



Joseph E. Kernan
Governor

Lori F. Kaplan
Commissioner

October 14, 2004

100 North Senate Avenue
P.O. Box 6015
Indianapolis, Indiana 46206-6015
(317) 232-8603
(800) 451-6027
www.in.gov/idem

TO: Interested Parties / Applicant

RE: Lippert Components, Inc. / 085-19617-00099

FROM: Paul Dubenetzky
Chief, Permits Branch
Office of Air Quality

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 enclosed matter. Pursuant to 326 IAC 2, this approval was effective immediately upon submittal of the application.

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, Room 1049, 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 Office of Environmental Adjudication (OEA);
- (2) the date of the postmark on the envelope containing the document, if the document is mailed to OEA by U.S. mail; or
- (3) The date on which the document is deposited with a private carrier, as shown by receipt issued by the carrier, if the document is sent to the OEA by private carrier.

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

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

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

Enclosures
FNPER-AM.dot 9/16/03



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Joseph E. Kernan
Governor

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October 14, 2004

Erick Click
Lippert Components, Inc.
2475 E Kercher Road
Goshen, IN 46526

Re: Exempt Construction and Operation Status,
085-19617-00099

Dear Erick Click:

The application from Lippert Components, Inc., received on September 15, 2004, has been reviewed. Based on the data submitted and the provisions in 326 IAC 2-1.1-3, it has been determined that the following metal boat trailer welding and powder surface coating source, to be located at 802 Old State Road 15, Milford, Indiana 46542, is classified as exempt from air pollution permit requirements:

- (a) Fifteen (15) welding stations (gas metal arc welding) utilizing carbon steel wire (ER-70s) at a maximum wire usage rate of 3.3 pounds of wire per hour.
- (b) Powder Coating Line:
 - (1) One (1) natural gas-fired dry off oven (designated EU-01) equipped with a low NOx burner, with a maximum heat input capacity of 1.89 MMBtu per hour and;
 - (2) One (1) electrostatic powder coating booth (designated EU-02), utilizing spray application method with a maximum coating rate of 15 pounds of powder coating per part and 24 parts per hour with filter wall particulate collection rated at 99.99% control efficiency to collect the powder overspray. Based on a powder coating transfer efficiency of 85% and the filter wall particulate collection efficiency, the filter wall has a design grain loading of less than or equal to 0.0000315 grain per actual cubic foot of outlet air, when operated at a maximum gas flow rate of twenty thousand (20,000) actual cubic feet per minute (acfm); and
 - (3) One (1) natural gas-fired powder curing oven (designated EU-03) equipped with a low NOx burner, with a maximum heat input capacity of 4.62 MMBtu per hour.
- (c) One (1) natural gas-fired unit heater (designated UH1-8) with a maximum heat input capacity of 0.2 MMBtu per hour.

The following conditions shall be applicable:

- (1) 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:
 - (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 15 minutes (60 readings) in a 6-hour period as measured according to 40 CFR 60, Appendix A, Method 9 or fifteen (15) one (1) minute nonoverlapping integrated averages for a continuous opacity monitor in a six (6) hour period.
- (2) 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.
- (3) Pursuant to 40 CFR 52, Subpart P (Particulate Matter), particulate matter emissions from the powder coating booth shall not exceed the pound per hour emission rate established as E in the following formula:

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:

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

- (4) The requirements of 326 IAC 6-3 are applicable to the powder coating booth. Pursuant to 326 IAC 6-3-2(e)(2), any manufacturing process not exempt under 326 IAC 6-3-1(b) or (c) and to which the control methods in 326 IAC 6-3-2 (b) through (d) do not apply shall calculate allowable particulate emissions as follows:
 - (a) No person shall operate any manufacturing process so as to produce, cause, suffer, or allow particulate to be emitted in excess of the amount shown in the table in 326 IAC 6-3-2(e)(2). The allowable rate of emission shall be based on the process weight rate for a manufacturing process.
 - (b) When the process weight rate is less than one hundred (100) pounds per hour, the allowable rate of emission is five hundred fifty-one thousandths (0.551) pound per hour.
 - (c) When the process weight exceeds two hundred (200) tons per hour, the allowable emission may exceed that shown in the table in 326 IAC 6-3-2(e)(2), provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per one thousand (1,000) pounds of gases:

In order to comply with the allowable rate of emission, the particulate controls of the powder coating booth shall be in operation at all times when the booth is in operation. The allowable rate of emission can be calculated as follows:

Interpolation of the data in the table in 326 IAC 6-3-2(e)(2) for the process weight rates up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

and interpolation and extrapolation of the data in the table in 326 IAC 6-3-2(e)(2) for the process weight rates in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour, and} \\ P = \text{process weight rate in tons per hour}$$

This exemption is the first air approval issued to this source.

