



Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
Commissioner

100 North Senate Avenue
Indianapolis, Indiana 46204
(317) 232-8603
(800) 451-6027
www.IN.gov/idem

TO: Interested Parties / Applicant
DATE: November 28, 2005
RE: Karl Schmidt Unisia, Inc. / 003-21848-00064
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 1/10/05



INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

We make Indiana a cleaner, healthier place to live.

Mitchell E. Daniels, Jr.
Governor

Thomas W. Easterly
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100 North Senate Avenue
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Mr. Tony Martin
Karl Schmidt Unisia, Inc.
2425 Coliseum Blvd. South
Fort Wayne, IN 46803

November 28, 2005

Re: 003-21848-00064
Exemption
Part 70 003-15163-00064

Dear Mr. Martin:

Karl Schmidt Unisia, Inc. was issued a permit on January 28, 2004 for a stationary aluminum foundry manufacturing pistons. A letter requesting an amendment was received on September 26, 2005.

A new coating operation, cure oven, and phosphate pretreatment line is being added to the existing source. Since potential emissions from these emission units are below the levels specified in 326 IAC 2-1.1-3(e)(1) (Exemptions), these units are being added as insignificant activities. See Appendix A of this document for emission calculations. The equipment descriptions for these units are as follows:

- (a) a coating operation for surface coating pistons which includes a pre-washer, natural gas-fired dry off oven, with a maximum heat input capacity of 0.4 million British thermal units (MMBtu) per hour, roller coating, silk screen coating application, and a natural gas-fired curing oven, with a maximum heat input capacity of 1.0 MMBtu per hour;
- (b) a phosphate pretreat line, consisting of six spray tanks connected to a RO Halo system.

The surface coating operation for surface coating pistons is not subject to the requirements of 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations) because it will be constructed after July 1, 1990 and has potential VOC emissions of less than fifteen (15) pounds per day.

The surface coating operation for surface coating pistons is also not subject to 326 IAC 6-3-2(d). This operation uses a silk screen coating application method which has a transfer efficiency of 100%. Therefore, there are negligible particulate emissions from this operation that are less than 0.551 pound per hour. Pursuant to 326 IAC 6-3-1(b)(14), this operation is exempt from this rule.

IDEM acknowledges the installation of the operations listed above. Since these facilities are insignificant activities pursuant to 326 IAC 2-7-1(21), and are not specifically regulated, no change will be made to Part 70 Operating Permit T003-15163-00064. All other conditions of the permit shall remain unchanged and in effect.

This decision is subject to the Indiana Administrative Orders and Procedures Act - IC 4-21.5-3-5. If you have any questions on this matter, please contact Trish Earls, at (973) 575-2555, ext. 3219 or dial (800) 451-6027, and ask for extension 3-6878.

Sincerely,

Original Signed By:
Nisha Sizemore
Permits Branch Section Chief
Office of Air Quality

Attachments

TE/EVP

cc: File – Allen County
U.S. EPA, Region V
Allen County Health Department
Air Compliance Section Inspector - Patrick Burton
Compliance Data Section
Administrative and Development
Technical Support and Modeling

Appendix A: Emission Calculations Source Emissions Summary

Company Name: Karl Schmidt Unisia, Inc.
Address City IN Zip: 2425 Coliseum Blvd. South, Fort Wayne, Indiana 46803
Exemption No.: 003-21848
Pit ID: 003-00064
Reviewer: Trish Earls/EVP

| Total Potential To Emit (tons/year) | | | |
|--|---------------------|------------------------|---------------------|
| Emissions Generating Activity | | | |
| Pollutant | Coating Operation | Natural Gas Combustion | TOTAL |
| PM | 0.00 | 0.01 | 0.01 |
| PM10 | 0.00 | 0.05 | 0.05 |
| SO2 | 0.00 | 0.00 | 0.00 |
| NOx | 0.00 | 0.61 | 0.61 |
| VOC | 1.69 | 0.03 | 1.72 |
| CO | 0.00 | 0.52 | 0.52 |
| total HAPs | 0.68 | 0.01 | 0.69 |
| worst case single HAP | (Glycol Ether) 0.54 | (Hexane) 0.01 | (Glycol Ether) 0.54 |
| Total emissions based on rated capacities at 8,760 hours/year. | | | |
| Controlled Potential to Emit (tons/year) | | | |
| Emissions Generating Activity | | | |
| Pollutant | Coating Operation | Natural Gas Combustion | TOTAL |
| PM | 0.00 | 0.01 | 0.01 |
| PM10 | 0.00 | 0.05 | 0.05 |
| SO2 | 0.00 | 0.00 | 0.00 |
| NOx | 0.00 | 0.61 | 0.61 |
| VOC | 1.69 | 0.03 | 1.72 |
| CO | 0.00 | 0.52 | 0.52 |
| total HAPs | 0.68 | 0.01 | 0.69 |
| worst case single HAP | (Glycol Ether) 0.54 | (Hexane) 0.01 | (Glycol Ether) 0.54 |
| Total emissions based on rated capacities at 8,760 hours/year. | | | |

