



# 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)

**Michael R. Pence**  
Governor

**Carol S. Comer**  
Commissioner

To: Interested Parties

Date: May 19, 2016

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

Source Name: Pro-Lam Products, Inc.

Permit Level: Registration - Reregistration

Permit Number: 163-36773-00109

Source Location: 10245 Hedden Road  
Evansville, Indiana

Type of Action Taken: Permit Renewal

## Notice of Decision: Approval - Registration

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.

The final decision is available on the IDEM website at: <http://www.in.gov/apps/idem/caats/>  
To view the document, select Search option 3, then enter permit 36773.

If you would like to request a paper copy of the permit document, please contact IDEM's central file room:

Indiana Government Center North, Room 1201  
100 North Senate Avenue, MC 50-07  
Indianapolis, IN 46204  
Phone: 1-800-451-6027 (ext. 4-0965)  
Fax (317) 232-8659

Pursuant to IC 4-21.5-3-4(d) this order is effective when it is served. When served by U.S. mail, the order is effective three (3) calendar days from the mailing of this notice pursuant to IC 4-21.5-3-2(e).

*(continues on next page)*

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 Office of Environmental Adjudication, 100 North Senate Avenue, Government Center North, Suite N 501E, Indianapolis, IN 46204, **within eighteen (18) calendar days of the mailing of this notice**. The filing of a petition for administrative review is complete on the earliest of the following dates that apply to the filing:

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

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

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

If you have technical questions regarding the enclosed documents, please contact the Office of Air Quality, Permits Branch at (317) 233-0178. Callers from within Indiana may call toll-free at 1-800-451-6027, ext. 3-0178.



# 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)

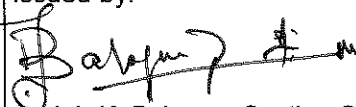
**Michael R. Pence**  
Governor

**Carol S. Comer**  
Commissioner

## REGISTRATION OFFICE OF AIR QUALITY

**Pro-Lam Products, Inc.**  
**10245 Hedden Road**  
**Evansville, Indiana 47725**

Pursuant to 326 IAC 2-5.1 (Construction of New Sources: Registrations) and 326 IAC 2-5.5 (Registrations), (herein known as the Registrant) is hereby authorized to construct and operate subject to the conditions contained herein, the source described in Section A (Source Summary) of this registration.

Registration No. R163-36773-00109	
Issued by:  Josiah K. Balogun, Section Chief Permits Branch Office of Air Quality	Issuance Date:  May 19, 2016

## SECTION A

## SOURCE SUMMARY

This registration 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 Registrant 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 Registrant to obtain additional permits pursuant to 326 IAC 2.

### A.1 General Information

---

The Registrant owns and operates a stationary wood office furniture operation.

Source Address:	10245 Hedden Road, Evansville, Indiana 47725
General Source Phone Number:	(812) 867-1662
SIC Code:	2521 (Wood Office Furniture)
County Location:	Vanderburgh County
Source Location Status:	Attainment for all criteria pollutants
Source Status:	Registration

### A.2 Emission Units and Pollution Control Equipment Summary

---

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

- (a) One (1) woodworking operation, identified as EU 120, constructed in 1995, with a maximum capacity of 1.0 ton per hour, using dust collector 01 as control, with air flow rate of 15,000 acfm, and exhausting to a stack.
- (b) One (1) surface coating booth, identified as EU 100, constructed in 2006 but permitted in 2016, with a maximum capacity of 30 units per hour, equipped with four (4) HVLP applicators, using dry particulate filters as control, and exhausting to a stack.
- (c) One (1) assembly gluing area, identified as EU 110, using roll application, constructed in 1995, and exhausting indoors.
- (d) One (1) natural gas-fired space heater, identified as EU 150, constructed in 1995, with a maximum capacity of 1.6 MMBtu/hr, and exhausting to a stack.
- (e) One (1) natural gas-fired space heater, identified as EU 140, constructed in 2001, with a maximum capacity of 1.6 MMBtu/hr, and exhausting to a stack.
- (f) One (1) natural gas-fired drying oven, identified as EU 130, constructed in 2006, with a maximum capacity of 0.65 MMBtu/hr, and exhausting to a stack.

## SECTION B GENERAL CONDITIONS

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

---

Terms in this registration 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 Effective Date of Registration [IC 13-15-5-3]

---

Pursuant to IC 13-15-5-3, this registration is effective immediately, unless a petition for stay of effectiveness is filed and granted according to IC 13-15-6-3, and may be revoked or modified in accordance with the provisions of IC 13-15-7-1.

### B.3 Registration Revocation [326 IAC 2-1.1-9]

---

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

- (a) Violation of any conditions of this registration.
- (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this registration.
- (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 registration shall not require revocation of this registration.
- (d) For any cause which establishes in the judgment of IDEM the fact that continuance of this registration is not consistent with purposes of this article.

### B.4 Prior Permits Superseded [326 IAC 2-1.1-9.5]

---

- (a) All terms and conditions of permits established prior to Registration No. R163-36773-00109 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 registration.

