal) \* (1- Weight % Volatile) \* (1-Transfer efficiency)

**Emissions Calculations  
Paved Roads - Plant 8**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

**Paved Roads at Industrial Site**

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

Vehicle Information (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Moving Truck (2-axle) (26' Straight Truck) - Entry and Exit	8.0	2.0	10.0	10.0	100.0	600	0.114	1.1	414.8
Freight Truck (5 axles) - Entry and Exit	8.0	2.0	10.0	40.0	400.0	600	0.114	1.1	414.8
<b>Totals</b>			<b>20.0</b>		<b>500.0</b>			<b>2.3</b>	<b>829.5</b>

Average Vehicle Weight Per Trip =  $\frac{25.0}{1}$  tons/trip  
 Average Miles Per Trip =  $\frac{0.11}{1}$  miles/trip

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

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	25.0	25.0	25.0	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m <sup>2</sup> = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

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

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

	PM	PM10	PM2.5	
Unmitigated Emission Factor, $E_f =$	2.319	0.464	0.1138	lb/mile
Mitigated Emission Factor, $E_{ext} =$	2.120	0.424	0.1041	lb/mile

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Moving Truck (2-axle) (26' Straight Truck) - Entry and Exit	0.48	0.10	0.02	0.44	0.09	0.02
Freight Truck (5 axles) - Entry and Exit	0.48	0.10	0.02	0.44	0.09	0.02
<b>Totals</b>	<b>0.96</b>	<b>0.19</b>	<b>0.05</b>	<b>0.88</b>	<b>0.18</b>	<b>0.04</b>

**METHODOLOGY**

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

**ABBREVIATIONS**

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

**Emissions Calculations  
Wood Sanding Operation  
Plant 5 - ST1 - ST15**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

Unit ID	Control Device	Material Input Rate (lb/hr)	Control Efficiency	Outlet Grain Loading (grains/dscf)	Air Flow Rate (cfm)	PM/PM10/PM2.5 before Controls (lbs/hr)	PM/PM10/PM2.5 before Controls (tons/yr)	PM/PM10/PM2.5 after Controls (lbs/hr)	PM/PM10/PM2.5 after Controls (tons/yr)
ST1	STF1	200.00	95.00%	0.001	1,500	0.26	1.20	0.0129	0.06
ST2	STF2	200.00	95.00%	0.001	1,500	0.26	1.20	0.0129	0.06
ST3	STF3	200.00	95.00%	0.001	1,500	0.26	1.20	0.0129	0.06
ST4	STF4	200.00	95.00%	0.001	1,500	0.26	1.20	0.0129	0.06
ST5	STF5	200.00	95.00%	0.001	1,500	0.26	1.20	0.0129	0.06
ST6	STF6	200.00	95.00%	0.001	1,500	0.26	1.20	0.0129	0.06
ST7	STF7	200.00	95.00%	0.001	1,500	0.26	1.20	0.0129	0.06
ST8	STF8	200.00	95.00%	0.001	1,500	0.26	1.20	0.0129	0.06
ST9	STF9	200.00	95.00%	0.001	1,500	0.26	1.20	0.0129	0.06
ST10	STF10	200.00	95.00%	0.001	1,500	0.26	1.20	0.0129	0.06
ST11	STF11	200.00	95.00%	0.001	1,500	0.26	1.20	0.0129	0.06
ST12	STF12	200.00	95.00%	0.001	1,500	0.26	1.20	0.0129	0.06
ST13	STF13	200.00	95.00%	0.001	1,500	0.26	1.20	0.0129	0.06
ST14	STF14	200.00	95.00%	0.001	1,500	0.26	1.20	0.0129	0.06
ST15	STF15	200.00	95.00%	0.001	1,500	0.26	1.20	0.0129	0.06
<b>Potential Emissions:</b>						<b>3.86</b>	<b>18.00</b>	<b>0.1929</b>	<b>0.90</b>

**Methodology**

PM10 and PM2.5 emissions assumed equal to PM emissions.