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.

Sincerely,

Original signed by

Paul Dubenetzky, Chief
Permits Branch
Office of Air Quality

NCB

cc: File - Kosciusko County
Kosciusko County Health Department
Air Compliance - Doyle Houser
Permit Tracking
Compliance Data Section

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

Technical Support Document (TSD) for an Exemption

Source Background and Description

Source Name: Lippert Components, Inc.
Source Location: 802 Old State Road 15, Milford, Indiana, 46542
County: Kosciusko
SIC Code: 3799
Operation Permit No.: 085-19617-00099
Permit Reviewer: Nathan C. Bell

The Office of Air Quality (OAQ) has reviewed an application from Tri Star Engineering, Inc. relating to the operation of a metal boat trailer welding and powder surface coating source.

Emission Units and Pollution Control Equipment

This source will include the following emission units:

- (a) Fifteen (15) welding stations (gas metal arc welding) utilizing carbon steel wire (ER-70s) at a maximum wire usage rate of 3.3 pounds of wire per hour.
- (b) Powder Coating Line:
 - (1) One (1) natural gas-fired dry off oven (designated EU-01) equipped with a low NOx burner, with a maximum heat input capacity of 1.89 MMBtu per hour and;
 - (2) One (1) electrostatic powder coating booth (designated EU-02), utilizing spray application method with a maximum coating rate of 15 pounds of powder coating per part and 24 parts per hour with filter wall particulate collection rated at 99.99% control efficiency to collect the powder overspray. Based on a powder coating transfer efficiency of 85% and the filter wall particulate collection efficiency, the filter wall has a design grain loading of less than or equal to 0.0000315 grain per actual cubic foot of outlet air, when operated at a maximum gas flow rate of twenty thousand (20,000) actual cubic feet per minute (acfm); and
 - (3) One (1) natural gas-fired powder curing oven (designated EU-03) equipped with a low NOx burner, with a maximum heat input capacity of 4.62 MMBtu per hour.
- (c) One (1) natural gas-fired unit heater (designated UH1-8) with a maximum heat input capacity of 0.2 MMBtu per hour.

Stack Summary

Stack ID	Operation	Height (ft)	Diameter (ft)	Flow Rate (acfm)	Temperature (°F)
S1	Dry Off Oven	22	0.72 x 0.93	1,223	Max 350°F
S2	Powder Curing Oven	22	1.33 x 1.77	3,834	Max 500°F

Enforcement Issue

There are no enforcement actions pending.

Recommendation

The staff recommends to the Commissioner that the construction and operation be approved. This recommendation is based on the following facts and conditions:

A complete application for the purposes of this review was received on September 15, 2004.

Unless otherwise stated, information used in this review was derived from the application and additional information provided by the applicant.

Air Pollution Control Justification as an Integral Part of the Process

IDEM, OAQ has evaluated the following information provided by the company and has determined that the filter wall particulate collection system can be considered as an integral part of the powder coating booth:

- (a) The entire system is a closed loop system, with no direct external exhausts.
- (b) The primary purpose of the filter wall is to collect the overspray powder and the powder that has settled on the coating booth's floor for re-use, providing cost savings by recovering expensive unused powder for recycling, and to control particulate emissions within the plant. The equipment would still be installed if no air quality regulations were in place.

Therefore, the permitting level will be determined using the potential to emit (PTE) after the filter wall. Operating conditions in the proposed permit will specify that the filter wall shall operate at all times when the powder coating booth is in operation.

Emission Calculations

- (a) Welding Operations: See Page 1 of 4 TSD Appendix A for detailed emission calculations.
- (b) Powder Coating Booth: See Page 2 of 4 TSD Appendix A for detailed emission calculations.
- (c) Natural Gas Combustion: See Page 3 of 4 TSD Appendix A for detailed emission calculations.
- (d) Powder Coating:

The PM/PM10 emissions from the powder coating booth was determined to be 0.02 tons per year after controls, based on a powder coating transfer efficiency of 85% and a filter wall particulate collection efficiency of 99.99%. Based on these efficiencies, the filter wall has a design grain loading of the of less than or equal to 0.0000315 grain per actual cubic foot of outlet air, when operated at a maximum gas flow rate of twenty thousand (20,000) actual cubic feet per minute (acfm).