### B.5 Annual Notification [326 IAC 2-5.1-2(f)(3)] [326 IAC 2-5.5-4(a)(3)]

---

Pursuant to 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3):

- (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 registration.
- (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, IN 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.6 Source Modification Requirement [326 IAC 2-5.5-6(a)]**

---

Pursuant to 326 IAC 2-5.5-6(a), an application or notification shall be submitted in accordance with 326 IAC 2 to the Office of Air Quality (OAQ) if the source proposes to construct new emission units, modify existing emission units, or otherwise modify the source.

**B.7 Registrations [326 IAC 2-5.1-2(i)]**

---

Pursuant to 326 IAC 2-5.1-2(i), this registration does not limit the source's potential to emit.

**B.8 Preventive Maintenance Plan [326 IAC 1-6-3]**

---

- (a) If required by specific condition(s) in Section D of this registration, the Registrant shall prepare and maintain Preventive Maintenance Plans (PMPs) no later than ninety (90) days after issuance of this registration 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 Registrant's control, the PMPs cannot be prepared and maintained within the above time frame, the Registrant may extend the date an additional ninety (90) days provided the Registrant 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 Registrant 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 Registrant 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 Registrant is required by 40 CFR Part 60 or 40 CFR Part 63 to have an Operation Maintenance, and Monitoring (OMM) Plan for a unit, such OMM Plan is deemed to satisfy the PMP requirements of 326 IAC 1-6-3 for that unit.

## SECTION C

## SOURCE OPERATION CONDITIONS

Entire Source

### Emission Limitations and Standards [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]

#### C.1 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 registration:

- (a) Opacity shall not exceed an average of thirty percent (30%) 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.2 Fugitive Dust Emissions [326 IAC 6-4]

The Registrant 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).

### Record Keeping Requirements [326 IAC 2-5.1-3(e)(2)]

#### C.3 General Record Keeping Requirements [326 IAC 2-5.1-3(e)(2)]

- (a) Records of all required monitoring data, reports and support information required by this registration 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 Registrant, the Registrant shall furnish the records to the Commissioner within a reasonable time.
- (b) Unless otherwise specified in this registration, for all record keeping requirements not already legally required, the Registrant shall be allowed up to ninety (90) days from the date of registration issuance or the date of initial start-up, whichever is later, to begin such record keeping.

**SECTION D.1**

**EMISSION UNIT OPERATION CONDITIONS**

**Emission Unit Description:**

- (a) One (1) woodworking operation, identified as EU 120, constructed in 1995, with a maximum capacity of 1.0 ton per hour, using dust collector 01 as control, with air flow rate of 15,000 acfm, and exhausting to a stack.

(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 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]**

**D.1.1 Particulate Emission Limitations for Manufacturing Processes [326 IAC 6-3-2(e)]**

Pursuant to 326 IAC 6-3-2(e), the allowable particulate matter (PM) from the woodworking operation EU 120 shall not exceed 4.1 pounds per hour when operating at a process weight rate of 1.0 ton per hour. The pound per hour limitation was calculated with the following equation:

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

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

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

A Preventive Maintenance Plan is required for this facility and its control device. Section B - Preventive Maintenance Plan contains the Registrant's obligation with regard to the preventive maintenance plan required by this condition.

**Compliance Determination Requirements [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]**

**D.1.3 Particulate (PM) Control [326 IAC 2-5.1-2(g)] [326 IAC 2-5.5-4(b)]**

In order to comply with this limit, the dust collector for particulate control shall be in operation at all times when EU 120 is in operation.



## SECTION D.2

## EMISSION UNIT OPERATION CONDITIONS

### Emission Unit Description:

- (b) One (1) surface coating booth, identified as EU 100, constructed in 2006 but permitted in 2016, with a maximum capacity of 30 units per hour, equipped with four (4) HVLP applicators, using dry particulate filters as control, and exhausting to a stack.

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

### Emission Limitations and Standards [326 IAC 2-5.1-2(f)(1)] [326 IAC 2-5.5-4(a)(1)]

#### D.2.1 Particulate Emission Limitations, Work Practices, and Control Technology [326 IAC 6-3-2(d)]

- (a) Pursuant to 326 IAC 6-3-2(d), particulate matter (PM) emissions from the surface coating booth, identified as EU 100, shall be controlled by a dry particulate filter, waterwash, or an equivalent control device 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 source 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 accumates on the ground.
  - (2) Operate equipment so that no overspray is visibly detectable at the exhaust or accumates on the ground.
- (c) If overspray is visibly detected, the source 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.2.2 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to the wood furniture and wood furniture components in the surface coating booth, identified as EU 100, shall perform surface coating of wood furniture and cabinets, with the exception of no more than ten (10) gallons of coating per day used for touch-up and repair operations, using one or more of the following applications methods:

Airless Spray Application  
Air Assisted Airless Spray Application  
Electrostatic Spray Application  
Electrostatic Bell or Disc Application  
Heated Airless Spray Application  
Roller Coating  
Brush or Wipe Application  
Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

D.2.3 Preventive Maintenance Plan [326 IAC 1-6-3]

A Preventive Maintenance Plan is required for this facility and its control device. Section B - Preventive Maintenance Plan contains the Registrant'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**

**REGISTRATION  
ANNUAL NOTIFICATION**

This form should be used to comply with the notification requirements under 326 IAC 2-5.1-2(f)(3) and 326 IAC 2-5.5-4(a)(3).