PM/PM10/PM2.5 after Controls (lbs/hr) = [Outlet Grain Loading (grains/dscf)] \* [Air Flow Rate (cfm)] \* [60 min/hr] \* [lb/7000 grains]

PM/PM10/PM2.5 after Controls (tons/yr) = [PM/PM10/PM2.5 after Controls (lbs/hr)] \* [8760 hr/yr] \* [ton/2000 lb]

PM/PM10/PM2.5 before Controls (lbs/hr) = [PM/PM10/PM2.5 after Controls (lbs/hr)] / [1 - control efficiency]

PM/PM10/PM2.5 before Controls (tons/yr) = [PM/PM10/PM2.5 after Controls (tons/yr)] / [1 - control efficiency]

Allowable Emission Rate (AER, lb/hr) = 4.1 \* [Material Input Rate (lb/hr) / 2,000 (lb/ton)]<sup>0.67</sup>

\*\*In October 1993 a Final Order Granting Summary Judgment was signed by Administrative Law Judge ("ALJ") Garrettson resolving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, the potential to emit particulate matter from the woodworking operations were calculated after consideration of the controls for determining operating permit level and for determining the applicability of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and Prevention of Significant Deterioration (PSD)

**Emissions Calculations  
Surface Coating Operations  
Eight (8) Adhesive Spray Booths  
Plant 5, SB1-SB8**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

**Volatile Organic Compound (VOC) and Particulate (PM/PM10/PM2.5) Emissions**

Unit ID	Material	Density (lb/gal)	Weight % Volatile (H <sub>2</sub> O & Organics)	Weight % Water & Exempt Solvents	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Maximum throughput (gal/hour)	Maximum (gal/day)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	PTE VOC (lbs/hour)	PTE VOC (lbs/day)	PTE VOC (tons/year)	PTE Solids (lbs/gal)	PTE PM/PM10/PM2.5 (lbs/hour)	PTE PM/PM10/PM2.5 (tons/year)	*Transfer Efficiency	
SB1	Jowapur 150.95	8.70	54.40%	54.40%	0.00%	54.40%	45.60%	0.6	14.4	0.00	0.00	0.00	0.00	0.00	0.00	0.83	3.65	65%	
SB2	Jowapur 150.95	8.70	54.40%	54.40%	0.00%	54.40%	45.60%	0.6	14.4	0.00	0.00	0.00	0.00	0.00	0.00	0.83	3.65	65%	
SB3	Jowapur 150.95	8.70	54.40%	54.40%	0.00%	54.40%	45.60%	0.6	14.4	0.00	0.00	0.00	0.00	0.00	0.00	0.83	3.65	65%	
SB4	Jowapur 150.95	8.70	54.40%	54.40%	0.00%	54.40%	45.60%	0.6	14.4	0.00	0.00	0.00	0.00	0.00	0.00	0.83	3.65	65%	
SB5	Jowapur 150.95	8.70	54.40%	54.40%	0.00%	54.40%	45.60%	0.6	14.4	0.00	0.00	0.00	0.00	0.00	0.00	0.83	3.65	65%	
SB6	Jowapur 150.95	8.70	54.40%	54.40%	0.00%	54.40%	45.60%	0.6	14.4	0.00	0.00	0.00	0.00	0.00	0.00	0.83	3.65	65%	
SB7	Jowapur 150.95	8.70	54.40%	54.40%	0.00%	54.40%	45.60%	0.6	14.4	0.00	0.00	0.00	0.00	0.00	0.00	0.83	3.65	65%	
SB8	Jowapur 150.95	8.70	54.40%	54.40%	0.00%	54.40%	45.60%	0.6	14.4	0.00	0.00	0.00	0.00	0.00	0.00	0.83	3.65	65%	
<b>Potential Emission Rate - Before Controls</b>																	<b>6.66</b>	<b>29.19</b>	
<b>Control Efficiency</b>																	<b>99.00%</b>	<b>99.00%</b>	
<b>Potential Emission Rate - After Controls</b>																	<b>0.07</b>	<b>0.29</b>	

\* Coating applied using Air-assisted Airless guns

**METHODOLOGY**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)

Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)

PTE VOC (pounds/hour) = Pounds of VOC/Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

PTE VOC (pounds/day) = Pounds of VOC/Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)

PTE VOC (tons/year) = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)