Potential to Emit Before Controls

Pursuant to 326 IAC 2-1.1-1(16), Potential to Emit is defined as "the maximum capacity of a stationary source or emissions 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, the department, or the appropriate local air pollution control agency."

Pollutant	Potential to Emit (tons/yr)
PM	1.21
PM-10	1.37
SO ₂	0.02
VOC	0.16
CO	2.47
NO _x	1.51

Hazardous Air Pollutant (HAP)	Potential to Emit (tons/yr)
Lead	neg.
Cadmium	neg.
Chromium	neg.
Cobalt	neg.
Manganese	0.69
Nickel	neg.
Benzene	neg.
Dichlorobenzene	neg.
Formaldehyde	neg.
Hexane	0.05
Toluene	neg.
Worst Single HAP	0.69
Combined HAPs	0.75

- (a) The potential to emit (as defined in 326 IAC 2-7-1(29)) of regulated criteria pollutants are less than the levels listed in 326 IAC 2-1.1-3(d)(1). Therefore, the source is subject to the provisions of 326 IAC 2-1.1-3.
- (b) The potential to emit (as defined in 326 IAC 2-7-1(29)) 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, the source is subject to the provisions of 326 IAC 2-1.1-3.

County Attainment Status

The source is located in Kosciusko County.

Pollutant	Status
PM-10	unclassifiable/attainment
SO ₂	unclassifiable/attainment
NO ₂	unclassifiable/attainment
1-hour Ozone	unclassifiable/attainment
8-hour Ozone	unclassifiable/attainment
CO	unclassifiable/attainment
Lead	attainment

- (a) Volatile organic compounds (VOC) and Nitrogen Oxides (NOx) are regulated under the Clean Air Act (CAA) for the purposes of attaining and maintaining the National Ambient Air Quality Standards (NAAQS) for ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standard. Kosciusko County has been designated as attainment or unclassifiable for ozone. Therefore, VOC emissions and NOx were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2. See the State Rule Applicability for the source section.

- (b) Kosciusko County has been classified as attainment or unclassifiable 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. See the State Rule Applicability for the source section.

Source Status

New Source PSD Definition (emissions after controls, based on 8760 hours of operation per year at rated capacity and/or as otherwise limited):

Pollutant	Emissions (tons/yr)
PM	1.21
PM-10	1.37
SO ₂	0.02
VOC	0.16
CO	2.47
NO _x	1.51
Worst Single HAP	0.69
Combined HAPs	0.75

- (a) This new source is not a major stationary source because no attainment pollutant is emitted at a rate of 250 tons per year or greater and it is not in one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, the PSD requirements do not apply.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This new source is not subject to the Part 70 Permit requirements because the potential to emit (PTE) of:

- (a) each criteria pollutant is less than 100 tons per year,
- (b) a single hazardous air pollutant (HAP) is less than 10 tons per year, and
- (c) any combination of HAPs is less than 25 tons/year.

This is the first air approval issued to this source.

Federal Rule Applicability

- (a) This source is not subject to the requirements of 40 CFR 60, Subpart E (60.50 through 60.54), Standards of Performance for Incinerators (326 IAC 12), because the natural gas-fired ovens have a charging rate less than fifty (50) tons per day and they do not burn refuse consisting of more than 50 percent municipal type waste (household, commercial/retail, and/or institutional waste).
- (b) This source is not subject to the requirements of 40 CFR 60, Subpart Ea (60.50a through 60.59a), Standards of Performance for Large Municipal Waste Combustors for Which Construction is Commenced after December 20, 1989 and on or before September 20, 1994(326 IAC 12), because the natural gas-fired ovens are not considered municipal waste combustors.
- (c) This source is not subject to the requirements of 40 CFR 60, Subpart Eb (60.50b through 60.59b), Standards of Performance for Large Municipal Waste Combustors for Which Construction is Commenced after September 20, 1994, or for Which Modification or Reconstruction is commenced after June 19, 1996 (326 IAC 12), because the natural gas-fired ovens are not considered municipal waste combustors.