<b>Company Name:</b>	Pro-Lam Products, Inc.
<b>Address:</b>	10245 Hedden Road
<b>City:</b>	Evansville, Indiana 47725
<b>Phone Number:</b>	(812) 867-1662
<b>Registration No.:</b>	R163-36773-00109

I hereby certify that Pro-Lam Products, Inc. is:

- still in operation.
- no longer in operation.
- in compliance with the requirements of Registration No. R163-36773-00109.
- not in compliance with the requirements of Registration No. R163-36773-00109.

I hereby certify that Pro-Lam Products, Inc. is:

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

# Indiana Department of Environmental Management Office of Air Quality

## Technical Support Document (TSD) for a Re-Registration

### Source Description and Location

<b>Source Name:</b>	<b>Pro-Lam Products, Inc.</b>
<b>Source Location:</b>	<b>10245 Hedden Road, Evansville, Indiana 47725</b>
<b>County:</b>	<b>Vanderburgh</b>
<b>SIC Code:</b>	<b>2521 (Wood Office Furniture)</b>
<b>Registration No.:</b>	<b>R163-36773-00109</b>
<b>Permit Reviewer:</b>	<b>Donald McQuigg</b>

On January 28, 2016, the Office of Air Quality (OAQ) received an application from Pro-Lam Products Inc. related to the construction and operation of new emission units and the continued operation of an existing stationary wood office furniture operation.

### Existing Approvals

The source has been operating under Registration No. R163-4448-00109, issued on July 17, 1995.

### County Attainment Status

The source is located in Vanderburgh County.

Pollutant	Designation
SO <sub>2</sub>	Better than national standards.
CO	Unclassifiable or attainment effective November 15, 1990.
O <sub>3</sub>	Unclassifiable or attainment effective July 20, 2012, for the 2008 8-hour ozone standard. <sup>1</sup>
PM <sub>2.5</sub>	Attainment effective October 27, 2011, for the annual PM <sub>2.5</sub> standard.
PM <sub>2.5</sub>	Unclassifiable or attainment effective December 13, 2009, for the 24-hour PM <sub>2.5</sub> standard.
PM <sub>10</sub>	Unclassifiable effective November 15, 1990.
NO <sub>2</sub>	Cannot be classified or better than national standards.
Pb	Unclassifiable or attainment effective December 31, 2011.

<sup>1</sup>Attainment effective October 18, 2000, for the 1-hour ozone standard for the Evansville area, including Vanderburgh County, and is a maintenance area for the 1-hour ozone National Ambient Air Quality Standards (NAAQS) for purposes of 40 CFR 51, Subpart X\*. The 1-hour designation was revoked effective June 15, 2005.

- (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. Vanderburgh County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.
- (b) **PM<sub>2.5</sub>**  
Vanderburgh 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 for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

- (c) Other Criteria Pollutants  
Vanderburgh County has been classified as attainment or unclassifiable in Indiana for PM<sub>10</sub>, SO<sub>2</sub>, CO, and NO<sub>2</sub>. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2.

### Fugitive Emissions

The fugitive emissions of criteria pollutants and hazardous air pollutants are counted toward the determination of 326 IAC 2-5.5 (Registrations) applicability.

### Background and Description of Emission Units and Pollution Control Equipment

The Office of Air Quality (OAQ) has reviewed an application, submitted by Pro-Lam Products, Inc. on January 28, 2016, relating to the construction and operation of one (1) surface coating booth and the Re-Registration of the source.

The source consists of the following existing emission unit(s):

- (a) One (1) woodworking operation, identified as EU 120, constructed in 1995, with a maximum capacity of 1.0 ton per hour, using dust collector 01 as control, with air flow rate of 15,000 acfm, and exhausting to a stack.
- (b) One (1) assembly gluing area, identified as EU 110, using roll application, constructed in 1995, and exhausting indoors.
- (c) One (1) natural gas-fired space heater, identified as EU 150, constructed in 1995, with a maximum capacity of 1.6 MMBtu/hr, and exhausting to a stack.
- (d) One (1) natural gas-fired space heater, identified as EU 140, constructed in 2001, with a maximum capacity of 1.6 MMBtu/hr, and exhausting to a stack.
- (e) One (1) natural gas-fired drying oven, identified as EU 130, constructed in 2006, with a maximum capacity of 0.65 MMBtu/hr, and exhausting to a stack.

