

# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live*

*Evan Bayh*  
Governor  
*Kathy Prosser*  
Commissioner

100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Telephone 317-232-8603  
Environmental Helpline 1-800-451-6027

April 26, 1996

Mr. Robert Elliott  
Arvin North American Automotive  
1001 Hurricane Street  
Franklin, Indiana 46131

Re: Operation Permit Validation  
Construction Permit No. CP 081-4910  
ID No. 081-00020

Dear Mr. Elliott:

The Office of Air Management (OAM) has received your Affidavit of Construction for the Cadillac Paint line with one (1) spray paint booth, one (1) natural gas-fired dry off oven and three (3) natural gas-fired parts washer combustion units located at 1001 Hurricane Street, Franklin, Indiana.

You are hereby authorized to operate the equipment as listed in Construction Permit No. CP 081-4910, ID No. 081-00020, pursuant to the operation permit conditions therein. This operation permit shall expire on April 25, 2001.

You will be billed for the applicable operating fee at a later date.

This authorization to operate does not terminate, dissolve or otherwise affect any appeal that may have been filed, or any stay of effectiveness that may have been issued with respect to the Construction Permit.

Sincerely,

*for Michael J. Titus*  
Barry Titus, Chief  
Permit Administration Section  
Office of Air Management

BJT/kam  
cc: File - Johnson County  
D.J. Knotts  
Janet Mobley  
Donna Dickison  
Michele Taylor  
Kellie Metts

Cnt P 203 644 655

Page 1 of 2

Mail to: Permit Administration & Development Section  
Office Of Air Management  
100 North Senate Avenue  
P. O. Box 6015  
Indianapolis, Indiana 46206-6015

Arvin North American Automotive  
1001 Hurricane Street  
Franklin, Indiana 46131

**Affidavit of Construction**

I, ROBERT ELLIOTT being duly sworn upon my oath, depose and say:

1. I live in BARTHOLOMEW County, Indiana and being of sound mind and over the twenty -one (21) years of age, I am competent to give this affidavit.
2. I hold the position of FACILITY MGR. for ARVIN N.AMER. AUTO.
3. By virtue of my position with ARVIN N.A.A. I have personal knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of ARVIN N.A.A. - FRANKLIN
4. I hereby certify that Arvin North American Automotive, 1001 Hurricane Street, Franklin, Indiana 46131, has constructed Cadillac Paint line with the spray paint booth, three (3) stage parts washer combustion units and the dry - off oven with the requirements and intent of the construction permit application received by the Office of Air Management on September 29, 1995 as permitted pursuant to **Construction Permit No. CP- 081 - 4910, Plant ID No. 081 - 00020** issued on 4/3/96.

Further Affiant said not.

RECEIVED  
APR 16 1996  
STATE OF INDIANA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT

1. 100-4-1

100-4-1

100-4-1

100-4-1

100-4-1

100-4-1

100-4-1

I affirm under penalties of perjury that the representations contained in this affidavit are true, to the best of my information and belief.

Robert Elliott  
Signature

ROBERT ELLIOTT  
Name (typed or printed)

4/4/96  
Date

STATE OF INDIANA )  
                          )SS

COUNTY OF JOHNSON )

Subscribed and sworn to me, a notary public in and for MARION County  
and State of Indiana on this 4<sup>th</sup> day of April, 19 96.

My Commission expires: 5-15-98.

Margaret Adolay  
Signature

MARK J. ADOLAY  
Name (typed or printed)

1. The first part of the paper  
discusses the general principles  
of the theory of the  
relativity of simultaneity.

2. The second part of the paper  
discusses the special theory of  
relativity, and the third part  
discusses the general theory of  
relativity.



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Commissioner

April 22, 1994

100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Telephone 317-232-8603  
Environmental Helpline 1-800-451-6027

Certified MailP 255 205 839

## OFFICE OF AIR MANAGEMENT

Advantage Engineering, Inc.  
P.O. Box 407  
Greenwood, IN 46142

Attention: Mr. Harry Short

Re: Registered Construction and Operation Status,  
CP# 081-3420 and Company I.D.# 081-00029

Ladies and Gentlemen:

The Advantage Engineering, Inc. application has been reviewed. Based on the data submitted and the provisions in Sections 1 and 2 of 326 IAC 2-1, it has been determined that the following, to be located at Greenwood, Indiana is classified as registered: Advantage Engineering produces a maximum of 406 pounds per hour of finished refrigerated machinery and related products.

A.) Four (4) spray booths each one using an air atomizing spray with a dry filter to control particulate matter. Each stack for booths 001, 002, 003 and 004 has a height of 12.5 feet and a diameter of 2.67 inches.

Pursuant to rule IAC 8-2-9 (d) no owner or operator of a facility engaged in the surface coating of miscellaneous metal parts and products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of forty-two hundredths (0.42) kilograms per liter (three and five-tenths (3.5) pounds per gallon) of coating excluding water, delivered to a coating applicator in a coating application system that is air dried or forced warm air dried at temperatures up to ninety degrees Celsius (90 degrees C) (one hundred ninety-four degrees Fahrenheit (194 degrees F)).

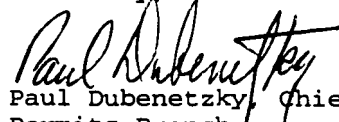
Page 2 of 2

Advantage Engineering, Inc.  
Greenwood, Indiana

CP # 081-3420  
ID # 081-00029

Any change or modification which may increase the potential emissions to 25 tons per year or more of volatile organic compounds from the equipment covered in this letter must be approved by the Office of Air Management before such change may occur.

Sincerely,



Paul Dubenetzky, Chief  
Permits Branch  
Office of Air Management

pjf

cc: Johnson County Health Department  
Air Compliance Section  
Compliance Branch - Tracking  
Data Support Section

State Potential VOC and Particulate Emissions  
From Surface Coating Operations  
Advantage Engineering, Inc.  
Greenwood, Indiana  
04/08/94  
Penny Flickinger

Material	1 Density (lb/gal)	2 Weight % Volatile (H <sub>2</sub> O & Organics)	3 Weight % Water	4 Weight % Organics	5 Volume % Water	6 Volume % Non-Vol (solids)	7 Gal of Mat (gal/unit)	8 Maximum (unit/hour)	9 Pounds VOC per gallon of coating less water	10 Pounds VOC per gallon of coating	11 Potential VOC pounds per hour	12 Potential VOC pounds per day	13 Potential VOC tons per year	14 Particulate Potential ton/yr	15 lb VOC /gal solids	16 Transfer Efficiency
Paint	9.4	25.2%	0.0%	25.2%	0.0%	31.0%	1.98000	0.20	2.37	2.37	0.94	22.51	4.11	10.98	7.64	10%
Primer	9.7	18.9%	0.0%	18.9%	0.0%	29.0%	0.47000	0.20	1.83	1.83	0.17	4.14	0.75	2.91	6.32	10%
State Potential Emissions											1.1	26.5	4.9	13.9		

Add worst case coating to all solvents

METHODOLOGY

- 1.) Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) divided by 1-Volume % water
- 2.) Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)
- 3.) Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* gal of Material (gal/unit) \* Maximum (unit/hr)
- 4.) Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* gal of Material (gal/unit) \* Maximum (unit/hr) \* (24 hrs/1 day)
- 5.) Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* gal of Material (gal/unit) \* Maximum (unit/hr) \* (8760 hrs/yr) \* (1 ton/2000 lbs)
- 6.) Particulate Potential Tons per Year = (unit/hour) \* (gal/unit) \* (1 - Weight % Volatiles) \* (1-Transfer efficiency) \* (8760 hrs/yr) \* (1 ton/2000 lbs)
- 7.) Pounds VOC per Gallon of Solids = (lbs/gal) \* (Weight % organics) / (Volume % solids)
- 8.) Total = Worst Coating + Sum of all solvents used

Registration: 26.6 lbs/day > 15 lbs/day but less than 25 tons/year  
and 76.16 lbs/day of particulate matter is > 25 lbs/day of particulate matter but < 25 tons/yr





# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live*

Evan Bayh  
Governor

April 12, 1994

Kathy Prosser  
Commissioner

100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Telephone 317-232-8603  
Environmental Helpline 1-800-451-6027

**CERTIFIED MAIL** P 352 042 375

Advantage Engineering  
P.O. Box 407  
Greenwood, In 46142

**PERMIT NO.** 081-3420

**RE: BILL FOR** \_\_\_\_\_

Paint Booths

Dear Harry Short

This will acknowledge receipt of your application for a permit to construct the facilities you indicated. The staff has reviewed the application and information submitted and finds that it is substantially complete. However, further reviewing might indicate that additional details are necessary.

Before the review can be completed, it will be necessary for you to submit the fee prescribed by 326 2-1-7.1. According to our preliminary review, the total fee will be \$200. This is based on:

\$200 Registration Review

Please remit a copy of this bill along with a check for the total fee above, payable to the Department of Environmental Management, to:

Cashier  
Department of Environmental Management  
Office of Air Management  
100 N. Senate Avenue  
P.O. Box 7060  
Indianapolis, IN 46206-7060

Any questions or additional information should be directed to the Office of Air Management at the above address. Payment will help avoid a delay in your permit. Construction can not commence until a permit is issued. This document is not a permit. Also, please write "Air Construction Permit" on your check.

Sincerely,

Terrence K. Hoya, Chief  
Engineering Section  
Office of Air Management

TKH/PJM

**Billing and Refund Instructions**

Form 2 -

Engineer : PSE  
Plant ID # : 081-00029  
CP Number : 081-3420

\_\_\_\_\_ Mail  
\_\_\_\_\_ Fax  
Fax Number \_\_\_\_\_

**Secr. Instructions:**

- \_\_\_\_\_ type bill letter (Remember to type the CP Number on the bill letter)  
and make 2 copies.  
\_\_\_\_\_ one copy for CP file  
\_\_\_\_\_ one copy for PJM mailout folder  
\_\_\_\_\_ mail/fax bill letter to company as instructed above  
\_\_\_\_\_ enter CP number, billing date, and amount on CPT form

Company Name ADVANTAGE ENGINEERING  
Mailing Address P.O. BOX 407  
City, State - zip GREENWOOD, IN 46142  
Attention HARRY SHORT  
Phone Number 317/887-0729  
Facility Description Print Booths  
Date Application Received 11/29/93

- ☒ \$100 for filing fee (for exemptions and registrations only)  
☒ \$200 for registration review  
\_\_\_\_\_ \$3,000 for construction permit review (credit for filing fee)  
\_\_\_\_\_ \$5,000 for PSD permit review (credit for filing fee)  
\_\_\_\_\_ air quality impact study review  
\_\_\_\_\_ \$3,000 if applicant does analysis, or  
\_\_\_\_\_ times \$5,000 per pollutant if OAM does analysis equals \$ \_\_\_\_\_  
\_\_\_\_\_ PSD BACT or LAER review  
\_\_\_\_\_ \$2,500 for 2 to 5 review analyses, or  
\_\_\_\_\_ \$5,000 for 6 to 10 review analyses, or  
\_\_\_\_\_ \$10,000 for 11 or more review analyses  
\_\_\_\_\_ \$400 for a public hearing  
\_\_\_\_\_ times \$200 for each NSPS review equals \$ \_\_\_\_\_  
\_\_\_\_\_ times \$200 for each NESHAP review equals \$ \_\_\_\_\_  
\_\_\_\_\_ times \$500 for each 326 IAC 8-1-6 BACT review equals \$ \_\_\_\_\_

Total of \$ 300 <sup>00</sup>

Minus \$ 100 credit for filing fee & minus \$ \_\_\_\_\_ other credit = \$ \_\_\_\_\_ total credit

Total due \$ 200 <sup>00</sup> Date bill mailed \_\_\_\_\_

**Refunds**

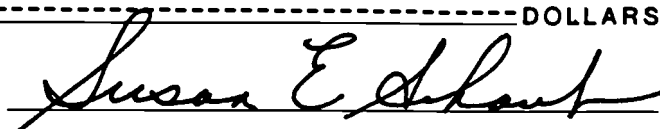
1. Determine the amount of refund is required (Total Received - Total Due)
2. Determine the reason why a refund is required
3. Make a copy of the receipts for the CP File.
4. Attach the receipts to this sheet.

Total Refund \$ \_\_\_\_\_ Date refund mailed \_\_\_\_\_

Reason for Refund: \_\_\_\_\_

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

RECEIPT

		16574
<b>ADVANTAGE ENGINEERING, INC.</b> 525 EAST STOP 18 ROAD P. O. BOX 407 GREENWOOD, INDIANA 46142		
		20-1/740
		11-19 19 93
PAY TO THE ORDER OF <u>Department of Environmental Management</u>		\$ 100.00
One hundred and 00/100ths-----		DOLLARS
<b>BANK ONE.</b> Bank One, Indianapolis, NA Indianapolis, Indiana 46277		
FOR _____		MP
⑆016574⑆ ⑆074000010⑆ 20 66868⑆		

RECEIPT NO. — 30582

ACCOUNT NUMBER 3240 140000

PROGRAM 411100

AMOUNT \$ 100.00

CASH ☐

RECEIVED FROM \_\_\_\_\_

DATE 11/24/93

REPRESENT \_\_\_\_\_

CASHIER 

\*\*COMMENT\*\*

*Advantage Engineering*

*CP# 081-3420-00029*

*Regis.*

*Iss. 4-22-94*

**RECEIVED**

NOV 29 1993

State Of Indiana  
 Department of Environmental Management  
 Office Of Air Management

INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

RECEIPT

17082

**ADVANTAGE ENGINEERING, INC.**

525 EAST STOP 18 ROAD  
GREENWOOD, INDIANA 46142

April 18 19 94

20-1/740

PAY TO THE ORDER OF Department of Environmental Management

\$ 200.00

Two Hundred Dollars 00/100 -----

DOLLARS

**BANK ONE.**

Bank One, Indianapolis, NA  
Indianapolis, Indiana 46277

*Susan E. Schaub*

FOR Air construction permit

⑈017082⑈ ⑆074000010⑆ 20 66868⑈

RECEIPT NO. 038392

ACCOUNT NUMBER 3240 140000

PROGRAM 411100

AMOUNT \$ 200.00

CASH ☐

RECEIVED FROM

**RECEIVED**

APR 21 1994

State of Indiana  
Department of Environmental Management  
Office of Air Management

DATE 4.21.94

REPRESENT \_\_\_\_\_

CASHIER Jay

\*\*\*COMMENT\*\*

*Advantage Engineering*  
*CP# 081-3420-00029*  
*Regis.*  
*ISS. 4-22-94*

RECEIVED

APR 18 1964

U.S. AIR FORCE



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Evan Bayh  
Governor

April 12, 1994

Kathy Prosser  
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P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Telephone 317-232-8603  
Environmental Helpline 1-800-451-6027

**CERTIFIED MAIL** P 352 042 375

Advantage Engineering  
P.O. Box 407  
Greenwood, In 46142

**PERMIT NO.** 081-3420

**RE: BILL FOR** \_\_\_\_\_

Paint Booths

Dear Harry Short

This will acknowledge receipt of your application for a permit to construct the facilities you indicated. The staff has reviewed the application and information submitted and finds that it is substantially complete. However, further reviewing might indicate that additional details are necessary.