PTE PM/PM10 (tons/year) = Max. (units/hour) \* Gal of Mat (gal/unit) \* Density (lbs/gal) \* (1- Weight % Volatile) \* (1-Transfer efficiency) \*8760 hours/year \*1ton/2000 lbs

PTE PM/PM10 (lbs/hour) = Max. (units/hour) \* Gal of Mat (gal/unit) \* Density (lbs/gal) \* (1- Weight % Volatile) \* (1-Transfer efficiency)

Emission Rates After Controls = Emission Rate Before Controls (lbhr or tons/yr) \* (1 - Control Efficiency)

**Emissions Calculations  
Woodworking Operation (WW1), Plant 5**

**Company Name:** Genesis Products, Inc., Plant 5, 8 and 9  
**Source Address:** 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526  
**Permit Number:** 039-47951-00765  
**Reviewer:** Tori Tamburrino

Process Description (Unit ID)	Control Device (Unit ID)	Control Efficiency	Outlet Grain Loading (grains/dscf)	Air Flow Rate (cfm)	PM/PM10/PM2.5 before Integral Controls (lbs/hr)	PM/PM10/PM2.5 before Integral Controls (tons/yr)	PM/PM10/PM2.5 after Integral Controls (lbs/hr)	PM/PM10/PM2.5 after Integral Controls (tons/yr)
Woodworking Operation (WW1)	Baghouse (DC1)	99.00%	0.001	57,000	48.86	<b>213.99</b>	0.49	<b>2.14</b>

*In October 1993 a Final Order Granting Summary Judgment was signed by Administrative Law Judge ("ALJ") Garrettson resolving an appeal filed by Kimball Hospitality Furniture Inc. (Cause Nos. 92-A-J-730 and 92-A-J-833) related to the method by which IDEM calculated potential emissions from woodworking operations. In his findings, the ALJ determined that particulate controls are necessary for the facility to produce its normal product and are integral to the normal operation of the facility, and therefore, potential emissions should be calculated after controls. Based on this ruling, the potential to emit particulate matter from the woodworking operations were calculated after consideration of the controls for determining operating permit level and for determining the applicability of 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes) and Prevention of Significant Deterioration (PSD)*

**METHODOLOGY**

PM10 and PM2.5 emissions assumed equal to PM emissions.

PM/PM10/PM2.5 after Integral Controls (lbs/hr) = [Outlet Grain Loading (grains/dscf)] \* [Air Flow Rate (cfm)] \* [60 min/hr] \* [lb/7000 grains]

PM/PM10/PM2.5 after Integral Controls (tons/yr) = [PM/PM10/PM2.5 after Integral Controls (lbs/hr)] \* [8760 hr/yr] \* [ton/2000 lb]

PM/PM10/PM2.5 before Integral Controls (lbs/hr) = [PM/PM10/PM2.5 after Integral Controls (lbs/hr)] / [1 - control efficiency]

PM/PM10/PM2.5 before Integral Controls (tons/yr) = [PM/PM10/PM2.5 after Integral Controls (tons/yr)] / [1 - control efficiency]

**Emissions Calculations  
Natural Gas Combustion Only, Plant 5  
MM BTU/HR <100**

**Company Name: Genesis Products, Inc., Plant 5, 8 and 9**  
**Source Address: 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526**  
**Permit Number: 039-47951-00765**  
**Reviewer: Tori Tamburrino**

Equipment ID	Quantity	Equipment Description	Max. Heat Input Capacity MMBtu/hr	HHV MMBtu/MMSCF	Potential Throughput MMCF/yr
AM1	1	Air Makeup Unit	0.28		
OH1	1	Forced Air Furnace	0.75		
RTH1 - RTH5	5	Radiant Tube Heaters	2.50		
		(@ 0.5 MMBtu/hr, each)			
		<b>Total</b>	<b>3.53</b>	<b>1020</b>	<b>30.3</b>

Emission Factor in lb/MMCF	Pollutant						
	PM*	PM10*	direct PM2.5*	SO2	NOx	VOC	CO
	1.9	7.6	7.6	0.6	100	5.5	84
					**see below		
Potential Emission in tons/yr	0.03	0.12	0.12	0.01	1.52	0.08	1.27