**The source has removed the following emission unit:**

- (a) One (1) Electrically Heated Cement Sprayer, constructed in 1995, with a maximum capacity of 8.65 units per hour, and exhausting to a stack.

### Unregistered Emission Units and Pollution Control Equipment

**The source consists of the following unregistered emission unit:**

- (a) One (1) surface coating booth, identified as EU 100, constructed in 2006 but permitted in 2016, with a maximum capacity of 30 units per hour, equipped with four (4) HVLP applicators, using dry particulate filters as control, and exhausting to a stack.

### Enforcement Issues

IDEM is aware that equipment has been constructed and operated prior to obtaining a registration.

Pro-Lam Products, Inc. was issued CP No. 163-4448-00109 on July 17, 1995, for a wood office furniture manufacturing operation. Pursuant to 326 IAC 2-5.5-2(b), the source was required to apply for a Re-Registration by December 25, 2000. On January 28, 2016, IDEM, OAQ received an application from Pro-

Lam Products, Inc. IDEM is reviewing this matter and will take the appropriate action. This proposed approval is intended to satisfy the requirements of the operating permit rules.

**Emission Calculations**

See Appendix A of this TSD for detailed emission calculations.

**Permit Level Determination –Registration**

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

Process/ Emission Unit	Potential To Emit of the Entire Source (tons/year)								
	PM	PM10*	PM2.5*	SO <sub>2</sub>	NO <sub>x</sub>	VOC	CO	Total HAPs	Worst Single HAP
Woodworking	3.942	3.942	3.942	-	-	-	-	-	-
Surface coating	2.319	2.319	2.319	-	-	19.78	-	4.25	3.50 (xylene)
Assembly gluing	-	-	-	-	-	2.22	-	-	-
Natural gas combustion	0.031	0.126	0.126	0.01	1.653	0.091	1.389	0.031	0.030 (hexane)
<b>Total PTE of Entire Source</b>	<b>6.29</b>	<b>6.39</b>	<b>6.39</b>	<b>0.01</b>	<b>1.65</b>	<b>22.09</b>	<b>1.39</b>	<b>4.28</b>	<b>3.560 (xylene)</b>
Exemptions Levels**	< 5	< 5	< 5	< 10	< 10	< 10	< 25	< 25	< 10
Registration Levels**	< 25	< 25	< 25	< 25	< 25	< 25	< 100	< 25	< 10

negl. = negligible  
 \*Under the Part 70 Permit program (40 CFR 70), PM10 and PM2.5, not particulate matter (PM), are each considered as a regulated air pollutant".

- (a) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) of PM<sub>10</sub>, PM<sub>2.5</sub>, and VOC are within the ranges listed in 326 IAC 2-5.5-1(b)(1). The PTE of all other regulated criteria pollutants are less than the ranges listed in 326 IAC 2-5.5-1(b)(1). Therefore, the source is subject to the provisions of 326 IAC 2-5.5 (Registrations). A Registration will be issued.
- (b) The potential to emit (PTE) (as defined in 326 IAC 2-1.1-1) of any single HAP is less than ten (10) tons per year and the PTE of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-7.

**Federal Rule Applicability Determination**

New Source Performance Standards (NSPS)

- (a) The requirements of the New Source Performance Standard for Surface Coating of Metal Furniture, 40 CFR 60.310, Subpart EE (326 IAC 12), are not included in the registration for the surface coating operation, identified as EU 100. The source does not surface coat metal furniture.
- (b) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the registration.

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

- (c) The requirements of the National Emission Standards for Hazardous Air Pollutants for Surface Coating of Plastic Parts and Products, 40 CFR 63.4481, Subpart PPPP (326 IAC 20-81), are not included in this registration for the surface coating operation, identified as EU 100 at this source. This source does not apply surface coatings to plastic parts or products and is not a major source of HAPs.
- (d) The requirements of the National Emission Standards for Hazardous Air Pollutants for Wood Furniture Manufacturing Operations, 40 CFR 63.800, Subpart JJ (326 IAC 20-14), are not included in this registration for the surface coating operation, identified as EU 100, at this source because the source is not a major source of HAPs.
- (e) There are no National Emission Standards for Hazardous Air Pollutants (NESHAPs) (326 IAC 14, 326 IAC 20 and 40 CFR Part 63) included in the registration.

#### Compliance Assurance Monitoring (CAM)

- (f) Pursuant to 40 CFR 64.2, Compliance Assurance Monitoring (CAM) is not included in the registration, 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.

<b>State Rule Applicability Determination</b>
---

The following state rules are applicable to the source:

- (a) 326 IAC 2-5.5 (Registrations)  
Registration applicability is discussed under the Permit Level Determination – Registration section above.
- (b) 326 IAC 2-4.1 (Major Sources of Hazardous Air Pollutants (HAP))  
The emission units potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year. Therefore, this source is an area source under Section 112 of the Clean Air Act (CAA) and not subject to the provisions of 326 IAC 2-4.1.
- (c) 326 IAC 2-6 (Emission Reporting)  
Pursuant to 326 IAC 2-6-1, this source is not subject to this rule, because it is not required to have an operating permit under 326 IAC 2-7 (Part 70), it is not located in Lake, Porter, or LaPorte County, and it does not emit lead into the ambient air at levels equal to or greater than 5 tons per year. Therefore, 326 IAC 2-6 does not apply.
- (d) 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 registration:
  - (1) Opacity shall not exceed an average of thirty percent (30%) 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.