Before the review can be completed, it will be necessary for you to submit the fee prescribed by 326 2-1-7.1. According to our preliminary review, the total fee will be \$200. This is based on:

\$200 Registration Review

Please remit a copy of this bill along with a check for the total fee above, payable to the Department of Environmental Management, to:

Cashier  
Department of Environmental Management  
Office of Air Management  
100 N. Senate Avenue  
P.O. Box 7060  
Indianapolis, IN 46206-7060

Any questions or additional information should be directed to the Office of Air Management at the above address. Payment will help avoid a delay in your permit. Construction can not commence until a permit is issued. This document is not a permit. Also, please write "Air Construction Permit" on your check.

Sincerely,

Terrence K. Hoya, Chief  
Engineering Section  
Office of Air Management

RECEIVED  
APR 20 1994  
CASHIER/PAYROLL

TKH/PJM



**ADVANTAGE ENGINEERING INC.**

525 E. STOP 18 RD. P.O. BOX 407 GREENWOOD, INDIANA 46142



Cashier

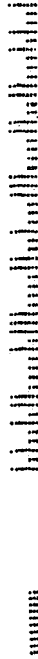
Department of Environmental Management

Office of Air Management

100 N. Senate Avenue

P.O. Box 7060

Indianapolis, IN 46206-7060







Sprag Booth

Advantage Engineering  
Planning Engineer's Master Checklist

Effective Date: June 21, 1993

- ☒ Initial Completeness Checklist
- ☒ Level of Document Checklist
- ☒ Final Completeness Checklist
- ☒ Planning Engineer's Summary

☒ Application is Complete *Identification sheet not signed.*  
Check the following which apply:

- ☐ Exemption
- ☒ Registration
- ☐ Permit
- ☐ CWOP
- ☐ OWOP
- ☐ Non-Attainment for \_\_\_\_\_
- ☐ PSD ☐ Yes ☐ No
- ☐ Offset ☐ Yes ☐ No
- ☐ Special Issues \_\_\_\_\_

Planning Engineer: Penny Flickinger

Date: 3/1/94

# Surface Coating Permit Application Review

## Initial Completeness Checklist

- ☒ Form A-C: Applicant filled out company name, address, phone number, contact name
- ☒ Form A-C: Applicant filled out SIC Code
- ☒ Form A-C: Applicant filled out dates of estimated or actual construction commencement and completion
- ☒ Form A-C: Applicant Filled out date of estimated or actual commencement of operation
- ☒ Note Date of Receipt of Application 11/29/93
- ☒ Determine whether or not the application is CWOP or OWOP
- ☒ Determine whether applicant constructed prior to receipt of application

If application was received after the applicant began construction the application is CWOP

If application was received after the applicant began operation, the application is OWOP

- ☒ Form A-C: Applicant signed the application
- ☒ Form B (and attachments): Applicant supplied drawings showing:
  - a) Position of relevant stack(s) in relation to property lines
  - b) Relative position of other buildings on property
  - c) Height of relevant stack(s)
  - d) Height of other buildings on property

Note: This information is necessary as surface coating application review usually involves modelling for air toxics, and this information is necessary for modelling. Send an RAI letter to the applicant requesting this information if it is not present.

- ☒ WA Form C: (If applicable) Applicant completely filled out form
- ☐ Form D: (If applicable) Applicant completely filled out form
- ☒ Form E: (If applicable) Applicant completely filled out form  
Note: This form has little to do with surface coating
- ☐ Form F: (and attachments) Applicant has provided enough data that the reviewer can understand work flow in relation to the surface coating operation being reviewed

☒ Form G: (If applicable) Applicant completely filled out form  
Not generally applicable to surface coating unless a dry  
material is stored in bulk (containers larger than 55  
gallon drums) for use in coating operation

☒ Form Q: (If applicable) Applicant completely filled out form  
Not generally applicable to surface coating operations as  
Form W-2 covers this subject

☒ Form W-1: Applicant completely filled out form  
With the exception of column 10, each column must be  
filled out for every coating and solvent used. It  
is also necessary to note which coatings and/or  
solvents are associated with which emission points  
described in Form W-2. Confirm that the applicant  
has included a "VOC Data Sheet" for each coating and  
solvent - both for "as supplied" condition and for  
"as applied" condition. Confirm that all densities,  
volatile and solids content figures are as delivered  
to the applicator. That is if the coating is  
diluted or "thinned" prior to application, the  
figures on Form W-1 must reflect this. If the  
applicant has not supplied "as applied" figures,  
use the RAI letter below to obtain the "as applied"  
values. Send the applicant a copy of  
EPA 450/3-84-019 "Procedure for Certifying Quantity  
of Volatile Organic Compounds Emitted by Paint, Ink,  
and Other Coatings" Chapter 3 to instruct him/her on  
approved methodology for calculating these values.

☒ Form W-2: Applicant completely filled out form  
Each column must be completely filled out for each  
place that surface coatings and/or solvents are  
applied to substrate. This form, if complete,  
renders Form Q unnecessary.

☒ Form Y1 thru Y4: Applicant completely filled out forms.  
It is also necessary to attach a Material Safety  
Data Sheet (MSDS) for each coating or solvent  
applied. Only the part of the MSDS that states  
the hazardous components of the coating or  
solvent need be attached. Applicant estimates  
hazardous emissions using MSDS data and form  
W-1 data.

☐ Prepare a Request For Additional Information (RAI) letter to  
notify the applicant of any information that prevented checking  
off any of the above items, as well as less crucial omissions,  
such as SIC code from form A-C.

or

Request For Additional Information is not necessary

After all items above are checked off, proceed to the Level of Document  
Checklist.

☒ Identification of Potentially Affected  
Persons

## Level of Document Checklist

The first calculation needed is the state potential emissions. This is the absolute worst case: the equipment operating at full rated capacity for 8,760 hours per year, with no operative emission controls.

For surface coating operations, determining the rated capacity is rather subjective. In general, the applicant will state the maximum rate that he/she can feed substrate into the surface coating operation.

- ☒ Calculate state potential emissions of VOC and particulate matter

Use the attached Spreadsheet to calculate the potential emissions of VOC and particulates using data from Form W-1.

- 1) Fill out one spreadsheet row for each coating or solvent (Material) used. For each material use the density and volatile content of the material as delivered to the applicator, that is: if the coating is diluted or "thinned" prior to application, the density and volatile content must reflect that fact. This information must be supplied by the applicant, or calculated using the attached spreadsheet. If more than 15 coatings and/or solvents are used, copy the spreadsheets as necessary.
- 2) Enter the transfer efficiency expected from the following table\*:

Method of Application	Coated Surface Type		
	Flat	"Table Leg"	"Bird Cage"
Brush or Roller	100%	100%	100%
Flowcoating	100%	100%	100%
Electrocoating	100%	100%	100%
Dip-and-Drain	100%	100%	100%
Spray:			
Air Atomization	50%	15%	10%
Airless	75%	10%	10%
Electrostatic Disc	95%	90%	90%
Electrostatic Airless	80%	70%	70%
Electrostatic Air Atomized	75%	65%	65%

\*From AP-40, Pg. 859-861

- 3) If more than one coating is used, determine the coating that if used exclusively, will emit the greatest amount of VOC. Add this to the sum of emissions from all solvents. This is the state potential emission of VOC. Change spreadsheet formulas as necessary.
- 4) Repeat the process in above for particulate matter. You may use entirely separate "worst case" coatings for VOC and particulate matter.

75 lbs/day  
 1000 lbs/day  
 2000 lbs/day  
 7400 lbs/day

☐ Check for exemption

If the state potential emission of VOC is less than 15 pounds per day, and particulate emission is less than 25 pounds per day, then the facility or source in question is exempt pursuant to 326 IAC 2-1.

☒ Check for registration

If the state potential emissions of both VOC and particulate matter (taken separately) are less than 25 tons per year each, but emission of VOC exceeds 15 pounds per day, or emissions of particulate matter exceeds 25 pounds per day; then the facility or source in question requires a registration pursuant to 326 IAC 2-1.

☐ Check for permit

If the state potential emission of either VOC or particulate exceeds 25 tons per year, then the source or facility in question requires a permit pursuant to 326 IAC 2-1.

[illegible]

## Final Completeness Checklist



Application requires a registration or exemption letter and no further completeness review is necessary.

or



Application requires a permit



Form A-C: Applicant has stated estimated total project cost



Estimated cost is less than \$10,000 - no further review is required

or



Estimated cost is greater than or equal to \$10,000 - P.E. signature is required



P.E. signature and number is not present

Application is not complete

Send Request for Additional Information Letter to applicant, citing need for P.E. signature and number, enclose copy of 326 IAC 2-1-3 (d).

or



P.E. signature and number is present

Application is complete



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

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Governor  
Kathy Prosser  
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March 11, 1994

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P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Telephone 317-232-8603  
Environmental Helpline 1-800-451-6027

CERTIFIED MAIL P 323 807 455

## OFFICE OF AIR MANAGEMENT

Advantage Engineering, Inc.  
P.O. Box 407  
Greenwood, IN 46142

Attention: Harry Short

Re: Permit Application for Construction  
Permit No. 081-3420

Ladies and Gentlemen:

Your application for four paint booths to be located at 525 East Stop 18 Road, Greenwood, Indiana was received on November 29, 1993. Sufficient data is not contained to act on this application.

Advantage has been classified back to Miscellaneous metal coating operations pursuant to 326 IAC 8-2-9. Unfortunately, Advantage Engineering Inc., change to waterborne paints have not successfully met 326 IAC 8-2-9 (d) requirements. Advantage Engineering Inc., pounds of VOC per gallon of coating less water (column 9), still fails to comply with part (d). Enclosed is an "EPA VOC Sheet, Basic Calculation" in order to help Advantage Engineering figure the pounds of VOC per gallon less water. Also enclosed is a calculation sheet which derived the pounds of VOC per gallon of coating less water by applying the "Basic Calculation Example." Furthermore, Article 8. Volatile Organic Compound Rules 326 IAC 8-1-2 presents compliance methods in order to comply with 326 IAC 8-2-9 (d). Please, describe how Advantage Engineering plans to comply with 326 IAC 8-2-9 part (d).

Your written response to this request for additional information must be received within 30 days of your receipt of this letter. If no written response or schedule of when this information will be provided is received within 30 days, your permit may be denied as a result of the incomplete application pursuant to 326 IAC 2-1-3 (f) (1).

Please contact me if you have any questions concerning this letter at the above address or via phone 317/233-0184. Please attach a copy of my letter to your response. Further review on this application can not be done until a response is received. Further questions may arise as the review proceeds.

Sincerely,

*Penny J. Flickinger*  
Penny J. Flickinger  
Environmental Scientist  
Office of Air Management

pjf  
Enclosures: 326 IAC 8-1-2  
Surface Coating Spread Sheet  
EPA VOC data sheet, Basic Calculation  
Sample Calculation Sheet



PJF



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live*

*Evan Bayh*  
Governor

*Kathy Prosser*  
Commissioner

March 2, 1994

100 North Senate Avenue  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Telephone 317-232-8603  
Environmental Helpline 1-800-451-6027

CERTIFIED MAIL P323 807 898

## OFFICE OF AIR MANAGEMENT

Advantage Engineering, Inc.  
P.O. Box 407  
Greenwood, IN 46142

Attention: Harry Short

Re: Permit Application for Construction  
Permit No. 081-3420

Ladies and Gentlemen:

Your application for four paint booths to be located at 525 East Stop 18 Road, Greenwood, Indiana was received on November 29, 1993. Sufficient data is not contained to act on this application.

Advantage has been reclassified as a Large Appliance Coating Operation pursuant to 326 IAC 8-2-7 part (b). Unfortunately, Advantage Engineering Inc., change to waterborne paints have not successfully met 326 IAC 8-2-7 (b) requirements. Advantage Engineering Inc., pounds of VOC per gallon of coating less water (column 9), still fails to comply with part (b). Please, describe how Advantage Engineering plans to comply with 326 IAC 8-2-7 part (b).

To help Advantage Engineering Inc., derive the quantity of VOC emitted from a coating, EPA VOC data sheet has been included.

Your written response to this request for additional information must be received within 30 days of your receipt of this letter. If no written response or schedule of when this information will be provided is received within 30 days, your permit may be denied as a result of the incomplete application pursuant to 326 IAC 2-1-3 (f) (1).

Please contact me if you have any questions concerning this letter at the above address or via phone 317/233-0184. Please attach a copy of my letter to your response. Further review on this application can not be done until a response is received. Further questions may arise as the review proceeds.

Sincerely,

Penny J. Flickinger  
Environmental Scientist  
Office of Air Management

pjf

Enclosure: 326 IAC 8-2-7  
Surface Coating Spread Sheet  
EPA VOC data sheet



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live*

Evan Bayh  
Governor

Kathy Prosser  
Commissioner

December 10, 1993

105 South Meridian Street  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Telephone 317-232-8603  
Environmental Helpline 1-800-451-6027

CERTIFIED MAIL P 215 679 311

## OFFICE OF AIR MANAGEMENT

Advantage Engineering, Inc.  
P.O. Box 407  
Greenwood, IN 46142

Attention: Harry Short

Re: Permit Application for Construction  
Permit No. 081-3420

Ladies and Gentlemen:

Your application for four paint booths to be located at 525 East Stop 18 Road, Greenwood, Indiana was received on November 29, 1993. Sufficient data is not contained to act on this application.