\*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 = 32

**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 MMBtu

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

**In October 1993 a Final Or Emission Factor in lb/MMcf	HAPs - Organics				
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene
	2.10E-03	1.20E-03	7.50E-02	1.80E+00	3.40E-03
Potential Emission in tons/yr	3.2E-05	1.8E-05	1.1E-03	2.7E-02	5.2E-05

Emission Factor in lb/MMcf	HAPs - Metals				
	Lead	Cadmium	Chromium	Manganese	Nickel
	5.00E-04	1.10E-03	1.40E-03	3.80E-04	2.10E-03
Potential Emission in tons/yr	7.6E-06	1.7E-05	2.1E-05	5.8E-06	3.2E-05
				<b>Total HAP</b>	<b>0.03</b>

**NOTES**

The five highest organic and metal HAPs emission factors are provided above.

Additional HAPs emission factors are available in AP-42, Chapter 1.4.

**Emissions Calculations  
Paved Roads, Plant 5**

**Company Name: Genesis Products, Inc., Plant 5, 8 and 9**  
**Source Address: 1846, 1853, 1811 and 1778 Eisenhower Drive South, Goshen, Indiana 46526**  
**Permit Number: 039-47951-00765**  
**Reviewer: Tori Tamburrino**

**Paved Roads at Industrial Site**

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

Vehicle Information (provided by source)

Type	Maximum number of vehicles per day	Number of one-way trips per day per vehicle	Maximum trips per day (trip/day)	Maximum Weight Loaded (tons/trip)	Total Weight driven per day (ton/day)	Maximum one-way distance (feet/trip)	Maximum one-way distance (mi/trip)	Maximum one-way miles (miles/day)	Maximum one-way miles (miles/yr)
Moving Truck (2-axle) (26' Straight Truck) - Entry and Exit	8.0	2.0	10.0	10.0	100.0	400	0.076	0.8	276.5
Freight Truck (5 axles) - Entry and Exit	8.0	2.0	10.0	40.0	400.0	400	0.076	0.8	276.5
<b>Totals</b>			<b>20.0</b>		<b>500.0</b>			<b>1.5</b>	<b>553.0</b>

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

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

	PM	PM10	PM2.5	
where k =	0.011	0.0022	0.00054	lb/VMT = particle size multiplier (AP-42 Table 13.2.1-1)
W =	25.0	25.0	25.0	tons = average vehicle weight (provided by source)
sL =	9.7	9.7	9.7	g/m <sup>2</sup> = silt loading value for paved roads at iron and steel production facilities - Table 13.2.1-3)

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

Mitigated Emission Factor, Eext =  $Ef * [1 - (p/4N)]$   
 where p =  days of rain greater than or equal to 0.01 inches (see Fig. 13.2.1-2)  
 N =  days per year

	PM	PM10	PM2.5	
Unmitigated Emission Factor, Ef =	2.319	0.464	0.1138	lb/mile
Mitigated Emission Factor, Eext =	2.120	0.424	0.1041	lb/mile

Process	Unmitigated PTE of PM (tons/yr)	Unmitigated PTE of PM10 (tons/yr)	Unmitigated PTE of PM2.5 (tons/yr)	Mitigated PTE of PM (tons/yr)	Mitigated PTE of PM10 (tons/yr)	Mitigated PTE of PM2.5 (tons/yr)
Moving Truck (2-axle) (26' Straight Truck) - Entry and Exit	0.32	0.06	0.02	0.29	0.06	0.01
Freight Truck (5 axles) - Entry and Exit	0.32	0.06	0.02	0.29	0.06	0.01
<b>Totals</b>	<b>0.64</b>	<b>0.13</b>	<b>0.03</b>	<b>0.59</b>	<b>0.12</b>	<b>0.03</b>

**METHODOLOGY**

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

**ABBREVIATIONS**

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



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We Protect Hoosiers and Our Environment.*

100 N. Senate Avenue • Indianapolis, IN 46204

(800) 451-6027 • (317) 232-8603 • [www.idem.IN.gov](http://www.idem.IN.gov)

**Eric J. Holcomb**  
Governor

**Brian C. Rockensuess**  
Commissioner

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

TO: Tori Patterson  
Genesis Products Incorporated Plant 5 8 9 & 10  
1853 Eisenhower Dr S  
Goshen, IN 46526

DATE: June 28, 2024

FROM: Jenny Acker, Branch Chief  
Permits Branch  
Office of Air Quality

SUBJECT: Final Decision  
MSOP Administrative Amendment  
039-47951-00765

This notice is to inform you that a final decision has been issued for the air permit application referenced above.