- (e) 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.
- (f) 326 IAC 6-5 (Fugitive Particulate Matter Emission Limitations)  
The source is not subject to the requirements of 326 IAC 6-5 because the source does not have potential fugitive particulate emissions greater than twenty-five (25) tons per year. Therefore, 326 IAC 6-5 does not apply.

#### Woodworking Operation EU 120

- (g) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-2(e), particulate matter (PM) emissions from the woodworking operation EU 120 shall not exceed 4.1 pounds per hour when operating at a process weight rate of 1.0 ton per hour. The pound per hour limitation was calculated with the following equation:

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

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

The dust collector shall be in operation at all times the woodworking operation is in operation, in order to comply with this limit.

#### Surface Coating Operation EU 100

- (h) 326 IAC 6-3-2 (Particulate Emission Limitations, Work Practices, and Control Technology)  
Pursuant to 326 IAC 6-3-2(d), particulate matter (PM) emissions from the surface coating facility EU 100 shall be controlled by a dry particulate filter, waterwash, or an equivalent control device, subject to the following:
  - (1) The source shall operate the control device in accordance with manufacturer's specifications; and
  - (2) If overspray is visibly detected at the exhaust or accumulates on the ground, the source shall inspect the control device and do either of the following no later than four (4) hours after such observation:
    - (A) Repair control device so that no overspray is visibly detectable at the exhaust or accumates on the ground.
    - (B) Operate equipment so that no overspray is visibly detectable at the exhaust or accumates on the ground.

If overspray is visibly detected, the source 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.

- (i) 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)  
The surface coating booth, identified as EU 100, is subject to the requirements of 326 IAC 8-2-12 because it performs surface coating of wood furniture, has actual pre-control VOC emissions greater than fifteen (15) pounds per day, is located in Vanderburgh County, and construction commenced after July 1, 1990.



Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to the wood furniture and wood furniture components in the surface coating booth, identified as EU 100, shall perform surface coating of wood furniture and cabinets, with the exception of no more than ten (10) gallons of coating per day used for touch-up and repair operations, using one or more of the following applications methods:

- Airless Spray Application
- Air Assisted Airless Spray Application
- Electrostatic Spray Application
- Electrostatic Bell or Disc Application
- Heated Airless Spray Application
- Roller Coating Brush or Wipe Application
- Dip-and-Drain Application

High Volume Low Pressure (HVLP) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to substrate by means of coating application equipment which operates between one tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

- (j) 326 IAC 8-11 (Wood Furniture Coatings)  
Pursuant to 326 IAC 8-11-1, this source is not subject to the requirements of 326 IAC 8-11 because the source is located in Vanderburgh County. This rule applies only to facilities located in Lake, Porter, Clark and Floyd Counties.

#### Natural Gas-Fired Combustion Units EU 130, EU 140, and EU 150

- (k) 326 IAC 7-1.1 (Sulfur Dioxide Emission Limitations)  
The natural gas-fired combustion units do not have the potential to emit greater than twenty-five (25) tons of SO<sub>2</sub> per year or ten (10) pounds of SO<sub>2</sub> per hour. Therefore, the natural gas-fired combustion units are not subject to the requirements of 326 IAC 7-1.1.
- (l) 326 IAC 8-1-6 (VOC Rules: General Reduction Requirements for New Facilities)  
The natural gas-fired combustion units are not subject to the requirements of 326 IAC 8-1-6 because each unit has unlimited VOC potential emissions of less than twenty-five (25) tons per year.

#### Gluing Area EU 110

- (m) 326 IAC 6-3-2 (Particulate Emission Limitations for Manufacturing Processes)  
Pursuant to 326 IAC 6-3-1(b)(6), the gluing area is exempt from the requirements of 326 IAC 6-3 because glue application is performed using roll coating.

<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 January 28, 2016.

The construction and operation of this source shall be subject to the conditions of the attached proposed Registration No. R163-36773-00109. The staff recommends to the Commissioner that this Registration be approved.

<b>IDEM Contact</b>
---------------------

- (a) Questions regarding this proposed registration can be directed to Donald McQuigg at the Indiana Department Environmental Management, Office of Air Quality, Permits Branch, 100 North Senate Avenue, MC 61-53 IGCN 1003, Indianapolis, Indiana 46204-2251 or by telephone at (317) 234-4240 or toll free at 1-800-451-6027 extension 4-4240.
- (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 Permit Guide on the Internet at: <http://www.in.gov/idem/5881.htm>; and the Citizens' Guide to IDEM on the Internet at: <http://www.in.gov/idem/6900.htm>.