According to Air Management's calculations in the Surface Coating Spread Sheet (column 12 and 13), Advantage Engineering Inc. application for a permit will be classified as a registration.

However, pursuant to 326 IAC 8-2-9 part (d), Advantage Engineering Inc., pounds of VOC per gallon of coating less water (column 9), fails to comply with part (d). Please, describe how Advantage Engineering plans to comply with 326 IAC 8-2-9 part (d).

Your written response to this request for additional information must be received within 30 days of your receipt of this letter. If no written response or schedule of when this information will be provided is received within 30 days, your permit may be denied as a result of the incomplete application pursuant to 326 IAC 2-1-3 (f) (1).

Please contact me if you have any questions concerning this letter at the above address or via phone 317/233-6875. Please attach a copy of my letter to your response. Further review on this application can not be done until a response is received. Further questions may arise as the review proceeds.

Sincerely,

Penny J. Flickinger  
Environmental Scientist  
Office of Air Management

pjf

Enclosure: 326 IAC 8-2-9  
Surface Coating Spread Sheet



081-3420

November 19, 1993

Cashier  
Department of Environmental Management  
P.O. Box 7060  
Indianapolis, IN 46206-7060

To whom it may concern;

Please find enclosed our check in the amount of \$100.00, representing the filing fee for the enclosed construction permit application.

Our application is for source registration as required by statute.

Yours truly,

A handwritten signature in dark ink, appearing to read 'Harry Short', is written over a horizontal line.

Harry Short

HS/sap  
Encl. Check

RECEIVED

NOV 29 1993

State of Indiana  
Department of Environmental Management  
Office Of Air Management



STATE OF INDIANA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
CONSTRUCTION PERMIT APPLICATION

RECEIVED  
FORM A-C  
NOV 29 1993  
State of Indiana  
Department of Environmental Management  
Office of Air Management

GENERAL INFORMATION

Company Name Advantage Engineering Inc.

Phone 317-887-0729

Mailing Address P.O. Box 407 Greenwood, IN 46142  
Street, P.O. Box City Zip Code

New Construction Location 525 E. Stop 18 Rd. Greenwood, Johnson  
No., St., Rd., Hwy. City County

Person to Contact on Matters of Air Pollution:

Name Harry Short

Title Vice President Phone 317-887-0729

If you have changed company name or location in the past six (6) years, please list the previous name(s) and location(s):

Name N/A

Location \_\_\_\_\_

Standard Industrial Classification Code 3559  
(if you do not know, a short description of business will suffice)

What is being installed? Paint Booths

Is construction an entirely new plant? No

Estimated Cost of Project \$ 22,000

Estimated Cost of Air Pollution Control Equipments \$ N/A

Estimated date construction will start Completed

Estimated date construction will be complete Completed

Estimated date operation will begin In operation

I hereby certify that the information submitted this 19th day of 11 1993 is true and correct to the best of my knowledge.

Signature [Signature]

Title Vice President

Plans and Specifications Approved By: J.W. Bloemer, P.E.

Indiana P.E. License No. PE 60890090

STATE OF INDIANA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT

FORM E

Process Information

Not Applicable   X  

Company Name   Advantage Engineering, Inc.  

Products Produced   Refrigerated Machinery and related products  

Raw Material Rate (use an additional sheet if needed)

TYPE MATERIAL	RATE (LB/HR)
Steel Products	400
Coatings	6

**Finished Product**

Pounds/Hour            Maximum   406              Normal   406  

**Process and Control Equipment** (Use an additional sheet if needed)

Process Identification:

  Paint Booths  

Type of Control   Dry filters  

Efficiency   98%  

For Dry Collectors, Tons/year Collected                     

**STACK DATA**

Stack Identification   See plant layout  

Height (ft. above ground)   See plant layout  

Diameter (ft. inside)   See plant layout  

Gas Discharge Temperature (Deg F)   Ambient  

Gas Flow Rate (acfm)   See plant layout  

**Operation Schedule**

Hours/Day   24  

Days/Week   6  

Weeks/Year   52

STATE OF INDIANA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT

FORM 3

Storage and Handling of Bulk Material

Not Applicable X

Company Name \_\_\_\_\_

<u>Material Handled or Stored</u>	<u>Method of Handling</u>	<u>Silo, Bin or Pile</u>	<u>Storage Capacity (Tons)</u>	<u>Maximum Throughput (Tons/Yr)</u>	<u>(Lb/Hr)</u>
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____
_____	_____	_____	_____	_____	_____

Dust Control Methods

\_\_\_\_\_

Process

Type of Control

Efficiency

PARTICULATE CONTROL DEVICES

GENERAL INFORMATION

Emission point identification (complete a separate page for each device) \_\_\_\_\_ N/A

Percent of Particulate Matter less than 10 microns at the outlet \_\_\_\_\_ %

Grain loading per actual cubic foot of outlet air \_\_\_\_\_, Average gas Temperature \_\_\_\_\_ °F

Design percentage collection efficiency \_\_\_\_\_ % ( 1- Weight Leaving ) X100  
( Weight Entering )

SPECIFIC COLLECTOR INFORMATION

A. CYCLONE

Number of tubes \_\_\_\_\_, Tube diameter \_\_\_\_\_ in.

B. BAGHOUSE

Bag material \_\_\_\_\_

Total filter area \_\_\_\_\_ ft<sup>2</sup>, Air to cloth ratio \_\_\_\_\_ acfm/ft<sup>2</sup>

Pressure drop across baghouse \_\_\_\_\_ inches of water

Method of bag cleaning (ie. shaking, jetpulse etc...) \_\_\_\_\_

C. ELECTROSTATIC PRECIPITATOR (ESP)

Type of ESP: Wet \_\_\_\_\_, Dry \_\_\_\_\_, Hot Side \_\_\_\_\_, Cold Side \_\_\_\_\_

Face velocity across the plates \_\_\_\_\_ ft/sec, Total face surface area \_\_\_\_\_ ft<sup>2</sup>

Number of fields along flow path \_\_\_\_\_, Gas conditioning agent \_\_\_\_\_

Delay time between starting of system and ESP unit operation \_\_\_\_\_

Why? \_\_\_\_\_

D. WET COLLECTORS (Scrubber Type \_\_\_\_\_)

Pressure drop across scrubber \_\_\_\_\_ inches of water, Flow Rate \_\_\_\_\_ gpm

Scrubbing liquor \_\_\_\_\_, Liquid to air ratio \_\_\_\_\_ gpm/10<sup>3</sup>acfm

Is there a demister following the scrubber? \_\_\_\_\_

Settling pond: volume \_\_\_\_\_ ft<sup>3</sup>, Depth \_\_\_\_\_ ft, Width \_\_\_\_\_ ft, Length \_\_\_\_\_ ft,

Diameter (if circular) \_\_\_\_\_ ft

STATE OF INDIANA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT

SURFACE COATING AND ACCESSORY SOLVENTS

Company Name Advantage Engineering Inc.

Process or Booth Identification (1)	001	002	003	004
Application Method (2)	Spray	Spray	Spray	Spray
If sprayed Specify type (3)	Air Atom.	Air Atom.	Air Atom.	Air Atom.
Type of Overspray controls (4)	Dry Filter	Dry Filter	Dry Filter	Dry Filter
Control Efficiency	98%	98%	98%	98%
Type of Hydrocarbon controls (5)	N/A	N/A	N/A	N/A
Control Efficiency	N/A	N/A	N/A	N/A
Stack Height (feet above ground)	12.5	12.5	15.0	15.0
Stack Diameter (inches)	2.67	2.67	2.67	2.67
Exhaust flow Rate (acfm)	18,200	18,200	18,200	18,200
Exhaust Discharge Temperature °F	Ambient	Ambient	Ambient	Ambient

Operating Schedule: 24 hours/day 6 days/week 52 weeks/year

1. Use identifiers from forms B and F.
2. Method of application refers to dipping, spraying, rollcoating, brushing, flowcoating, or other.
3. Types of spray coating include: air atomization, airless, electrostatic disc, electrostatic airless, electrostatic air atomized, low pressure air atomization, low pressure-high volume, or other.
4. Overspray controls include: dry and wet filters, baffles, waterwash, or other.
5. Hydrocarbon controls include: catalytic or direct flame incineration, solvent recovery, carbon adsorption, or other.

Revised 8-23-88



STATE OF INDIANA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT

FORM B

Plant Layout and GEP Stack Height Information Sheet

Company Name Advantage Engineering Inc.

This permit application must include a plant layout(s) showing the following information:

1. Drawings, several, if necessary, but each one must be to scale, with actual scale shown. All dimensions must be clearly indicated. This includes building heights, widths, and lengths, and their distance relationship with the property line. It should also indicate where fences or other access-limiting features exist.
2. The layout must show the location of all emission points (exhaust stacks, roof monitors, control devices, or process vents, etc.). Identify each of these emission points under "Stack Identification" on the appropriate forms.
3. The layout(s) must show all roadways and description of roadway surfaces.
4. The layout(s) must include a compass pointing north.

See attached plant layout.

STATE OF INDIANA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT

FORM C

Incinerator Information

Not Applicable X

Company Name \_\_\_\_\_

Manufacturer \_\_\_\_\_ Model \_\_\_\_\_

(Furnish sketch with dimensions)

Design Capacity \_\_\_\_\_ lb/hr \_\_\_\_\_ Btu/hr

Type of Waste Burned (Be Specific) \_\_\_\_\_

Check one: Single Chamber w/Afterburner \_\_\_\_\_ Multiple Chambers \_\_\_\_\_

Burner in Primary Chamber? Yes \_\_\_\_\_ No \_\_\_\_\_

Burner in Secondary Chamber? Yes \_\_\_\_\_ No \_\_\_\_\_

Type of Fuel \_\_\_\_\_

Chamber	Primary	Secondary
Residence Time (sec)	_____	_____
Temperature (°F)	_____	_____

STACK DATA

Stack Identification \_\_\_\_\_

Height (ft above ground) \_\_\_\_\_

Diameter (ft inside) \_\_\_\_\_

Gas discharge Temperature (°F) \_\_\_\_\_

Gas Flow Rate (acfm) \_\_\_\_\_

OPERATION SCHEDULE

Hours/Day \_\_\_\_\_

Days/Week \_\_\_\_\_

Weeks/Year \_\_\_\_\_

Manufacturer's Guaranteed Emission Rate (lb particulate matter per 1,000 lb dry exhaust gas at 70°F and 1 atm, corrected to 50 % excess air) \_\_\_\_\_

Revised 9/22/88

## SURFACE COATING AND ACCESSORY SOLVENTS

[illegible]

- Attach a Material Safety Data Sheet (MSDS) for each material listed. DO NOT SEND THE ENTIRE MSDS. The required sections are: Section I (Product Identification), Section II (Composition Information), and Section III (Physical Property Information).

Density, Weight % Volatiles, and Weight % Water are determined by methods listed in 326 IAC 8-1-4

STATE OF INDIANA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT

FORM F

Flow Diagram

Not Applicable \_\_\_\_\_

Company Name Advantage Engineering

This permit application must include a simple flow diagram of your operation from raw materials input to the finished products. Show points of emission including stacks. Show location of air pollution control equipment, the process it controls, and removal efficiency. State the maximum hourly capacity of each step of the operation.

See attached plant layout

STATE OF INDIANA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT

FORM Y1  
7-29-91

Air Toxic Pollutants

Company Name Advantage Engineering Inc.

Location 525 E. Stop 18 Road, Greenwood, Indiana 46142

Place an "X" beside each compound listed on forms Y1 through Y4 that will be emitted into the air from the equipment covered in this application. Attach Sections I, II, and III (only) of Material Safety Data Sheets (MSDS) for each toxic containing material. List all emission points (as identified on the site plot plan) for each compound. Include stack parameters for each listed air toxic emission point on the appropriate form.

X	CAS NUMBER	CHEMICAL NAME	EMISSION POINTS	MAXIMUM EMISSION RATE (POUNDS/HR)
—	00075070	Acetaldehyde	—	—
—	00060355	Acetamide	—	—
—	00075058	Acetonitrile	—	—
—	00098862	Acetophenone	—	—
—	00053963	2-Acetylaminofluorine	—	—
—	00107028	Acrolein	—	—
—	00079061	Acrylamide	—	—
—	00079107	Acrylic Acid	—	—
—	00107131	Acrylonitrile	—	—
—	00107051	Allyl chloride	—	—
—	00092671	4-Aminodiphenyl	—	—
—	00062533	Aniline	—	—
—	29191524	o-Anisidine	—	—
—	01332214	Asbestos	—	—
—	00071432	Benzene (including from gasoline)	—	—
—	00092875	Benzidine	—	—
—	00098077	Benzotrichloride	—	—
—	00100447	Benzyl chloride	—	—
—	00092524	Biphenyl	—	—
—	00117817	Bis (2-ethylhexyl) phthalate	—	—
—	00542881	Bis(chloromethyl)ether	—	—
—	00075252	Bromoform	—	—
—	00106990	1,3-Butadiene	—	—
—	00156627	Calcium cyanamide	—	—
—	00105602	Caprolactam	—	—
—	00133062	Captan	—	—
—	00063252	Carbaryl	—	—
—	00075150	Carbon disulfide	—	—
—	00056235	Carbon tetrachloride	—	—
—	00463581	Carbonyl sulfide	—	—
—	00120809	Catechol (1,2-dihydroxybenzene)	—	—
—	00133904	Chloramben	—	—
—	00057749	Chlordane	—	—
—	07782505	Chlorine	—	—
—	00079118	Chloroacetic acid	—	—
—	00532274	2-Chloroacetophenone	—	—
—	00108907	Chlorobenzene	—	—
—	00510156	Chlorobenzilate	—	—
—	00067663	Chloroform	—	—
—	00107302	Chloromethyl methyl ether	—	—
—	00126998	Chloroprene	—	—
—	01319773	Cresols/Cresylic acid (isomers and mixtures)	—	—
—	00095487	o-Cresol	—	—
—	00108394	m-Cresol	—	—
—	00106445	p-Cresol	—	—
—	00098828	Cumene	—	—
—	00095757	2,4-D, salts and esters	—	—
—	03547044	DDE	—	—