**Appendix A: Emissions Calculations
HAPs
From Surface Coating Operations**

Company Name: Karl Schmidt Unisia, Inc.
Address City IN Zip: 2425 Coliseum Blvd. South, Fort Wayne, Indiana 46803
Exemption No.: 003-21848
Plt ID: 003-00064
Reviewer: Trish Earls/EVP

| Material | Density (Lb/Gal) | Weight % Glycol Ethers | Weight % HF | Gal of Mat. (gal/hour) | Glycol Ether Emissions (tons/yr) | HF Emissions (tons/yr) |
|--------------|------------------|------------------------|-------------|------------------------|----------------------------------|------------------------|
| Oakite NSS | 9.00 | 1.80% | 0.0% | 0.75945 | 0.54 | 0.00 |
| Oakite P4311 | 11.04 | 0.00% | 0.0% | 0.01352 | 0.00 | 0.00 |
| Oakite 365 | 9.71 | 0.00% | 1.6% | 0.21699 | 0.00 | 0.14 |

State Potential Emissions

| | |
|-------------|-------------|
| 0.54 | 0.14 |
|-------------|-------------|

Total HAPs:

| |
|-------------|
| 0.68 |
|-------------|

METHODOLOGY

Potential HAP Tons per Year = Density (lb/gal) * Gal of Material (gal/hour) * Weight % HAP * (8760 hr/yr) * (1 ton/2000 lbs)

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

Company Name: Karl Schmidt Unisia, Inc.
Address City IN Zip: 2425 Coliseum Blvd. South, Fort Wayne, Indiana 46803
Exemption No.: 003-21848
Pit ID: 003-00064
Reviewer: Trish Earls/EVP

Heat Input Capacity
MMBtu/hr

Potential Throughput
MMCF/yr

1.4

12.3

Heat input capacity includes one (1) dry off oven rated at 0.4 MMBtu/hr, one (1) cure oven rated at 1.0 MMBtu/hr and three burners for the phosphate line each rated at 0.001 MMBtu/hr.

| Emission Factor in lb/MMCF | Pollutant | | | | | |
|-------------------------------|-----------|-------|------|-------------|------|------|
| | PM* | PM10* | SO2 | NOx | VOC | CO |
| | 1.9 | 7.6 | 0.6 | 100.0 | 5.5 | 84.0 |
| | | | | **see below | | |
| Potential Emission in tons/yr | 0.01 | 0.05 | 0.00 | 0.61 | 0.03 | 0.52 |

*PM emission factor is filterable PM only. PM10 emission factor is filterable and condensable PM10 combined.

**Emission Factors for NOx: Uncontrolled = 100, Low NOx Burner = 50, Low NOx Burners/Flue gas recirculation = 32

Methodology

All emission factors are based on normal firing.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Potential Throughput (MMCF) = Heat Input Capacity (MMBtu/hr) x 8,760 hrs/yr x 1 MMCF/1,000 MMBtu

Emission Factors are from AP 42, Chapter 1.4, Tables 1.4-1, 1.4-2, 1.4-3, SCC #1-02-006-02, 1-01-006-02, 1-03-006-02, and 1-03-006-03 (SUPPLEMENT D 3/98)

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

See next page for HAPs emissions calculations.

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

Company Name: Karl Schmidt Unisia, Inc.
Address City IN Zip: 2425 Coliseum Blvd. South, Fort Wayne, Indiana 46803
Exemption No.: 003-21848
Pit ID: 003-00064
Reviewer: Trish Earls/EVP

| HAPs - Organics | | | | | |
|-------------------------------|--------------------|----------------------------|-------------------------|-------------------|--------------------|
| Emission Factor in lb/MMcf | Benzene 2.1E-03 | Dichlorobenzene 1.2E-03 | Formaldehyde 7.5E-02 | Hexane 1.8E+00 | Toluene 3.4E-03 |
| Potential Emission in tons/yr | 1.290E-05 | 7.374E-06 | 4.609E-04 | 1.106E-02 | 2.089E-05 |

| HAPs - Metals | | | | | |
|-------------------------------|-----------------|--------------------|---------------------|----------------------|-------------------|
| Emission Factor in lb/MMcf | Lead 5.0E-04 | Cadmium 1.1E-03 | Chromium 1.4E-03 | Manganese 3.8E-04 | Nickel 2.1E-03 |
| Potential Emission in tons/yr | 3.073E-06 | 6.760E-06 | 8.603E-06 | 2.335E-06 | 1.290E-05 |

Methodology is the same as previous page.

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