**Appendix A: Emission Calculations  
Emissions Summary**

**Company Name:** Pro-Lam Products Inc.  
**Address City IN Zip:** 10245 Hedden Road, Evansville, Indiana 47725  
**Registration No.:** R163-36773-00109  
**Reviewer:** Donald McQuigg  
**Date:** January 28, 2016

<b>Unlimited/uncontrolled Potential To Emit of the Source (Tons Per Year)</b>									
<b>Emission Unit/Process</b>	<b>PM</b>	<b>PM<sub>10</sub></b>	<b>PM<sub>2.5</sub></b>	<b>SO<sub>2</sub></b>	<b>NO<sub>x</sub></b>	<b>VOCs</b>	<b>CO</b>	<b>Total HAPs</b>	<b>Worst Single HAP</b>
Woodworking	3.942	3.942	3.942	-	-	-	-	-	-
Surface coating	2.319	2.319	2.319	-	-	19.78	-	4.250	3.50 (xylene)
Adhesive operation	-	-	-	-	-	2.22	-	-	-
Natural gas combustion	0.031	0.126	0.126	0.010	1.653	0.091	1.389	0.031	0.03 (hexane)
<b>Total</b>	<b>6.29</b>	<b>6.39</b>	<b>6.39</b>	<b>0.010</b>	<b>1.653</b>	<b>22.09</b>	<b>1.39</b>	<b>4.28</b>	<b>3.50 (xylene)</b>

**Appendix A: Emission Calculations**  
**Particulate Emissions - Wood Working Operations**

**Company Name:** Pro-Lam Products Inc.  
**Address City IN Zip:** 10245 Hedden Road, Evansville, Indiana 47725  
**Registration No.:** R163-36773-00109  
**Reviewer:** Donald McQuigg  
**Date:** January 28, 2016

Unit ID	Control Device	Outlet Grain Loading (gr/dscf)	Maximum Air Flow Rate (scfm)	Control Efficiency (%)	PTE of PM/PM <sub>10</sub> /PM <sub>2.5</sub> After Integral Baghouse (lbs/hr)	PTE of PM/PM <sub>10</sub> /PM <sub>2.5</sub> After Integral Baghouse (tons/yr)	PTE of PM/PM <sub>10</sub> /PM <sub>2.5</sub> Before Integral Baghouse (lbs/hr)	PTE of PM/PM <sub>10</sub> /PM <sub>2.5</sub> Before Integral Baghouse (tons/yr)	Process Weight Rate (ton/hr)	326 IAC 6-3-2 Allowable PM Emission Rate (lbs/hr)	Baghouse Required (Y/N)
Wood Working	Dust Collector	0.007	15,000	99.0%	0.900	3.942	90.00	394.2	1.00	4.10	Y
<b>Total</b>						<b>3.942</b>		<b>394</b>		<b>4.10</b>	

Assume all PM emissions equal to PM<sub>10</sub>/PM<sub>2.5</sub> emissions.

**Methodology**

PTE of PM/PM<sub>10</sub>/PM<sub>2.5</sub> After Integral Baghouse (lbs/hr) = Grain Loading (gr/dscf) x Max. Air Flow Rate (scfm) x 60 mins/hr x 1/7000 lb/gr

PTE of PM/PM<sub>10</sub>/PM<sub>2.5</sub> After Integral Baghouse (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/PM<sub>10</sub>/PM<sub>2.5</sub> Before Integral Baghouse (lbs/hr) = PTE of PM/PM<sub>10</sub>/PM<sub>2.5</sub> After Integral Baghouse (lbs/hr) / (1-Control Efficiency)

PTE of PM/PM<sub>10</sub>/PM<sub>2.5</sub> Before Integral Baghouse (tons/yr) = PTE of PM/PM<sub>10</sub>/PM<sub>2.5</sub> After Integral Baghouse (tons/yr) / (1-Control Efficiency)

326 IAC 6-3-2 Allowable PM Emission Rate (lbs/hr) = 4.1 \* Process Weight Rate (tons/hr) ^ 0.67

**Appendix A: Emissions Calculations  
VOC and Particulate  
From Surface Coating Operations**

**Company Name:** Pro-Lam Products Inc.  
**Address City IN Zip:** 10245 Hedden Road, Evansville, Indiana 47725  
**Registration No.:** R163-36773-00109  
**Reviewer:** Donald McQuigg  
**Date:** January 28, 2016