STATE OF INDIANA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT

FORM Y2  
7-29-91

Air Toxic Pollutants				
X	CAS NUMBER	CHEMICAL NAME	EMISSION POINTS	MAXIMUM EMISSION RATE (POUNDS/HRI)
---	00334883	Diazomethane	---	---
---	00132649	Dibenzofurans	---	---
---	00096128	1,2-Dibromo-3-chloropropane	---	---
---	00084742	Dibutylphthalate	---	---
---	00106467	1,4-Dichlorobenzene (p)	---	---
---	00091941	3,3-Dichlorobenzidene	---	---
---	00111444	Dichloroethyl ether (Bis (2-chloroethyl) ether)	---	---
---	00542756	1,3-Dichloropropene	---	---
---	00062737	Dichlorvos (DDVP)	---	---
---	00111422	Diethanolamine	---	---
---	00121697	N,N-Diethyl aniline (N,N-Dimethylaniline)	---	---
---	00064675	Diethyl sulfate	---	---
---	00119904	3,3'-Dimethoxybenzidine	---	---
---	00060117	Dimethyl aminoazobenzene	---	---
---	00119937	3,3'-Dimethyl benzidine	---	---
---	00079447	Dimethyl carbamoyl chloride	---	---
---	00068122	Dimethyl formamide	---	---
---	00057147	1,1-Dimethyl hydrazine	---	---
---	00131113	Dimethyl phthalate	---	---
---	00077781	Dimethyl Sulfate	---	---
---	00534521	4,6-Dinitro-o-cresol, and salts	---	---
---	00051285	2,4-Dinitrophenol	---	---
---	00121142	2,4-Dinitrotoluene	---	---
---	00123911	1,4-Dioxane (1,4-Diethyleneoxide)	---	---
---	00122667	1,2-Diphenylhydrazine	---	---
---	00106898	Epichlorohydrine (1-Chloro-2,3-epoxypropane)	---	---
---	00106887	1,2-Epoxybutane	---	---
---	00140885	Ethyl acrylate	---	---
X	00100414	Ethyl benzene	001-004	0.09
---	00051796	Ethyl carbamate (Urethane)	---	---
---	00075003	Ethyl chloride (Chloroethane)	---	---
---	00106934	Ethylene dibromide (Dibromoethane)	---	---
---	00107062	Ethylene dichloride (1,2-Dichloroethane)	---	---
---	00107211	Ethylene Glycol	---	---
---	00151564	Ethylene imine (Aziridine)	---	---
---	00075218	Ethylene Oxide	---	---
---	00096457	Ethylene thiourea	---	---
---	00075343	Ethylidene dichloride (1,1-Dichloroethane)	---	---
---	00050000	Formaldehyde	---	---
---	00076448	Heptachlor	---	---
---	00118741	Hexachlorobenzene	---	---
---	00087683	Hexachlorobutadiene	---	---
---	00077474	Hexachlorocyclopentadiene	---	---
---	00067721	Hexachloroethane	---	---
---	00822060	Hexamethylene-1,6-diisocyanate	---	---
---	00680319	Hexamethylphosphoramide	---	---
---	00110543	Hexane	---	---
---	00302012	Hydrazine	---	---
---	07647010	Hydrochloric acid	---	---
---	07664393	Hydrogen fluoride (Hydrofluoric acid)	---	---
---	07788064	Hydrogen sulfide	---	---
---	00123319	Hydroquinone	---	---
---	00078591	Isophorone	---	---
---	00058899	Lindane (all isomers)	---	---
---	00108316	Maleic anhydride	---	---
X	00067561	Methanol	001-004	0.06
---	00072435	Methoxychlor	---	---

STATE OF INDIANA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT

FORM Y3  
7-29-91

Air Toxic Pollutants

	<u>CAS</u> <u>NUMBER</u>	<u>CHEMICAL</u> <u>NAME</u>	<u>EMISSION</u> <u>POINTS</u>	<u>MAXIMUM EMISSION</u> <u>RATE (POUNDS/HRI)</u>
X				
—	00074839	Methyl Bromide (Bromomethane)	—	—
—	00074873	Methyl chloride (Chloromethane)	—	—
—	00071556	Methyl Chloroform (1,1,1-Trichloroethane)	—	—
—	00078933	Methyl ethyl ketone (2-Butanone)	—	—
—	00060344	Methyl hydrazine	—	—
—	00074884	Methyl iodide (Iodomethane)	—	—
—	00108101	Methyl isobutyl ketone (Hexone)	—	—
—	00624839	Methyl isocyanate	—	—
—	00080626	Methyl methacrylate	—	—
—	01634044	Methyl tert butyl ether	—	—
—	00101144	4,4-Methylene bis(2-chloroaniline)	—	—
—	00075092	Methylene chloride (Dichloromethane)	—	—
—	00101688	Methylene diphenyl diisocyanate (MDI)	—	—
—	00101779	4,4'-Methylenedianiline	—	—
—	00091203	Naphthalene	—	—
—	00098953	Nitrobenzene	—	—
—	00092933	4-Nitrobiphenyl	—	—
—	00100027	4-Nitrophenol	—	—
—	00079469	2-Nitropropane	—	—
—	00684935	N-Nitroso-N-methylurea	—	—
—	00062759	N-Nitrosodimethylamine	—	—
—	00059892	N-Nitrosomorpholine	—	—
—	00056382	Parathion	—	—
—	00082688	Pentachloronitrobenzene (Quintobenzene)	—	—
—	00087865	Pentachlorophenol	—	—
—	00108952	Phenol	—	—
—	00106503	p-Phenylenediamine	—	—
—	00075445	Phosgene	—	—
—	07803512	Phosphine	—	—
—	07723140	Phosphorus	—	—
—	00085449	Phthalic anhydride	—	—
—	01336363	Polychlorinated biphenyls (Aroclors)	—	—
—	01120714	1,3-Propane sultone	—	—
—	00057578	beta-Propiolactone	—	—
—	00123386	Propionaldehyde	—	—
—	00114261	Propoxur (Baygon)	—	—
—	00078875	Propylene dichloride (1,2-Dichloropropane)	—	—
—	00075569	Propylene Oxide	—	—
—	00075558	1,2-Propylenimine (2-Methyl aziridine)	—	—
—	00091225	Quinoline	—	—
—	00106514	Quinone	—	—
—	00100425	Styrene	—	—
—	00096093	Styrene oxide	—	—
—	01746016	2,3,7,8-Tetrachlorodibenzo -p-dioxin	—	—
—	00079345	1,1,2,2-Tetrachloroethane	—	—
—	00127184	Tetrachloroethylene (Perchloroethylene)	—	—
—	07550450	Titanium tetrachloride	—	—
X	00108883	Toluene	001-004	0.30
—	00095807	2,4-Toluene diamine	—	—
—	00584849	2,4-Toluene diisocyanate	—	—
—	00095534	o-Toluidine	—	—
—	08001352	Toxaphene (chlorinated camphene)	—	—
—	00120821	1,2,4-Trichlorobenzene	—	—
—	00079005	1,1,2-Trichloroethane	—	—
—	00079016	Trichloroethylene	—	—
—	00095954	2,4,5-Trichlorophenol	—	—

STATE OF INDIANA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT

FORM Y4  
7-29-91

Air Toxic Pollutants

	<u>CAS</u>	<u>CHEMICAL</u>	<u>EMISSION</u>	<u>MAXIMUM EMISSION</u>
<u>X</u>	<u>NUMBER</u>	<u>NAME</u>	<u>POINTS</u>	<u>RATE (POUNDS/HR)</u>
---	00088062	2,4,6-Trichlorophenol	---	---
---	00121448	Triethylamine	---	---
---	01582098	Trifluralin	---	---
---	00540841	2,2,4-Trimethylpentane	---	---
---	00108054	Vinyl acetate	---	---
---	00593602	Vinyl bromide	---	---
---	00075014	Vinyl Chloride	---	---
---	00075354	Vinylidene chloride	---	---
---		(1,1-Dichloroethylene)	---	---
<u>X</u>	01330207	Xylenes (isomers and mixture)	001-004	0.60
---	00095476	o-Xylenes	---	---
---	00108383	m-Xylenes	---	---
---	00106423	p-Xylenes	---	---
---		Antimony Compounds	---	---
---		Arsenic Compounds	---	---
---		(Inorganic including arsine)	---	---
---		Beryllium Compounds	---	---
---		Cadmium Compounds	---	---
---		Chromium Compounds	---	---
---		Cobalt Compounds	---	---
---		Coke Oven Emissions	---	---
---		Cyanide Compounds <sup>1</sup>	---	---
---		Glycol ethers <sup>2</sup>	---	---
---		Lead Compounds	---	---
---		Manganese Compounds	---	---
---		Mercury Compounds	---	---
---		Mineral Fibers <sup>3</sup>	---	---
---		Nickel Compounds	---	---
---		Polycyclic Organic Matter <sup>4</sup>	---	---
---		Radionuclides (Including Radon) <sup>5</sup>	---	---
---		Selenium Compounds	---	---
---	NONE OF THE COMPOUNDS LISTED ON FORMS Y1 THROUGH Y4 WILL BE			
---	EMITTED FROM THE EQUIPMENT LISTED IN THIS APPLICATION.			

NOTE: FOR ALL LISTINGS ABOVE WHICH CONTAIN THE WORD "COMPOUND" AND FOR GLYCOL ETHERS THESE LISTINGS ARE DEFINED AS INCLUDING ANY UNIQUE CHEMICAL SUBSTANCE THAT CONTAINS THE NAMED CHEMICAL AS PART OF THAT CHEMICAL'S INFRASTRUCTURE.

- 1 X'CN where X=H' or any other group where a formal dissociation may occur. For example KCN or Ca(CN)<sub>2</sub>
- 2 includes mono- and di- ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>-OR' where: n= 1, 2, or 3; R= alkyl or aryl groups; and R'= R, H, or groups which, when removed, yield glycol ethers with the structure R-(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>-OH. Polymers are excluded from the glycol category.
- 3 includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.
- 4 includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100 degrees Celsius.
- 5 a type of atom which spontaneously undergoes radioactive decay.

DO NOT SEND ENTIRE MATERIAL SAFETY DATA SHEETS (MSDS). The required sections are: Section I (Product Identification), Section II (Composition Information), and Section III (Physical Property Information).





# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live*

Evan Bayh  
Governor

Kathy Prosser  
Commissioner

105 South Meridian Street  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Telephone 317-232-8603  
Environmental Helpline 1-800-451-6027

TO: Applicant

FROM: Kathy Prosser, Commissioner *K Prosser*

SUBJECT: Identification of Potentially Affected Persons

The Administrative Orders and Procedures Act (IC 4-21.5-3-5) requires that the Department of Environmental Management give notice of its decision on your application to the following persons:

- (a) each person to whom the decision is specifically directed;
- (b) each person to whom a law requires notice be given;
- (c) each competitor who has applied to the DEM for a mutually exclusive license, if issuance is the subject of the decision and the competitor's application has not been denied in an order for which all rights to judicial review have been waived or exhausted;
- (d) each person who has provided the DEM with a written request for notification of the decision;
- (e) each person who has a substantial and direct proprietary interest in the issuance of the (permit) (variance);
- (f) each person whose absence as a party in the proceeding concerning the (permit) (variance) decision would deny another party complete relief in the proceeding or who claims an interest related to the issuance of the (permit) (variance) and is so situated that the disposition of the matter, in the person's absence may:
  - (1) as a practical matter impair or impede the person's ability to protect that interest, or
  - (2) leave any other person who is a party to a proceeding concerning the permit subject to a substantial risk of incurring multiple or otherwise inconsistent obligations by reason of the person's claimed interest.

IC 4-21.5-3-5(f) provides that we may request your assistance in identifying these people. Our failure to properly identify and notify these people of the decision could have the result of voiding any decision which is made.

As part of your application, identify those people who you believe are entitled to notice by IC 4-21.5-3-5. I am especially interested in your identifying those addressed under subdivisions (e) and (f) above.

Your assistance in identifying these people will help ensure that the legislator's intent is met and the decision made by the DEM is upheld upon administrative or judicial review.

Thank you for your cooperation. If there are any questions, please contact the Office of Air Management at (317) 232-8384.

# IDENTIFICATION OF POTENTIALLY AFFECTED PERSONS

Please read the attached letter from the Commissioner, and list here any persons whom you have reason to believe have a substantial or proprietary interest in this matter, or could otherwise be considered to be potentially affected under the law. Failure to notify a person who is later determined to be potentially affected could result in voiding our decision on procedural grounds. To ensure conformance with the Administrative Adjudication Act and to avoid reversal of a decision, please list all such parties. Use additional sheets if necessary.

NAME \_\_\_\_\_

NAME \_\_\_\_\_

STREET \_\_\_\_\_

STREET \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

NAME \_\_\_\_\_

NAME \_\_\_\_\_

STREET \_\_\_\_\_

STREET \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

NAME \_\_\_\_\_

NAME \_\_\_\_\_

STREET \_\_\_\_\_

STREET \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

## CHECK APPROPRIATE BOX

- ☐ Construction Permit
- ☐ Operation Permit
- ☐ Variance
- ☐ Other \_\_\_\_\_

## ADDRESS OF SITE:

Street \_\_\_\_\_

City \_\_\_\_\_

Please complete this form by signing the following statement:

I certify that to the best of my knowledge I have listed all potentially affected parties, as defined by IC 4-21.5, known to me. If none are listed it signifies that no such parties are known.

SIGNATURE \_\_\_\_\_

PRINTED NAME \_\_\_\_\_

COMPANY \_\_\_\_\_

DATE \_\_\_\_\_



*add info*  
*CP# 081-3420*

RECEIVED

DEC 27 1993

December 20, 1993

Indiana Department of Environmental Management  
105 S. Meridian Street  
P.O. Box 6015  
Indianapolis, IN 46206-6015

State Of Indiana  
Department of Environmental Management  
Office Of Air Management

Attention: Penny J. Flickinger  
Office of Air Management

Reference: #081-3420

Dear Ms. Flickinger:

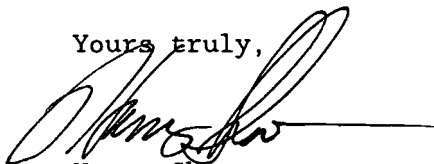
Thank you for your letter of December 10, 1993 explaining 326 IAC 8-2-9 part (d). Our consultant was of the understanding that this rule applied to permit application requiring permitting as opposed to registration.