- (d) This source is not subject to the requirements of 40 CFR 60, Subpart Ec (60.50c through 60.58c), Standards of Performance for Hospital/Medical/Infectious Waste Incinerators for Which Construction is Commenced after January 20, 1996 (326 IAC 12), because the natural gas-fired ovens are not considered Hospital/Medical/Infectious Waste Incinerators.
- (e) There are no New Source Performance Standards (NSPS) (326 IAC 12 and 40 CFR Part 60) included in the permit for this source.
- (f) This source is not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR 63, Subpart Mmmm, Miscellaneous Metal Parts and Products Surface Coating, because this source is not a major source of HAPs as defined in 40 CFR 63.2.
- (g) The natural gas-fired heaters and ovens are not subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAPs) for Industrial, Commercial, and Institutional Boilers and Process Heaters, 40 CFR 63, Subpart DDDDD. The natural gas-fired heaters and ovens are part of the affected source for the small gaseous fuel subcategory, as defined by 40 CFR 63.7575, because they each have a rated capacity of less than or equal to 10 million British thermal units per hour heat input. However, pursuant to 40 CFR 63.7506(c), there are no applicable requirements from 40 CFR 63, Subpart DDDDD and 40 CFR, Subpart A for the affected source for the small gaseous fuel subcategory.
- (h) This source is not subject to the requirements of 40 CFR Subpart EEE (63.1200 through 63.1214), NESHAPs from Hazardous Waste Combustors (326 IAC 20-28-1), because the natural gas-fired ovens are not considered hazardous waste incinerators and the source is not a major source of HAPs.
- (i) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP)(326 IAC 14, 20 and 40 CFR Part 61, 63) included in the permit for this source.

State Rule Applicability - Entire Source

326 IAC 2-2 (Prevention of Significant Deterioration (PSD))

This source was constructed in 2004, after the applicability date of August 7, 1977, however, it is not one of the 28 listed source categories defined in 326 IAC 2-2-1(y)(1), no major modifications were done to this source, and the uncontrolled potential to emit of all attainment regulated pollutants is less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (PSD) are not applicable.

326 IAC 2-4.1 and 326 IAC 2-7 (Major Sources of Hazardous Air Pollutants (HAP))

The requirements of 326 IAC 2-4.1 are not applicable to this source, since the potential to emit of any single HAP is less than ten (10) tons per year and the potential to emit of a combination of HAPs is less than twenty-five (25) tons per year.

326 IAC 2-6 (Emission Reporting)

The requirements of 326 IAC 2-6 are not applicable, since this source is located in Kosciusko County and does not have a permit under 326 IAC 2-7, Part 70 Permit Program.

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:

- (a) Opacity shall not exceed an average of forty percent (40%) 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.

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.

State Rule Applicability - Individual Facilities

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

The requirements of 326 IAC 8-1-6 are not applicable, since each of the emission units at this source does not have the potential to emit greater than twenty-five (25) tons of VOCs per year.

State Rule Applicability - Welding Emission Units

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

Pursuant to 326 IAC 6-3-1(b)(14), the welding operations of this source are exempt from the requirements of 326 IAC 6-3 because the potential particulate emissions is less than five hundred fifty-one thousandths (0.551) pound per hour.

State Rule Applicability - Powder Coating Booth Emission Unit

40 CFR 52, Subpart P (Particulate Matter (PM))

Pursuant to 40 CFR 52, Subpart P, the PM from the powder coating booth shall not exceed the pound per hour emission rate established as E in the following formula:

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:

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

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

The requirements of 326 IAC 6-3 are applicable to the powder coating booth. Pursuant to 326 IAC 6-3-2(e)(2), any manufacturing process not exempt under 326 IAC 6-3-1(b) or (c) and to which the control methods in 326 IAC 6-3-2 (b) through (d) do not apply shall calculate allowable particulate emissions as follows:

- (1) No person shall operate any manufacturing process so as to produce, cause, suffer, or allow particulate to be emitted in excess of the amount shown in the table in 326 IAC 6-3-2(e)(2). The allowable rate of emission shall be based on the process weight rate for a manufacturing process.
- (2) When the process weight rate is less than one hundred (100) pounds per hour, the allowable rate of emission is five hundred fifty-one thousandths (0.551) pound per hour.
- (3) When the process weight exceeds two hundred (200) tons per hour, the allowable emission may exceed that shown in the table in 326 IAC 6-3-2(e)(2), provided the concentration of particulate in the discharge gases to the atmosphere is less than one-tenth (0.10) pound per

one thousand (1,000) pounds of gases:

In order to comply with the allowable rate of emission, the particulate controls of the powder coating booth shall be in operation at all times when the booth is in operation. The allowable rate of emission can be calculated as follows:

Interpolation of the data in the table in 326 IAC 6-3-2(e)(2) for the process weight rates up to sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

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

and interpolation and extrapolation of the data in the table in 326 IAC 6-3-2(e)(2) for the process weight rates in excess of sixty thousand (60,000) pounds per hour shall be accomplished by use of the equation:

$$E = 55.0 P^{0.11} - 40 \quad \text{where } E = \text{rate of emission in pounds per hour, and} \\ P = \text{process weight rate in tons per hour}$$

326 IAC 8-2 (Surface Coating Emission Limitations)

Pursuant to 326 IAC 8-2-1 (Applicability) and 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), this rule applies to facilities constructed after July 1, 1990 located in any county, and with actual VOC emissions of greater than fifteen (15) pounds per day before add-on controls. The one (1) powder coating booth is not subject to the requirements of 326 IAC 8-2-9 because spray application of the dry powder coatings does not emit VOCs.

State Rule Applicability – Natural Gas Combustion Sources

326 IAC 4-2-2 (Incinerators)

The natural gas-fired dry off oven (EU-01) and powder curing oven (EU-03) are not incinerators, as defined by 326 IAC 1-2-34, since they do not burn waste substances. Therefore, these ovens are not subject to 326 IAC 4-2-2.

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

The natural gas-fired dry off oven (EU-01), powder curing oven (EU-03), and unit heater (UH1-8) are not subject to 326 IAC 6-2 as they are not sources of indirect heating.

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

Pursuant to 326 IAC 6-3-1(b)(14), the natural gas-fired dry off oven (EU-01), powder curing oven (EU-03), and unit heater (UH1-8) are each exempt from the requirements of 326 IAC 6-3 because they each have a potential particulate emissions less than five hundred fifty-one thousandths (0.551) pound per hour.

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

The natural gas-fired heaters and ovens are not subject to the rule 326 IAC 7-1 because the potential and the actual emissions are less than 25 tons per year and 10 pounds per hour respectively.

Conclusion

The operation of this metal boat trailer welding and powder surface coating source shall be subject to the conditions of the attached proposed Exemption No. 085-19617-00099.

**Appendix A: Emissions Calculations
Welding Operations**

Company Name: Lippert Components, Inc.
Address City IN Zip: 802 Old State Road 15, Milford, IN 46542
Permit Number: 085-19617
Plt ID: 085-00099
Reviewer: Nathan C. Bell
Date: September 30, 2004

PROCESS	Number of Stations	Max. electrode consumption per station (lbs/hr)	Max. electrode consumption (lbs/day)	EMISSION FACTORS* (lb pollutant/lb electrode)						EMISSIONS (lbs/hr)						HAPS (lbs/hr)	
				PM = PM10	Pb	Cr	Co	Mn	Ni	PM = PM10	Pb	Cr	Co	Mn	Ni		
WELDING																	
Gas Metal Arc Welding (ER70s)	15	3.3	1188	5.20E-03		1.0E-05	1.0E-05	3.2E-03	1.0E-05	0.26		5.0E-04	5.0E-04	1.6E-01	5.0E-04	1.6E-01	

Total Potential Emissions lbs/day	6.18		0.01	0.01	3.78	0.01	3.80
Total Potential Emissions tons/year	1.13		0.002	0.002	0.689	0.002	0.69

METHODOLOGY

*Emission Factors are default values for Gas Metal Arc Welding (GMAW) (SCC 3-09-052) Electrode Type ER70s, AP-42

Welding emissions, lb/hr: (# of stations) * (max. lbs of electrode used/hr/station) * (emission factor, lb. pollutant/lb. of electrode used)

Emissions, lbs/day = emissions, lbs/hr x 24 hrs/day

Emissions, tons/yr = emissions, lb/hr x 8,760 hrs/year x 1 ton/2,000 lbs.