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Controlled Particulate Potential (ton/yr)	Transfer Efficiency
Wh Bright Varnish	7.91	55.80%	0.00%	55.80%	0.00%	0.00%	0.000641	30.000	4.41	4.41	0.08	2.04	0.37	0.09	0.01	70%
Wh Varnish Dull	7.95	55.30%	0.00%	55.30%	0.00%	0.00%	0.000481	30.000	4.40	4.40	0.06	1.52	0.28	0.07	0.01	70%
Wh Varnish Medium	7.93	55.50%	0.00%	55.50%	0.00%	0.00%	0.015865	30.000	4.40	4.40	2.09	50.27	9.17	2.21	0.33	70%
Vinyl Sealer	7.41	75.40%	0.00%	75.40%	0.00%	0.00%	0.000801	30.000	5.59	5.59	0.13	3.22	0.59	0.06	0.01	70%
Catalyst	8.09	62.20%	0.05%	62.15%	0.00%	0.00%	0.000449	30.000	5.03	5.03	0.07	1.63	0.30	0.05	0.01	70%
Yellow Dye	8.80	74.00%	0.12%	73.88%	0.00%	0.00%	0.000160	30.000	6.50	6.50	0.03	0.75	0.14	0.01	0.00	70%
Red Dye	9.00	82.00%	0.50%	81.50%	0.00%	0.00%	0.000112	30.000	7.34	7.34	0.02	0.59	0.11	0.01	0.00	70%
Black Dye	8.92	74.00%	0.10%	73.90%	0.00%	0.00%	0.000112	30.000	6.59	6.59	0.02	0.53	0.10	0.01	0.00	70%
Mineral Spirits	6.42	100.00%	0.00%	100.00%	0.00%	0.00%	0.000080	30.000	6.42	6.42	0.02	0.37	0.07	0.00	0.00	70%
HAPs Free Reducer	6.76	100.00%	0.00%	100.00%	0.00%	0.00%	0.007051	30.000	6.76	6.76	1.43	34.32	6.26	0.00	0.00	70%
Butyl Acetate	7.31	100.00%	0.00%	100.00%	0.00%	0.00%	0.003526	30.000	7.31	7.31	0.77	18.56	3.39	0.00	0.00	70%

**Total Potential to Emit - Worst Case**

Dry filter control efficiency = 85.00%

<b>19.78</b>	<b>2.32</b>	<b>0.35</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)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

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

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

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

**Appendix A: Emissions Calculations  
Hazardous Air Pollutants (HAPs)  
From Surface Coating Operations (EU 100)**

**Company Name:** Pro-Lam Products Inc.  
**Address City IN Zip:** 10245 Hedden Road, Evansville, Indiana 47725  
**Registration No.:** R163-36773-00109  
**Reviewer:** Donald McQuigg  
**Date:** January 28, 2016

Material	Density (Lb/Gal)	Gallons of Material (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % Benzene	Weight % Ethyl Benzene	Weight % Chromium Cmpds	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Benzene Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	Chromium Cmpds Emissions (ton/yr)
Wh Bright Varnish	7.91	0.000641	30.00	21.00%	0.00%	0.01%	0.00%	4.00%	0.00%	0.14	0.00	0.0001	0.00	0.03	0.00
Wh Varnish Dull	7.95	0.000481	30.00	21.00%	0.00%	0.01%	0.00%	4.00%	0.00%	0.11	0.00	0.0001	0.00	0.02	0.00
Wh Varnish Medium	7.93	0.015865	30.00	21.00%	0.00%	0.01%	0.00%	4.00%	0.00%	3.47	0.00	0.0017	0.00	0.66	0.00
Vinyl Sealer	7.41	0.000801	30.00	4.00%	6.00%	0.00%	0.00%	0.60%	0.00%	0.03	0.05	0.00	0.00	0.00	0.00
Catalyst	8.09	0.000449	30.00	0.00%	0.00%	0.00%	0.00%	0.00%	0.00%	0.00	0.00	0.00	0.00	0.00	0.00
Yellow Dye	8.80	0.000160	30.00	0.00%	0.00%	0.00%	0.00%	0.00%	18.00%	0.00	0.00	0.00	0.00	0.00	0.03
Red Dye	9.00	0.000112	30.00	0.00%	0.00%	0.00%	0.00%	0.00%	18.00%	0.00	0.00	0.00	0.00	0.00	0.02
Black Dye	8.92	0.000112	30.00	0.00%	0.00%	0.00%	0.00%	0.00%	16.00%	0.00	0.00	0.00	0.00	0.00	0.02

**Total Single HAP Potential Emissions - Worst Case**

**3.503      0.047      0.002      0.000      0.666      0.033**

**Total HAP Potential Emissions - Worst Case**

**4.25**

**METHODOLOGY**

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

**Appendix A: Emissions Calculations  
VOC  
From Adhesive Operations**

**Company Name:** Pro-Lam Products Inc.  
**Address City IN Zip:** 10245 Hedden Road, Evansville, Indiana 47725  
**Registration No.:** R163-36773-00109  
**Reviewer:** Donald McQuigg  
**Date:** January 28, 2016

Material	Density (Lb/Gal)	Weight % Volatile (H2O & Organics)	Weight % Water	Weight % Organics	Volume % Water	Volume % Non-Volatiles (solids)	Gal of Mat. (gal/unit)	Maximum (unit/hour)	Pounds VOC per gallon of coating less water	Pounds VOC per gallon of coating	Potential VOC pounds per hour	Potential VOC pounds per day	Potential VOC tons per year	Particulate Potential (ton/yr)	Controlled Particulate Potential (ton/yr)	Transfer Efficiency*
Wilsonart PVA Wood Glue	9.40	50.00%	45.00%	5.00%	0.00%	0.00%	0.036000	30.000	0.47	0.47	0.51	12.18	2.22	0.00	0.00	100%

**Total Potential to Emit - Worst Case**

<b>2.22</b>	<b>0.00</b>	<b>0.00</b>
-------------	-------------	-------------

\* Transfer efficiency is 100% for roll coating.