If this rule applies to registration applications then we must work with our suppliers to acquire water base paints or high solids paint for our products. These coatings are typically much more expensive or require ovens or heat application for proper curing.

I will send a follow-up letter once I have additional knowledge on alternative coatings which can be applied in our case.

I respectfully request 60 days from today's date to specify our compliance to 326 IAC 8-2-9 part (d). Your cooperation will be much appreciated.

Yours truly,



Harry Short

HS/sap

Encl. IDEM Letter, 12/10/93

cc: J.W. Bloemer P.E.  
JWB Environmental Engineering  
10324 Briar Creek Place  
Carmel, IN 46033



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live*

*Evan Bayh*  
Governor

*Kathy Prosser*  
Commissioner

December 10, 1993

105 South Meridian Street  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Telephone 317-232-8603  
Environmental Helpline 1-800-451-6027

CERTIFIED MAIL P 215 679 311

## OFFICE OF AIR MANAGEMENT

Advantage Engineering, Inc.  
P.O. Box 407  
Greenwood, IN 46142

Attention: Harry Short

Re: Permit Application for Construction  
Permit No. 081-3420

Ladies and Gentlemen:

Your application for four paint booths to be located at 525 East Stop 18 Road, Greenwood, Indiana was received on November 29, 1993. Sufficient data is not contained to act on this application.

According to Air Management's calculations in the Surface Coating Spread Sheet (column 12 and 13), Advantage Engineering Inc. application for a permit will be classified as a registration.

However, pursuant to 326 IAC 8-2-9 part (d), Advantage Engineering Inc., pounds of VOC per gallon of coating less water (column 9), fails to comply with part (d). Please, describe how Advantage Engineering plans to comply with 326 IAC 8-2-9 part (d).

Your written response to this request for additional information must be received within 30 days of your receipt of this letter. If no written response or schedule of when this information will be provided is received within 30 days, your permit may be denied as a result of the incomplete application pursuant to 326 IAC 2-1-3 (f) (1).

Please contact me if you have any questions concerning this letter at the above address or via phone 317/233-6875. Please attach a copy of my letter to your response. Further review on this application can not be done until a response is received. Further questions may arise as the review proceeds.

Sincerely,

Penny J. Flickinger  
Environmental Scientist  
Office of Air Management

pjf

Enclosure: 326 IAC 8-2-9  
Surface Coating Spread Sheet

to a coating applicator in a coating application system that is air dried or forced warm air dried at temperatures up to ninety degrees Celsius (90°C) (one hundred ninety-four degrees Fahrenheit (194°F)).

(3) Forty-two hundredths (0.42) kilograms per liter (three and five-tenths (3.5) pounds per gallon) of coating, excluding water, delivered to a coating applicator that applies extreme performance coatings. Extreme performance coatings are coatings designed for exposure to temperatures consistently above ninety-five degrees Celsius (95°C), detergents, abrasive or scouring agents, solvents, corrosive atmospheres, outdoor weather at all times, or similar environmental conditions.

(4) Thirty-six hundredths (0.36) kilograms per liter (three (3) pounds per gallon) of coating, excluding water, delivered to a coating applicator for all other coatings and coating application systems.

(e) If more than one (1) emission limitation in subsection (d) applies to a specific coating, then the least stringent emission limitation shall be applied.

(f) Solvent sprayed from application equipment during cleanup or color changes shall be directed into containers. Such containers shall be closed as soon as such solvent spraying is complete, and the waste solvent shall be disposed of in such a manner that evaporation is minimized. (Air Pollution Control Board; 326 IAC 8-2-9; filed Feb 9, 1988, 2:07 p.m.: 11 IR 1736; filed Mar 10, 1988, 1:20 pm: 11 IR 2534; filed Apr 18, 1990, 4:55 p.m.: 13 IR 1678)

Cited in: 326 IAC 8-1-2; 326 IAC 8-2-1.

### 326 IAC 8-2-10 Flat wood panels; manufacturing operations

Authority: IC 13-1-1-4; IC 13-7-7  
Affected: IC 13-1-1-1; IC 13-1-1-4; IC 13-7-1-1; IC 13-7-7

Sec. 10. (a) This section establishes the emission limitations for flat wood manufacturing and surface finishing of the following:

(1) Printed interior panels made of hardwood plywood and thin particle board. "Printed interior panels" means panels whose grain or natural surface is obscured by fillers and basecoats upon which a simulated grain or decorative pattern is printed. "Hardwood particleboard" is a manufactured board one-fourth (1/4) inch or less in thickness made of individual wood particles which have been coated with a binder and formed into flat sheets by pressure.

(2) Natural finish hardwood plywood panels. "Natural finish hardwood plywood panels" means panels whose original grain pattern is enhanced by essentially transparent finishes frequently supplemented by fillers and toners.

(3) Hardboard paneling with Class II finishes. "Hardboard" is a panel manufactured primarily from inter-felted ligno-cellulosic fibers which are consolidated under heat and pressure in a hot press. "Class II finish" means finishes which meet the specifications of Voluntary Product Standard PS-59-73 as approved by the American National Standards Institute.

(b) This section does not apply to coating lines used solely in the manufacture of exterior siding, tileboard, or particleboard used as a furniture component. "Tileboard" means paneling that has a colored waterproof surface coating.

(c) If a coating line is used both for coating paneling subject to this section as described in subsection (a), of this section and for paneling exempt from this section as described in subsection (b), of this section, then any control equipment installed on such line shall be operated at all times when such line is in use.

(d) No owner or operator of a flatwood manufacturing facility subject to this section shall emit volatile organic compounds from a coating line in excess of:

(1) 2.9 kg per 100 square meters of coated finished product (6.0 lb/1,000 sq ft) from

**AIR POLLUTION CONTROL BOARD**

### **326 IAC 8-2-8 Magnet wire coating operations**

**Authority:** IC 13-1-4; IC 13-7-7  
**Affected:** IC 13-1-1; IC 13-1-4; IC 13-7-1-1;  
IC 13-7-5

Sec. 8. (e) This section establishes the emission limitations for the process of applying a coating of electrically insulating varnish or enamel to aluminum or copper wire for use in electrical machinery.

(b) No owner or operator of a magnet wire coating oven subject to this section may cause, allow or permit the discharge into the atmosphere of any volatile organic compounds in excess of 0.20 kilograms per liter of coating (1.7 pounds per gallon) excluding water, delivered to the coating applicator from magnet wire coating operations. (Air Pollution Control Board; 326 IAC 8-2-8; filed Mar 10, 1988, 1:20 pm: 11 IR 2534)

**Cited in: 328 LAC 8-1-3; 328 LAC 8-2-1.**

**326 LAC 8-2-9 Miscellaneous metal coating operations**

Authority: IC 13-1-1-4; IC 13-7-7  
Affected: IC 13-1-1-1; IC 13-7-1-1; IC 13-7-7-5

**Sec. 9. (a) This section is applicable to the surface coating of the following:**

- (1) Large and small farm machinery.
- (2) Small household appliances.
- (3) Office equipment.
- (4) Industrial machinery.
- (5) Any other industrial category which costs metal parts or products under the Standard Industrial Classification Code of major groups #33, #34, #35, #36, #37, #38, and #39.

(b) This section is not applicable to the surface coating of the following metal parts and products or to the following types of coating except as indicated in subsection (c):

- x (1) Any metal parts or products limited by other sections of this rule.
- x (2) Exterior of airplanes.
- x (3) Automobile refinishing.
- x (4) Customized top coating of automobiles and trucks, if production is less than thirty-five (35) vehicles per day.
- > (5) Exterior of marine vessels.
- o (6) Maintenance coatings of production equipment.
- (7) The application of adhesives or preparation of adhesives.
- (8) Lubricants used to prevent sticking of internally moving parts.
- + (9) Chromium plated plastics.
- + (10) The application of coatings to burial caskets (Standard Industrial Classification Code 3995) if the source is not located in or adjacent to a county designated as nonattainment for ozone.

(c) Commencing July 1, 1991, the operations described in subsection (b)(6) through (b)(9) shall comply with the requirements of this section.

(d) No owner or operator of a facility engaged in the surface coating of miscellaneous metal parts and products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of the following:

- (1) Fifty-two hundredths (0.52) kilograms per liter (four and three-tenths (4.3) pounds per gallon) of coating, excluding water, delivered to a coating applicator that applies clear coatings. A clear coating is a coating that lacks color or opacity and is transparent and uses the undercoat as a reflectant base or undertone color.

- (2) Forty-two hundredths (0.42) kilograms per liter (three and five-tenths (3.5) pounds per gallon) of coating excluding water, delivered

State Potential VOC and Particulate Emissions  
From Surface Coating Operations  
Advantage Engineering, Inc.  
Greenwood, Indiana  
12/3/93  
Penny Flickinger

Material	1 Density (lb/gal)	2 Weight % Volatile (H2O & Organics)	3 Weight % Water	4 Weight % Organics	5 Volume % Water	6 Volume % Non-Vol (solids)	7 Gal of Mat (gal/unit)	8 Maximum (unit/hour)	9 Pounds VOC of coating less water	10 Pounds VOC of coating	11 Potential VOC pounds per hour	12 Potential VOC pounds per day	13 Potential VOC tons per year	14 Particulate Potential ton/yr	15 lb VOC /gal solids	16 Transfer Efficiency
Paint	9.58	62.8%	0.0%	62.8%	0.0%	42.1%	1.98000	0.20	6.02	6.02	2.38	57.18	10.44	5.56	14.29	10%
Primer	9.43	49.4%	0.0%	49.4%	0.0%	35.0%	0.17000	0.20	4.66	4.66	0.44	10.51	1.92	1.77	13.31	10%
Thinner	7.5	100.0%	0.0%	100.0%	0.0%	0.0%	1.01000	0.20	7.50	7.50	1.52	36.36	6.66	0.00	#DIV/0!	10%
State Potential Emissions									18.17	18.17	4.3	104.0	19.0	7.3		
Add worst case coating to all solvents																

**METHODS**

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 (unit/hr) \* (24 hrs / 1 day)  
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* (8760 hr/yr) \* (1 ton / 2000 lbs)  
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (unit/hr) \* (8760 hr/yr) \* (1 ton / 2000 lbs)  
Particulate Potential Tons per Year = (unit/hr) \* (lb/gal) \* (1 - Weight % Volatiles) \* (1 - Transfer efficiency) \* (8760 hr/yr) \* (1 ton / 2000 lbs)  
Pounds VOC per Gallon of Solids = (lbs/gal) \* (Weight % Organics) / (Volume % Solids)  
Total = Worst Coating + Sum of all solvents used

**Applicable Rules  
Advantage Engineering  
Penny Flickinger  
4/8/94**

**Rule 326 IAC 8-2-9 (d)(2)**

No owner or operator of a facility engaged in the surface coating of miscellaneous metal parts and products may cause, allow, or permit the discharge into the atmosphere of any volatile organic compounds in excess of forty-two hundredths (0.42) kilograms per liter (three and five-tenths (3.5) pounds per gallon) of coating excluding water, delivered to a coating applicator in a coating application system that is air dried or forced warm air dried at temperatures up to ninety degrees Celsius (90 degrees C) (one hundred ninety-four degrees Fahrenheit (194 degrees F)).

Since Advantage Engineering's coating is 2.37 lbs of VOC per gallon of coating less water, they are in compliance with rule 326 IAC 8-2-9.



## Plant Point/Segment ID

Use this form to enter new segments or modifications into the AFS system. The BOLD information is necessary for new segment data of existing plant. Use a separate sheet for each segment added. Use RED ink to make modifications in existing segments only. When entering a new plant, all information must be filled in.

Co. # 081-5420 Plant # 681-60029 CPS Eng PJFPlant Name Advantage Engineering New Segment/Modify Existing: Circle one: N / MPlant Address 525 E. 5th 18 Rd Plant City/Zip: Greenwood INContact Person Harry Short Phone # 317/887-0729 Primary SIC Code: 3559Mail Address/Zip P.O. Box 407, Greenwood, IN 46142Point # \_\_\_\_\_ Segment # \_\_\_\_\_ Stack # \_\_\_\_\_ SCC # 4-02-00210Description of process for point Process booths 003-004Max Design Rate (MDR) 39 gal/hr Paint (list units, e.g., T/H) Annual Process Weight Rate \_\_\_\_\_

Ann Fuel Usage \_\_\_\_\_ Fuel Data: Sulphur (%) \_\_\_\_\_ Ash (%) \_\_\_\_\_ Heat Content \_\_\_\_\_

Hours of Operation: Hrs/Day 24 Days/Week 6 Weeks/Year 52Control Equipment (description) Dry FilterPollutant Pm Em. Factor -- Appl Rule \_\_\_\_\_ Control Eff. % 98 Allow. \_\_\_\_\_Pollutant Am<sub>10</sub> Em. Factor -- Appl Rule \_\_\_\_\_ Control Eff. % \_\_\_\_\_ Allow. \_\_\_\_\_Pollutant SO<sub>2</sub> Em. Factor 0.0 lbs/gal Appl Rule \_\_\_\_\_ Control Eff. % \_\_\_\_\_ Allow. \_\_\_\_\_Pollutant NO<sub>x</sub> Em. Factor 0.0 lbs/gal Appl Rule \_\_\_\_\_ Control Eff. % \_\_\_\_\_ Allow. \_\_\_\_\_Pollutant CO Em. Factor 0.0 lbs/gal Appl Rule \_\_\_\_\_ Control Eff. % \_\_\_\_\_ Allow. \_\_\_\_\_Pollutant VOC Em. Factor 1.0 lbs/gal Appl Rule \_\_\_\_\_ Control Eff. % \_\_\_\_\_ Allow. \_\_\_\_\_Stack Ht.(ft) 15 Stack Dia.(ft) 2.67 Plume Height(ft) (only if no ht. or dia. available) \_\_\_\_\_Exit Gas Temp (f) ambient air Gas Flow Rate (acfm) 13,200 UTM H \_\_\_\_\_ UTM V: \_\_\_\_\_

Construction Permit # \_\_\_\_\_ Facility Subject to: PSD NSPS Subpart: \_\_\_\_\_ Offsets NESHAP

Are tests required as part of the operating or construction permit? \_\_\_\_\_

What time limits are given to the company to complete testing? \_\_\_\_\_

Permit limited potential? Y / N What are the limitations?(amount) \_\_\_\_\_

Describe what the limitations are for: \_\_\_\_\_

For NEW plants or processes, fill form out completely.