Abbreviations

Cr = Chromium Mn = Manganese
 Co = Cobalt Pb = Lead
 Ni = Nickel

**Appendix A: Emissions Calculations
VOC and Particulate
Powder Coating Booth EU-02**

**Company Name: Lippert Components, Inc.
Address City IN Zip: 802 Old State Road 15, Milford, IN 46542
Permit Number: 085-19617
Plt ID: 085-00099
Reviewer: Nathan C. Bell
Date: September 30, 2004**

Material	Density (Lb/Gal)	Weight % Organics	Weight % Non-Volatiles (solids)	Pounds of Mat. (lbs/unit)	Gal of Mat. (gal/unit)	Maximum (unit/hr)	Pounds of Powder used (lb/hr)	Gal of Mat. Used (gal/day)	Potential VOC (lb/hr)	Particulate Potential (lb/hr)	Transfer Efficiency*
Powder Booth EU-02											
Bumper Black Powder Coating	13.76	0.0%	100%	15	1.1	24	360	628	0	54	85.0%

* Transfer Efficiency is assumed to be 0% for worst case emissions.

Potential Emissions (lb/day)	0	1296
Potential Emissions (ton/yr)	0	237

Filter Wall Control Efficiency	99.99%
Particulate Matter Emissions after controls (lb/hr)	0.0054
Particulate Matter Emissions after controls (lb/day)	0.13
Particulate Matter Emissions after controls (ton/yr)	0.02

Maximum Outlet Air Flow Rate (acfm)	20000
Outlet Grain Loading (grains/scf)	3.15E-05

METHODOLOGY

Potential VOC Pounds per Hour = Density (lb/gal) * Weight % Organics * Gal of Material (gal/unit) * Maximum (units/hr)

Particulate Potential Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) * Gal of Material (gal/unit) * Maximum (units/hr) * (Weight % Solids) * (1-Transfer efficiency)

Pounds per Day = (lb/hr) * (24 hr/day)

Tons per Year = (lb/day) * (365 days/yr) * (1 ton/2000 lbs)

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

Dry-Off Oven EU-01, Powder Cure Oven EU-03, Unit Heater UH1-8

Company Name: Lippert Components, Inc.
Address City IN Zip: 802 Old State Road 15, Milford, IN 46542
Permit Number: 085-19617
Plt ID: 085-00099
Reviewer: Nathan C. Bell
Date: September 30, 2004

Emission Factor lb/MMCF						Potential Emission tons/yr		
PM*	PM10*	SO2	NOx**	VOC	CO	PM*	PM10*	SO2
1.9	7.6	0.6	50	5.5	84.0	0.016	0.06	0.005
1.9	7.6	0.6	50	5.5	84.0	0.038	0.15	0.012
1.9	7.6	0.6	100	5.5	84.0	0.002	0.01	0.001

* PM10 emission factor is filterable and condensable PM10 combined.

** Controlled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Emission Factor lb/MMCF					Potential Emission tons/yr			
Benzene	DCB	Formaldehyde	Hexane	Toluene	Benzene	DCB	Formaldehyde	Hexane
2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	1.7E-05	9.9E-06	6.2E-04	1.5E-02
2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	4.2E-05	2.4E-05	1.5E-03	3.6E-02
2.1E-03	1.2E-03	7.5E-02	1.8E+00	3.4E-03	1.8E-06	1.1E-06	6.6E-05	1.6E-03

Emission Factor lb/MMCF					Potential Emission tons/yr			
Pb	Cd	Cr	Mn	Ni	Pb	Cd	Cr	Mn
5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	4.1E-06	9.1E-06	1.2E-05	3.1E-06
5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	1.0E-05	2.2E-05	2.8E-05	7.7E-06
5.0E-04	1.1E-03	1.4E-03	3.8E-04	2.1E-03	4.4E-07	9.6E-07	1.2E-06	3.3E-07

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

**Appendix A: Emissions Calculations
Total VOC, Particulate, and HAPs
Welding, Painting, and Natural Gas Ovens**

**Company Name: Lippert Components, Inc.
Address City IN Zip: 802 Old State Road 15, Milford, IN 46542
Permit Number: 085-19617
Plt ID: 085-00099
Reviewer: Nathan C. Bell
Date: September 30, 2004**

VOCs and Particulate Matter

Operation	Potential Emissions					
	PM (ton/yr)	PM10 (ton/yr)	SO2 (ton/yr)	NOx (ton/yr)	VOC (ton/yr)	CO (ton/yr)
Welding	1.13	1.13	-	-	-	-
Powder Coating (EU-02)	0.02	0.02	-	-	-	-
Natural Gas Ovens (EU-01, EU-03, UH1-8)	0.06	0.22	0.02	1.51	0.16	2.47
Totals	1.21	1.37	0.02	1.51	0.16	2.47

For welding and natural gas ovens, no controls were assumed to be used