**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)

Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)

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

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

Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \* (8760 hrs/yr) \* (1 ton/2000 lbs)

Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids)

Total = Worst Coating + Sum of all solvents used

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

**Company Name:** Pro-Lam Products Inc.  
**Address City IN Zip:** 10245 Hedden Road, Evansville, Indiana 47725  
**Registration No.:** R163-36773-00109  
**Reviewer:** Donald McQuigg  
**Date:** January 28, 2016

Emission Unit	MMBtu/hr
drying oven	0.65
space heater	1.6
space heater	1.6
<b>Total</b>	<b>3.85</b>

Heat Input Capacity MMBtu/hr	HHV mmBtu mmscf	Potential Throughput MMCF/yr
3.85	1020	33.1

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	0.13	0.13	0.01	1.65	0.09	1.39

\*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

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

**Hazardous Air Pollutants (HAPs)**

	HAPs - Organics					
	Benzene	Dichlorobenzene	Formaldehyde	Hexane	Toluene	Total - Organics
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	3.5E-05	2.0E-05	1.2E-03	0.03	5.6E-05	<b>0.03</b>

	HAPs - Metals					
	Lead	Cadmium	Chromium	Manganese	Nickel	Total - Metals
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	8.3E-06	1.8E-05	2.3E-05	6.3E-06	3.5E-05	<b>9.1E-05</b>

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.

<b>Total HAPs</b>	<b>0.031</b>
<b>Worst HAP</b>	<b>0.030</b>





# 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)

**Michael R. Pence**  
*Governor*

**Carol S. Comer**  
*Commissioner*

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

**TO:** Mark Plummer  
Pro-Lam Products, Inc.  
10245 Hedden Road  
Evansville, IN 47725

**DATE:** May 19, 2016

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

**SUBJECT:** Final Decision  
Registration - Reregistration  
163-36773-00109

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

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

A copy of the final decision and supporting materials has also been sent via standard mail to:  
OAQ Permits Branch Interested Parties List

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

Final Applicant Cover letter.dot 2/17/2016

# Mail Code 61-53

IDEM Staff	VHAUN 5/19/2016 Pro-Lam Products, Inc. 163-36773-00109 FINAL		Type of Mail:  <b>CERTIFICATE OF MAILING ONLY</b>	AFFIX STAMP HERE IF USED AS CERTIFICATE OF MAILING
Name and address of Sender	▶	Indiana Department of Environmental Management Office of Air Quality – Permits Branch 100 N. Senate Indianapolis, IN 46204		

Line	Article Number	Name, Address, Street and Post Office Address	Postage	Handing Charges	Act. Value (If Registered)	Insured Value	Due Send if COD	R.R. Fee	S.D. Fee	S.H. Fee	Rest. Del. Fee	Remarks
1		Mark Plummer Pro-Lam Products, Inc. 10245 Hedden Rd Evansville IN 47725 (Source CAATS)										
2		Vanderburgh County Commissioners 1 NW MLK Blvd, Rm 305 Evansville IN 47708 (Local Official)										
3		Mr. Don Mottley Save Our Rivers 6222 Yankeetown Hwy Boonville IN 47601 (Affected Party)										
4		Vanderburgh County Health Dept. 420 Milberry Street Evansville IN 47713-1888 (Health Department)										
5		Mr. Mark Wilson Evansville Courier & Press P.O. Box 268 Evansville IN 47702-0268 (Affected Party)										
6		David Boggs 216 Western Hills Dr Mt Vernon IN 47620 (Affected Party)										
7		John Blair 800 Adams Ave Evansville IN 47713 (Affected Party)										
8												
9												
10												
11												
12												
13												
14												
15												

Total number of pieces Listed by Sender	Total number of Pieces Received at Post Office	Postmaster, Per (Name of Receiving employee)	The full declaration of value is required on all domestic and international registered mail. The maximum indemnity payable for the reconstruction of nonnegotiable documents under Express Mail document reconstructing insurance is \$50,000 per piece subject to a limit of \$50, 000 per occurrence. The maximum indemnity payable on Express mil merchandise insurance is \$500. The maximum indemnity payable is \$25,000 for registered mail, sent with optional postal insurance. See <b>Domestic Mail Manual R900, S913, and S921</b> for limitations of coverage on inured and COD mail. See <b>International Mail Manual</b> for limitations o coverage on international mail. Special handling charges apply only to Standard Mail (A) and Standard Mail (B) parcels.
<b>6</b>			