For entering petroleum storage tank data, please see NJL.

Date Entered: \_\_\_\_\_ Year of Emission Inventory \_\_\_\_\_ Inspector: \_\_\_\_\_



## Plant Point/Segment ID

Use this form to enter new segments or modifications into the AFS system. The BOLD information is necessary for new segment data of existing plant. Use a separate sheet for each segment added. Use RED ink to make modifications in existing segments only. When entering a new plant, all information must be filled in.

Co. # 081-3420 Plant # 081-00029 CPS Eng \_\_\_\_\_Plant Name Advantage Eng. New Segment/Modify Existing: Circle one: N / M

Plant Address \_\_\_\_\_ Plant City/Zip: \_\_\_\_\_

Contact Person \_\_\_\_\_ Phone # \_\_\_\_\_ Primary SIC Code: \_\_\_\_\_

Mail Address/Zip \_\_\_\_\_

Point # \_\_\_\_\_ Segment # \_\_\_\_\_ Stack # \_\_\_\_\_ SCC # \_\_\_\_\_

Description of process for point Process Boilers 003-004Max Design Rate (MDR) 2.55 gals/min primer (list units, e.g., T/H) Annual Process Weight Rate \_\_\_\_\_

Ann Fuel Usage \_\_\_\_\_ Fuel Data: Sulphur (%) \_\_\_\_\_ Ash(%) \_\_\_\_\_ Heat Content \_\_\_\_\_

Hours of Operation: Hrs/Day 24 Days/Week 6 Weeks/Year 52Control Equipment (description) Dry filterPollutant Pm Em. Factor -- Appl Rule \_\_\_\_\_ Control Eff. % 98 Allow. \_\_\_\_\_Pollutant Pm10 Em. Factor -- Appl Rule \_\_\_\_\_ Control Eff. % \_\_\_\_\_ Allow. \_\_\_\_\_Pollutant SO2 Em. Factor 0.0 lbs/gal Appl Rule \_\_\_\_\_ Control Eff. % \_\_\_\_\_ Allow. \_\_\_\_\_Pollutant NO2 Em. Factor 0.0 lbs/gal Appl Rule \_\_\_\_\_ Control Eff. % \_\_\_\_\_ Allow. \_\_\_\_\_Pollutant CO Em. Factor 0.0 lbs/gal Appl Rule \_\_\_\_\_ Control Eff. % \_\_\_\_\_ Allow. \_\_\_\_\_Pollutant VOC Em. Factor 1.0 lbs/gal Appl Rule \_\_\_\_\_ Control Eff. % \_\_\_\_\_ Allow. \_\_\_\_\_Stack Ht.(ft) 15 Stack Dia.(ft) 2.67 Plume Height(ft) (only if no ht. or dia. available) \_\_\_\_\_Exit Gas Temp (f) ambient Gas Flow Rate (acfm) 18,200 UTM H \_\_\_\_\_ UTM V: \_\_\_\_\_

Construction Permit # \_\_\_\_\_ Facility Subject to: PSD NSPS Subpart: \_\_\_\_\_ Offsets NESHAP

Are tests required as part of the operating or construction permit? \_\_\_\_\_

What time limits are given to the company to complete testing? \_\_\_\_\_

Permit limited potential? Y / N What are the limitations?(amount) \_\_\_\_\_

Describe what the limitations are for: \_\_\_\_\_

For NEW plants or processes, fill form out completely.

For entering petroleum storage tank data, please see NJL.

Date Entered: \_\_\_\_\_ Year of Emission Inventory \_\_\_\_\_ Inspector: \_\_\_\_\_





RECEIVED

FEB 25 1994

State Of Indiana  
Department of Environmental Management  
Office Of Air Management

*addl info*  
*CP# 081-3420*

February 15, 1994

Indiana Department of Environmental Management  
105 S. Meridian Street  
P.O. Box 6015  
Indianapolis, IN 46206-6015

Attention: Penny J. Flickinger  
Office of Air Management

Reference: #081-3420

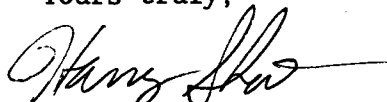
Dear Ms. Flickinger:

This letter is further to my correspondence of December 20, 1993,  
regarding the above referenced matter.

I have enclosed new data on the coatings to be sprayed. We will be using  
a waterborn paint and primer with VOC content of less than 3.5 lbs/gal  
to comply with 326 IAC 8-2-9 part (d).

Please proceed with our registration application. Thank you for your  
assistance.

Yours truly,



Harry Short

HS/kr

Encl. New Surface Coating Spread Sheet  
Applicable MSDS Sheets  
Flickinger Letter 12/10/93  
Short Letter 12/20/93

CHEMICAL

Product: N5892F BLUE W/R AIR DRY ENAMEL

PAINT

EMERGENCY TELEPHONE NUMBER  
(219)-236-5856 (24 Hours)  
(616)-683-3377 (Information)  
Contact: Mike Lichatowich

(Page 1 of 6)

SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT NAME: N5892F BLUE W/R AIR DRY ENAMEL

PRODUCT CLASS: N/A, Fed. # N/A

DATE: 02-10-1974

National Stock Number : Not Applicable

CASE Code : 02388

Health	2
Flammability	2
Reactivity	0
P.P.E.	G

SECTION 2 - HAZARDOUS INGREDIENTS

INGREDIENT	CAS #	% WT	OCCUPATIONAL EXPOSURE LIMITS (ppm)		OSHA PEL	VAPOR PRESSURE mm @ 20° C
			ACGIH TLV	ACGIH STEL		
ALYD RESIN	N.A.	16	25 SKIN	75	50	NE
BUTYL CELLOSOLVE	111-76-2	8	15 SKIN	NE	25 SKIN	0.6
BUTYL ALCOHOL	71-36-3	1	50 SKIN	NE	50	4.4
SECONDARY BUTYL ALCOHOL	78-92-2	1	100	150	150	13
BLACK PIGMENT	1333-86-4	<1	3.5 mg/m <sup>3</sup>	NE	3.5mg/m <sup>3</sup>	0
COPALT COMPOUNDS (as Co)	7440-48-4	<1	2mg/m <sup>3</sup>	NE	0.1mg/m <sup>3</sup>	NE
Proprietary Ingredients *		Balance				

\* Manufacturer states unidentified ingredients are not considered hazardous under the Federal Hazard Communication Regulations.

SECTION 3 - PHYSICAL DATA

BOILING RANGE: 208 - 398 °F ( 97 - 203 °C)

EVAPORATION RATE: Slower than ether

VAPOR DENSITY: Heavier than air

AUTOIGNITION TEMPERATURE: NE

DECOMPOSITION TEMPERATURE: NE

APPEARANCE AND ODOR: Liquid, Odor of solvents

CORROSION RATE: Minimal

WEIGHT PER GALLON: 10.32

% VOLATILE BY VOLUME: 72.42

V.O.C.: 2.83 Lbs/Gal.

VISCOSITY: 50-60s #4F

SOLUBILITY IN WATER: Yes

SPECIFIC GRAVITY: 1.237

pH: N.A.

## CHEMICAL

Product: N-4896 GRAY W/R PRIMER A.D.

## PAINT

EMERGENCY TELEPHONE NUMBER  
(219)-236-5856 (24 Hours)  
(616)-683-3377 (Information)  
Contact: Mike Lichatowich

(Page 1 of 6)

## SECTION 1 - PRODUCT IDENTIFICATION

PRODUCT NAME: N-4896 GRAY W/R PRIMER A.D.

PRODUCT CLASS: N/A, Fed. # N/A

DATE: 02-14-1994

National Stock Number : Not Applicable

CAGE Code : 02388

Health	2
Flammability	2
Reactivity	0
P.P.E.	6

## SECTION 2 - HAZARDOUS INGREDIENTS

INGREDIENT	CAS #	% WT	OCCUPATIONAL EXPOSURE LIMITS (ppm)		OSHA PEL	VAPOR PRESSURE mm @ 20° C
			ACGIH TLV	ACGIH STEL		
ALKYD RESIN SOLUTION	N.A.	14	25ppm	50p	75ppm	6.87
BARIUM SULFATE	7727-43-7	5	NE	NE	NE	NE
BUTYL CELLOSOLVE	111-76-2	5	25 SKIN	NE	25 SKIN	0.6
SECONDARY BUTYL ALCOHOL	78-92-2	2	100	150	150	13
BUTYL ALCOHOL	71-36-3	1	50 SKIN	NE	50	4.4
COBALT COMPOUNDS (as Co)	7440-48-4	<1	2mg/m3	NE	0.1mg/m3	NE
BLACK PIGMENT	1333-86-4	<1	3.5 mg/m3	NE	3.5mg/m3	0
Proprietary Ingredients †		Balance				

† Manufacturer states unidentified ingredients are not considered hazardous under the Federal Hazard Communication Regulations.

## SECTION 3 - PHYSICAL DATA

BOILING RANGE: 208 - 398 °F ( 97 - 203 °C)  
EVAPORATION RATE: Slower than ether  
VAPOR DENSITY: Heavier than air  
AUTOIGNITION TEMPERATURE: NE  
DECOMPOSITION TEMPERATURE: NE  
APPEARANCE AND ODOR: Liquid, Odor of solvents  
CORROSION RATE: Minimal

WEIGHT PER GALLON: 10.61  
% VOLATILE BY VOLUME: 71.98  
V.O.C.: 2.44 Lbs/Gal.  
VISCOSITY: 75-85s #4F  
SOLUBILITY IN WATER: Yes  
SPECIFIC GRAVITY: 1.272  
pH: N.A.

7% water 44%

7% organic 10%

Volume Part Water 56%

Volume Non-Volatile 28%

## SURFACE COATING AND ACCESSORY SOLVENTS

- If different types or sizes of units are coated in the same paint booth with the same coating, this amount should be based on the production unit requiring the most gallons per hour. Gallons per hour = Column 8 x Column 9. If different coatings are used, they must be listed as a separate material.
- Complete this column for operation permit renewals only.

Attach a Material Safety Data Sheet (MSDS) for each material listed. DO NOT SEND THE ENTIRE MSDS. The required sections are: Section I (Product Identification), Section II (Composition Information), and Section III (Physical Property Information).

Density, Weight % Volatiles, and Weight % Water are determined by methods listed in 326 IAC 8-1-4

[illegible]



100

100

100

100

100

100

100

100

100

100



# INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT

*We make Indiana a cleaner, healthier place to live*

*Evan Bayh*  
Governor  
*Kathy Prosser*  
Commissioner

December 10, 1993

105 South Meridian Street  
P.O. Box 6015  
Indianapolis, Indiana 46206-6015  
Telephone 317-232-8603  
Environmental Helpline 1-800-451-6027

CERTIFIED MAIL P 215 679 311

## OFFICE OF AIR MANAGEMENT

Advantage Engineering, Inc.  
P.O. Box 407  
Greenwood, IN 46142

Attention: Harry Short

Re: Permit Application for Construction  
Permit No. 081-3420

Ladies and Gentlemen:

Your application for four paint booths to be located at 525 East Stop 18 Road, Greenwood, Indiana was received on November 29, 1993. Sufficient data is not contained to act on this application.

According to Air Management's calculations in the Surface Coating Spread Sheet (column 12 and 13), Advantage Engineering Inc. application for a permit will be classified as a registration.

However, pursuant to 326 IAC 8-2-9 part (d), Advantage Engineering Inc., pounds of VOC per gallon of coating less water (column 9), fails to comply with part (d). Please, describe how Advantage Engineering plans to comply with 326 IAC 8-2-9 part (d).

Your written response to this request for additional information must be received within 30 days of your receipt of this letter. If no written response or schedule of when this information will be provided is received within 30 days, your permit may be denied as a result of the incomplete application pursuant to 326 IAC 2-1-3 (f) (1).

Please contact me if you have any questions concerning this letter at the above address or via phone 317/233-6875. Please attach a copy of my letter to your response. Further review on this application can not be done until a response is received. Further questions may arise as the review proceeds.

Sincerely,

Penny J. Flickinger  
Environmental Scientist  
Office of Air Management

pjf

Enclosure: 326 IAC 8-2-9  
Surface Coating Spread Sheet



December 20, 1993

Indiana Department of Environmental Management  
105 S. Meridian Street  
P.O. Box 6015  
Indianapolis, IN 46206-6015

Attention: Penny J. Flickinger  
Office of Air Management

Reference: #081-3420

Dear Ms. Flickinger:

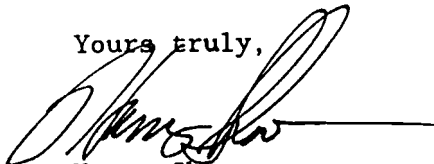
Thank you for your letter of December 10, 1993 explaining 326 IAC 8-2-9 part (d). Our consultant was of the understanding that this rule applied to permit application requiring permitting as opposed to registration.

If this rule applies to registration applications then we must work with our suppliers to acquire water base paints or high solids paint for our products. These coatings are typically much more expensive or require ovens or heat application for proper curing.

I will send a follow-up letter once I have additional knowledge on alternative coatings which can be applied in our case.

I respectfully request 60 days from today's date to specify our compliance to 326 IAC 8-2-9 part (d). Your cooperation will be much appreciated.

Yours truly,



Harry Short

HS/sap

Encl. IDEM Letter, 12/10/93

cc: J.W. Bloemer P.E.  
JWB Environmental Engineering  
10324 Briar Creek Place  
Carmel, IN 46033



RECEIVED

APR 4 1994

State Of Indiana  
Department of Environmental Management  
Office Of Air Management

*addl info  
081-3420*

March 29, 1994

Indiana Department of Environmental Management  
105 S. Meridian Street  
P.O. Box 6015  
Indianapolis, IN 46206-6015

Attention: Penny J. Flickinger  
Office of Air Management

Reference: 081-3420

Dear Ms. Flickinger;

Pursuant to our recent telephone conversations, I am submitting specifications for a new waterborn coating to be used in our painting operations.