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. In addition, the Notice of Decision has been sent to the OAQ Permits Branch Interested Parties List and, if applicable, the Consultant/Agent and/or Responsible Official/Authorized Individual.

**The final decision and supporting materials are available electronically;** the original signature page is enclosed for your convenience. The final decision and supporting materials available electronically at:

**IDEM's online searchable database:** <http://www.in.gov/apps/idem/caats/> . Choose Search Option by **Permit Number**, then enter permit 47951

and

**IDEM's Virtual File Cabinet (VFC):** <https://www.in.gov/idem>. Enter VFC in the search box, then search for permit documents using a variety of criteria, such as Program area, date range, permit #, Agency Interest Number, or Source ID.

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, or have difficulty accessing the documents online, 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 8/20/20-acces via website





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Commissioner

**June 28, 2024**  
**Genesis Products, Inc., Plant 5, 8, 9 and 10**  
**039-47951-00765**

To: Interested Parties

This notice is to inform you that a final decision has been issued for the air permit application referenced above. This notice is for informational purposes only. You are not required to take any action.

You are receiving this notice because you asked to be on IDEM's notification list for this company and/or county; or because your property is nearby the company being permitted; or because you represent a local/regional government entity.

The enclosed Notice of Decision Letter provides additional information about the final permit decision.

The final decision and supporting materials are available electronically at:

IDEM's online searchable database: <http://www.in.gov/apps/idem/caats/> . Choose Search Option by Permit Number, then enter permit 47951

and


IDEM's Virtual File Cabinet (VFC): <https://www.in.gov/idem>. Enter VFC in the search box, then search for permit documents using a variety of criteria, such as Program area, date range, permit #, Agency Interest Number, or Source ID.

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.

**Please Note:** *If you would like to be removed from the Air Permits mailing list, please contact Joanne Smiddie-Brush with the Air Permits Administration Section at 1-800-451-6027, ext. 3-0185 or via e-mail at [JBRUSH@IDEM.IN.GOV](mailto:JBRUSH@IDEM.IN.GOV). If you have recently moved and this Notice has been forwarded to you, please notify us of your new address and if you wish to remain on the mailing list. Mail that is returned to IDEM by the Post Office with a forwarding address in a different county will be removed from our list unless otherwise requested.*

Enclosure  
Final Interested Parties Cover Letter 10/13/2023

# Mail Code 61-53

IDEM Staff	LGAINES 6/28/2024 Genesis Products Incorporated Plant 5 8 9 & 10 039-47951-00765 (final)		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	Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	

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		Tori Patterson Genesis Products Incorporated Plant 5 8 9 & 10 1853 Eisenhower Dr S Goshen IN 46526 (Source CAATS) VIA UPS										
2		Rick Thacker Vice President of Operations Genesis Products Incorporated Plant 5 8 9 & 10 1853 Eisenhower Dr S Goshen IN 46526 (RO CAATS)										
3		Elkhart City Council and Mayors Office 229 S Second St Elkhart IN 46516 (Local Official)										
4		Elkhart County Health Department 608 Oakland Ave Elkhart IN 46516 (Health Department)										
5		Goshen City Hall and Mayors Office 202 S 5th St, Ste 1 Goshen IN 46528 (Local Official)										
6		Elkhart County Board of Commissioners 117 N 2nd St Goshen IN 46526 (Local Official)										
7		Polly Mishler D & B Environmental Services Inc 401 Lincoln Way W Osceola IN 46561 (Consultant)										
8		Jeri Seely The Mail-Journal PO Box 188 Milford IN 46542 (Affected Party)										
9		Mr. Roger Schneider The Goshen News 114 S Main St Goshen IN 46526 (Affected Party)										
10		Nibco, Inc. 701 Eisenhower Drive Goshen IN 46526 (Affected Party)										
11												
12												
13												
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15												

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