Please proceed with our registration application. Thank you for your assistance.

Yours truly,

A handwritten signature in cursive script, appearing to read 'Harry Short', written over a horizontal line.  
Harry Short

HS/sap

Encl. "Hydro Prime" Product Data Sheet  
"Aqua Acrylic" Product Data Sheet  
MSDS Sheets  
Surface Coating Spread Sheet  
Gable Letter 3/22/94

## SURFACE COATING AND ACCESSORY SOLVENTS

[illegible]

- Attach a Material Safety Data Sheet (MSDS) for each material listed. DO NOT SEND THE ENTIRE MSDS. The required sections are: Section I (Product Identification), Section II (Composition Information), and Section III (Physical Property Information).

Prüfung 7.16.01

# MATERIAL SAFETY DATA SHEET

## FOR COATING, RESINS, AND RELATED MATERIALS

Date of Preparation- 6/01/93

Page 1

Manufacturer: LILLY INDUSTRIES, INC. PERFECTION PAINT DIVISION  
Address : 715 East Maryland Street  
Indianapolis, IN 46202-3999

Telephone #: (317) 231-2255 Emergency Night:  
Emergency #: (317) 231-2255 CHEMTREC #: (800) 424-9300

### SECTION I PRODUCT IDENTIFICATION

Manufacturer's Code Identification: AA21  
Product Class: WATER-BORNE ACRYLIC ENAMEL  
Trade Name: AQUA-ACRYLIC ALL BASES AND COLORS

HMIS Information: Health- 2 Flammability- 1  
Reactivity- 0 Personal Protective Equipment- B  
HAZARD INDEX: 4= Severe 3= Serious 2= Moderate 1= Slight 0= Least  
Eye Protection & Skin Protection

### SECTION II HAZARDOUS INGREDIENTS

INGREDIENT	CAS#	ACGIH TLV(TWA) PPM	OSHA PEL PPM	LEL
10 ETHYLENE GLYCOL MONO	111-76-2	/	25.00/	1.1
BUTYL ETHER	/	/	/	
14 METHYL ALCOHOL	/67-56-1	/	200.00/	6.0
	/	/	/	/TLV-SKIN

This product contains no reported carcinogens or suspected carcinogens.

This product contains pigments which may become a dust nuisance when removed by abrasive blasting, sanding, or grinding.

### SECTION III PHYSICAL DATA

Boiling Range: High- 343.0 F Low- 212.0 F  
Vapor Pressure: 100.00 MMHG @68 F  
Vapor Density: Heavier Than Air  
Evaporation Rate: Faster than Butyl Acetate  
Weight per Gallon: 9.4  
VOC Lbs/Gal: 2.364  
Physical State: LIQUID  
Odor: SLIGHT  
pH: 9.0  
Freezing Point: 32.0 F

## FOR COATING, RESINS, AND RELATED MATERIALS

Date of Preparation- 1/27/94

Page 1

Manufacturer: LILLY INDUSTRIES, INC. PERFECTION PAINT DIVISION  
Address : 715 East Maryland Street  
Indianapolis, IN 46202-3999

Telephone #: (317) 231-2255  
Emergency #: (317) 231-2255

Emergency Night:  
CHEMTREC #: (800) 424-9300

## SECTION I PRODUCT IDENTIFICATION

Manufacturer's Code Identification: HP261  
Product Class: ACRYLIC EMULSION  
Trade Name: HYDRO PRIME

HMIS Information: Health- 2 Flammability- 0  
Reactivity- 0 Personal Protective Equipment- 8  
HAZARD INDEX: 4= Severe 3= Serious 2= Moderate 1= Slight 0= Least  
Eye Protection & Skin Protection

## SECTION II HAZARDOUS INGREDIENTS

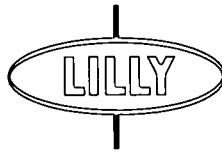
INGREDIENT MATERIAL DESCRIPTION REF#	CAS#	ACGIH TLV(TWA) PPM	OSHA PEL PPM	LEL
11 BUTYL ALCOHOL -N	/71-36-3	/	/ 50.00/	50.00/ 1.4
12 ETHYLENE GLYCOL MONO	/111-76-2	/	/ 25.00/	25.00/ 1.1
BUTYL ETHER	/	/	/	/
13 AROMATIC PETROLEUM	/64742-95-6	/	/NOT EST/	100.00/ .9
DISTILLATE	/	/	/	/
15 PROPYLENE GLYCOL	/57-55-6	/	/NOT EST/	NOT EST/ 2.6

This product contains no reported carcinogens or suspected carcinogens.

This product contains pigments which may become a dust nuisance when removed by abrasive blasting, sanding, or grinding.

## SECTION III PHYSICAL DATA

Boiling Range: High- 343.0 F Low- 212.0 F  
Vapor Pressure: 9.00 MMHG @68 F  
Vapor Density: Heavier Than Air  
Evaporation Rate: Slower than Butyl Acetate  
Weight per Gallon: 9.7  
VOC Lbs/Gal: 1.832  
Physical State: LIQUID  
Odor: SLIGHT  
pH: 7.5  
Freezing Point: 32.0 F



**Lilly Industries, Inc.**

March 22, 1994

Mr. Harry Short  
Advantage Engineering, Inc.  
525 E. Stop 18 Road  
Greenwood, IN 46142

Dear Mr. Short:

This letter is to certify that the amounts of volatile organic compounds shown on Perfection's Product Data Sheets and MSDS, which cover our product called Aqua Acrylic and also Hydro Prime, are calculated using the following method:

ASTM D 2369-81 with EPA modification 24 from 40CFR 60 Appendix A

It is our understanding that this is the method used in  
326 IAC 8-2-9 (d), State of Indiana.

If we may be of any further assistance in this matter, please do not hesitate to call immediately.

Sincerely,

Bruce T. Gable  
Industrial Coatings Representative

039409bg/pl

State of: INDIANA

ss: MARION

County of: JOHNSON

Subscribed and sworn to before me this 22nd day of March,  
1994.

  
Phyllis E. Lane, Notary Public

My commission expires 4-6-97.





# PRODUCT DATA SHEET

## AQUA ACRYLIC

### DESCRIPTION:

A water-borne, pure acrylic interior/exterior industrial and maintenance coating with excellent water and good chemical resistance. Dries quickly producing an extremely durable film that equals or exceeds most fast dry alkyd base enamels.

### USES:

This product may be used on almost any prepared surface of wood, metal or concrete. For use on unusual surfaces, consult your Perfection factory representative.

### APPLICATION:

Aqua Acrylic is designed for spray application. (Airless tip size .011 - .013). It may be brushed and rolled if necessary, but is not recommended for large areas.

This product performs extremely well in isolated electrostatic systems.

### SURFACE PREPARATION AND LIMITATIONS:

Any surface to which this product is applied must be clean, basically dry and free from contaminants such as grease, oil or dirt. Previously enameled or glossy surfaces must be sanded or thoroughly dulled with a liquid sanding aid. For maximum flow and leveling, apply at surface temperatures between 60° - 80° F. Do not apply if surface temperature is below 50° F.

### APPEARANCE:

Gloss (80° reading on 60° gloss meter). Some custom tinted colors will produce a lower gloss. Satin (15° reading on 60° gloss meter). Final gloss may fluctuate depending on how well the surface is sealed.

### COVERAGE:

Recommended dry film thickness is 1 to 1.5 mils. This requires a wet film application of approximately 4.5 mils or 350 to 375 sq. ft. per gallon.

### DRY TIMES:

Brush and roll application: To touch - 30 minutes. To recoat - 1 hour. To sand - 2 hours. Through dry - 2- 4 hours.

Spray application: To touch - 10 minutes. To handle - 15-30 minutes. To recoat - 10 - 20 minutes. To sand - 1 hour. Through dry - 2- 4 hours. Complete cure - 3 days.

Important: These times are based on surface temperatures between 60° and 80°F at a relative humidity of 45% - 60%. As with all water base products, lower surface temperatures not only slow dry times but impede flow and leveling.

### AQUA ACRYLIC (Continued)

#### TECHNICAL DATA:

Solids by weight - 42%  $\pm$  2.  
Solids by volume - 31%  $\pm$  2.  
Resin solids by weight - 21% (100% acrylic).  
Flash Point - Non-combustible.  
V.O.C. - 2.45 lbs. per gallon or 294 grams per liter.  
Heat resistant to 250°F.  
Pencil hardness after 24 hours is HB. After 3 days, H.

#### PRIMER RECOMMENDED:

Self-priming over wood and clean, rust-free metal and cast iron. If a water reducible primer is needed, use One Hour Sealer for wood and rust inhibiting Hydro Primer for metal.

#### COLORS AVAILABLE:

Full range, plus custom matched metallics.

#### THINNERS & CLEAN-UP:

This product is formulated ready to spray. If thinning is necessary, use only small amounts of tap water. Maximum 4 oz. per gallon. For brush and roll, clean tools with warm, soapy water. Clean spray equipment with tap water.

#### CONTAINER SIZES:

5 gallons, 1 gallon.

PERFECTION MAKES NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THIS PRODUCT. Customer only remedy for any defect in this product is recovery of (1) the original cost including freight, plus (2) the unrecoverable value of the product to which the defective coating is applied. As a condition of any recovery, customer must take all reasonable steps to minimize their costs and losses as soon as it is discovered that the product is defective. IN NO EVENT SHALL PERFECTION PAINT DIVISION, LILLY INDUSTRIES, INC., BE LIABLE TO CUSTOMER FOR ANY OTHER CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM OR IN CONNECTION WITH THIS PRODUCT.



# PRODUCT DATA SHEET

## HYDRO PRIME

### DESCRIPTION:

A rust inhibitive water-borne acrylic primer for use on interior or exterior surfaces. Hydro Prime can be used on steel, galvanized, aluminum and ceramic surfaces. It provides excellent adhesion to most surfaces and prepares the substrate for the finish coat. Hydro Prime is an excellent intermediate coat between old painted surfaces and new coatings that will normally lift old paint. It can be coated with solvent-based as well as water-borne products.

### APPLICATION:

Conventional, airless or isolated electrostatic spray. This product has limited brush and roll characteristics, but is acceptable for touch-up of spray painted parts.

### SURFACE PREPARATION AND TEMPERATURE LIMITATIONS:

Any surface to which this product is applied must be clean, basically dry and free from contaminants such as oil or dirt.

For maximum flow and leveling apply at surface temperatures between 60°-80°F. Do not apply if surface temperature is below 50°F. Hydro Prime is not recommended for submersion.

### APPEARANCE:

Flat. 5°-10° reading on 60° gloss meter.

### COVERAGE:

Recommended dry film thickness is 1 to 1.5 mils. This requires a wet film application of approximately 4 mils or 400 sq. ft. per gallon.

### DRY TIMES:

Spray application:

To touch - 15 minutes.

To handle - 30 minutes.

To sand or top coat - 1 hour.

Important: These times are based on surface temperatures between 60° and 80°F at a relative humidity of between 45% and 60%. Initial dry times will fluctuate with temperature and humidity changes.

## HYDRO PRIME (Continued)

### TECHNICAL DATA:

Solids by weight -  $41\% \pm 2$ .  
Solids by volume -  $29\% \pm 2$ .  
Resins solids by weight - 20% (100% acrylic).  
Flash Point - None.  
VOC - 1.9 lbs. per gallon.  
Viscosity - 35 seconds, Zahn #3.  
Weight per gallon -  $9.70 \pm 2\%$ .  
Pencil hardness at full cure - H.

### PERFORMANCE TESTS:

Conducted on fully cured Hydro Prime film:  
ASTM D3359 - Cross-hatch adhesion.  
Pass.  
ASTM D522 - Flexibility, 1/4" mandrel bend. Pass.

### COLORS AVAILABLE:

Light gray.

### THINNERS & CLEAN-UP:

This product is formulated and ready to spray. If thinning is necessary use up to 4 oz. per gallon of tap water. Clean spray equipment thoroughly and immediately after use with tap water. A film which has been allowed to dry even a short time may require use of solvent.

### CONTAINER SIZES:

5 gallon, 1 gallon.

PERFECTION MAKES NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THIS PRODUCT. Customer's only remedy for any defect in this product is recovery of (1) the original cost including freight, plus (2) the unrecoverable value of the product to which the defective coating is applied. As a condition of any recovery, customer must take all reasonable steps to minimize their costs and losses as soon as it is discovered that the product is defective. IN NO EVENT SHALL PERFECTION PAINT DIVISION, LILLY INDUSTRIES, INC. BE LIABLE TO CUSTOMER FOR ANY OTHER CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM OR IN CONNECTION WITH THIS PRODUCT.

**Lilly Industries, Inc.**

March 22, 1994

Mr. Harry Short  
Advantage Engineering, Inc.  
525 E. Stop 18 Road  
Greenwood, IN 46142

Dear Mr. Short:

This letter is to certify that the amounts of volatile organic compounds shown on Perfection's Product Data Sheets and MSDS, which cover our product called Aqua Acrylic and also Hydro Prime, are calculated using the following method:

ASTM D 2369-81 with EPA modification 24 from 40CFR 60 Appendix A

It is our understanding that this is the method used in  
326 IAC 8-2-9 (d), State of Indiana.

If we may be of any further assistance in this matter, please do not hesitate to call immediately.

Sincerely,

Bruce T. Gable  
Industrial Coatings Representative

039409bg/pl

State of: INDIANA

ss: MARION

County of: JOHNSON

Subscribed and sworn to before me this 22nd day of March,  
1994.

  
Phyllis E. Lane, Notary PublicMy commission expires 4-6-97.

**FAX**

MESSAGE AND COVER PAGE

Date 3/24/94 Time \_\_\_\_\_ # Pages 2 (including this page)

PLEASE DELIVER TO:

FROM:

PENNY FLICKINGERHARRY SHORTIDEM - A.R. MANAGEMENT

ADVANTAGE ENGINEERING INC.  
525 E. STOP 18 RD. BOX 407  
GREENWOOD, IN 46142  
PHONE 317 887-0729 FAX 317 881-1277

233 - 5967☐ In reply to your request☒ For your information☐ Reply requested

MESSAGE

CALCULATION VERIFICATION FOR VOC COMPLIANCEPLEASE LET ME KNOW what ELSE WE NEEDThanksHarry

APR 08 '94 10:05AM

## IDENTIFICATION OF POTENTIALLY AFFECTED PERSONS

Please read the attached letter from the Commissioner, and list here any persons whom you have reason to believe have a substantial or proprietary interest in this matter, or could otherwise be considered to be potentially affected under the law. Failure to notify a person who is later determined to be potentially affected could result in voiding our decision on procedural grounds. To ensure conformance with the Administrative Adjudication Act and to avoid reversal of a decision, please list all such parties. Use additional sheets if necessary.

NAME \_\_\_\_\_

NAME \_\_\_\_\_

STREET \_\_\_\_\_

STREET \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

NAME \_\_\_\_\_

NAME \_\_\_\_\_

STREET \_\_\_\_\_

STREET \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

NAME \_\_\_\_\_

NAME \_\_\_\_\_

STREET \_\_\_\_\_

STREET \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

CITY, STATE, ZIP \_\_\_\_\_

## CHECK APPROPRIATE BOX

- ☒ Construction Permit  
☐ Operation Permit  
☐ Variance  
☐ Other \_\_\_\_\_

## ADDRESS OF SITE:

Street \_\_\_\_\_

City \_\_\_\_\_

Please complete this form by signing the following statement:

I certify that to the best of my knowledge I have listed all potentially affected parties, as defined by IC 4-21.9, known to me. If none are listed it signifies that no such parties are known.

SIGNATURE *Harry R. Short*PRINTED NAME HARRY R. SHORTCOMPANY ADVANTAGE ENGINEERINGDATE 4/8/94



**Lilly Industries, Inc.**

March 22, 1994

Mr. Harry Short  
Advantage Engineering, Inc.  
525 E. Stop 18 Road  
Greenwood, IN 46142

Dear Mr. Short:

This letter is to certify that the amounts of volatile organic compounds shown on Perfection's Product Data Sheets and MSDS, which cover our product called Aqua Acrylic and also Hydro Prime, are calculated using the following method:

ASTM D 2369-81 with EPA modification 24 from 40CFR 60 Appendix A

It is our understanding that this is the method used in  
326 IAC 8-2-9 (d), State of Indiana.

If we may be of any further assistance in this matter, please do not hesitate to call immediately.

Sincerely,

Bruce T. Gable  
Industrial Coatings Representative

039409bg/pl

State of: INDIANA

ss: MARION

County of: JOHNSON

Subscribed and sworn to before me this 22nd day of March,  
1994.

  
Phyllis E. Lane, Notary Public

My commission expires 4-6-97.





# PRODUCT DATA SHEET

## AQUA ACRYLIC

### DESCRIPTION:

A water-borne, pure acrylic interior/exterior industrial and maintenance coating with excellent water and good chemical resistance. Dries quickly producing an extremely durable film that equals or exceeds most fast dry alkyd base enamels.

### USES:

This product may be used on almost any prepared surface of wood, metal or concrete. For use on unusual surfaces, consult your Perfection factory representative.

### APPLICATION:

Aqua Acrylic is designed for spray application. (Airless tip size .011 - .013). It may be brushed and rolled if necessary, but is not recommended for large areas.

This product performs extremely well in isolated electrostatic systems.

### SURFACE PREPARATION AND LIMITATIONS:

Any surface to which this product is applied must be clean, basically dry and free from contaminants such as grease, oil or dirt. Previously enameled or glossy surfaces must be sanded or thoroughly dulled with a liquid sanding aid. For maximum flow and leveling, apply at surface temperatures between 60° - 80° F. Do not apply if surface temperature is below 50° F.

### APPEARANCE:

Gloss (80° reading on 60° gloss meter). Some custom tinted colors will produce a lower gloss. Satin (15° reading on 60° gloss meter). Final gloss may fluctuate depending on how well the surface is sealed.

### COVERAGE:

Recommended dry film thickness is 1 to 1.5 mils. This requires a wet film application of approximately 4.5 mils or 350 to 375 sq. ft. per gallon.

### DRY TIMES:

Brush and roll application: To touch - 30 minutes. To recoat - 1 hour. To sand - 2 hours. Through dry - 2- 4 hours.

Spray application: To touch - 10 minutes. To handle - 15-30 minutes. To recoat - 10 - 20 minutes. To sand - 1 hour. Through dry - 2- 4 hours. Complete cure - 3 days.

Important: These times are based on surface temperatures between 60° and 80°F at a relative humidity of 45% - 60%. As with all water base products, lower surface temperatures not only slow dry times but impede flow and leveling.

AQUA ACRYLIC (Continued)

TECHNICAL DATA:

Solids by weight - 42%  $\pm$  2.  
Solids by volume - 31%  $\pm$  2.  
Resin solids by weight - 21% (100% acrylic).  
Flash Point - Non-combustible.  
V.O.C. - 2.45 lbs. per gallon or 294 grams per liter.  
Heat resistant to 250°F.  
Pencil hardness after 24 hours is HB. After 3 days, H.

PRIMER RECOMMENDED:

Self-priming over wood and clean, rust-free metal and cast iron. If a water reducible primer is needed, use One Hour Sealer for wood and rust inhibiting Hydro Primer for metal.

COLORS AVAILABLE:

Full range, plus custom matched metallics.

THINNERS & CLEAN-UP:

This product is formulated ready to spray. If thinning is necessary, use only small amounts of tap water. Maximum 4 oz. per gallon. For brush and roll, clean tools with warm, soapy water. Clean spray equipment with tap water.

CONTAINER SIZES:

5 gallons, 1 gallon.

PERFECTION MAKES NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THIS PRODUCT. Customer only remedy for any defect in this product is recovery of (1) the original cost including freight, plus (2) the unrecoverable value of the product to which the defective coating is applied. As a condition of any recovery, customer must take all reasonable steps to minimize their costs and losses as soon as it is discovered that the product is defective. IN NO EVENT SHALL PERFECTION PAINT DIVISION, LILLY INDUSTRIES, INC., BE LIABLE TO CUSTOMER FOR ANY OTHER CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM OR IN CONNECTION WITH THIS PRODUCT.



# PRODUCT DATA SHEET

## HYDRO PRIME

### DESCRIPTION:

A rust inhibitive water-borne acrylic primer for use on interior or exterior surfaces. Hydro Prime can be used on steel, galvanized, aluminum and ceramic surfaces. It provides excellent adhesion to most surfaces and prepares the substrate for the finish coat. Hydro Prime is an excellent intermediate coat between old painted surfaces and new coatings that will normally lift old paint. It can be coated with solvent-based as well as water-borne products.

### APPLICATION:

Conventional, airless or isolated electrostatic spray. This product has limited brush and roll characteristics, but is acceptable for touch-up of spray painted parts.

### SURFACE PREPARATION AND TEMPERATURE LIMITATIONS:

Any surface to which this product is applied must be clean, basically dry and free from contaminants such as oil or dirt.

For maximum flow and leveling apply at surface temperatures between 60°-80°F. Do not apply if surface temperature is below 50°F. Hydro Prime is not recommended for submersion.

### APPEARANCE:

Flat. 5°-10° reading on 60° gloss meter.

### COVERAGE:

Recommended dry film thickness is 1 to 1.5 mils. This requires a wet film application of approximately 4 mils or 400 sq. ft. per gallon.

### DRY TIMES:

Spray application:

To touch - 15 minutes.

To handle - 30 minutes.

To sand or top coat - 1 hour.

Important: These times are based on surface temperatures between 60° and 80°F at a relative humidity of between 45% and 60%. Initial dry times will fluctuate with temperature and humidity changes.

## HYDRO PRIME (Continued)

### TECHNICAL DATA:

Solids by weight -  $41\% \pm 2$ .  
Solids by volume -  $29\% \pm 2$ .  
Resins solids by weight - 20% (100% acrylic).  
Flash Point - None.  
VOC - 1.9 lbs. per gallon.  
Viscosity - 35 seconds, Zahn #3.  
Weight per gallon -  $9.70 \pm 2\%$ .  
Pencil hardness at full cure - H.

### PERFORMANCE TESTS:

Conducted on fully cured Hydro Prime film:  
ASTM D3359 - Cross-hatch adhesion.  
Pass.  
ASTM D522 - Flexibility, 1/4" mandrel bend. Pass.

### COLORS AVAILABLE:

Light gray.

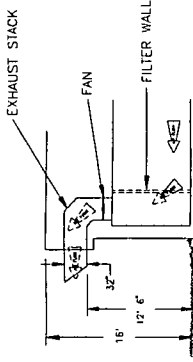
### THINNERS & CLEAN-UP:

This product is formulated and ready to spray. If thinning is necessary use up to 4 oz. per gallon of tap water. Clean spray equipment thoroughly and immediately after use with tap water. A film which has been allowed to dry even a short time may require use of solvent.

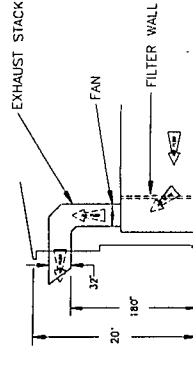
### CONTAINER SIZES:

5 gallon, 1 gallon.

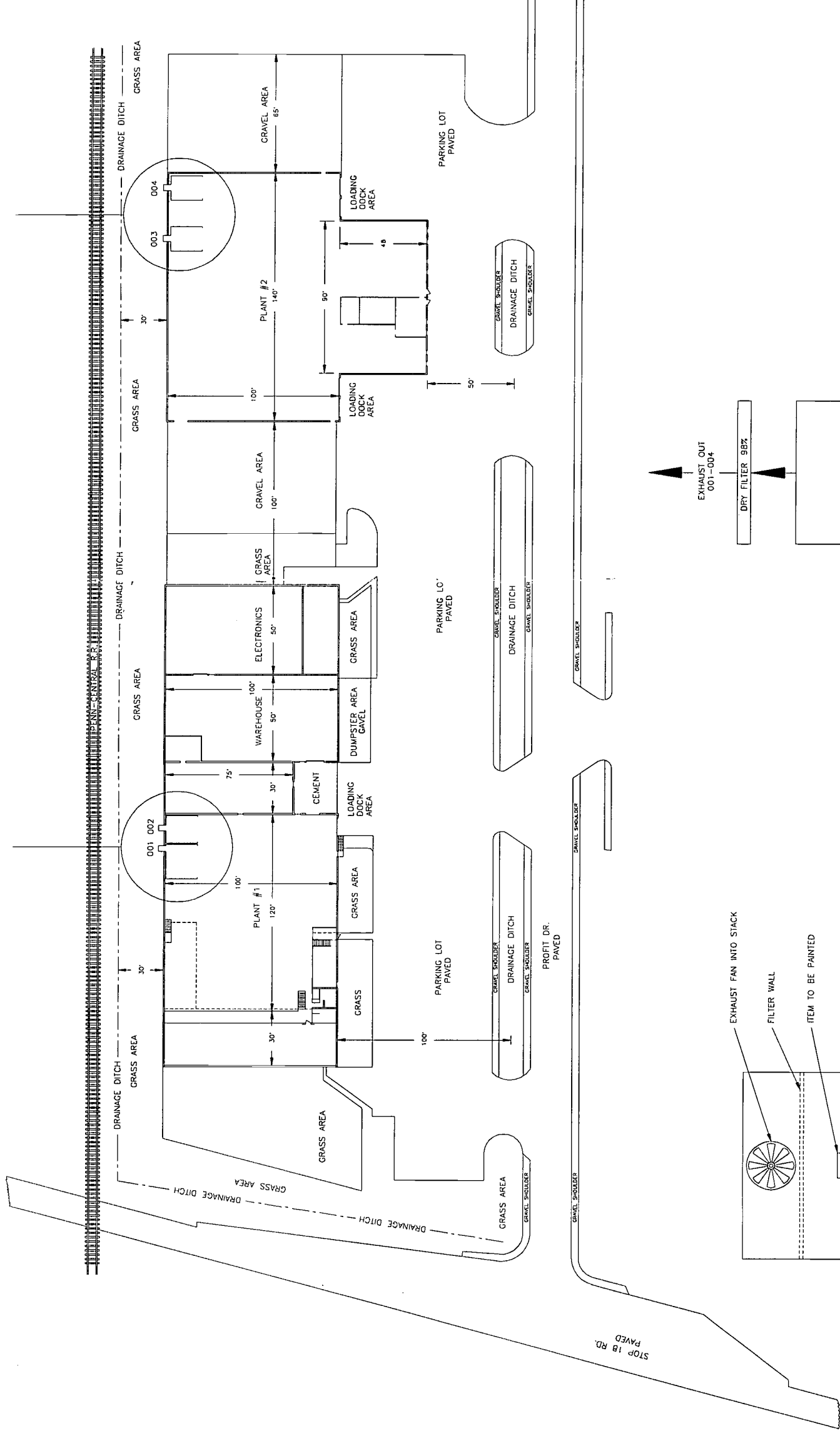
PERFECTION MAKES NO IMPLIED WARRANTIES OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE WITH RESPECT TO THIS PRODUCT. Customer's only remedy for any defect in this product is recovery of (1) the original cost including freight, plus (2) the unrecoverable value of the product to which the defective coating is applied. As a condition of any recovery, customer must take all reasonable steps to minimize their costs and losses as soon as it is discovered that the product is defective. IN NO EVENT SHALL PERFECTION PAINT DIVISION, LILLY INDUSTRIES, INC. BE LIABLE TO CUSTOMER FOR ANY OTHER CONSEQUENTIAL OR INCIDENTAL DAMAGES ARISING FROM OR IN CONNECTION WITH THIS PRODUCT.



EMISSION POINTS 001 & 002  
PAINT BOOTH  
ELEVATION VIEW  
(ENLARGED/NOT TO SCALE)



EMISSION POINTS 003 & 004  
PAINT BOOTH  
ELEVATION VIEW  
(ENLARGED/NOT TO SCALE)





DVANTAGE

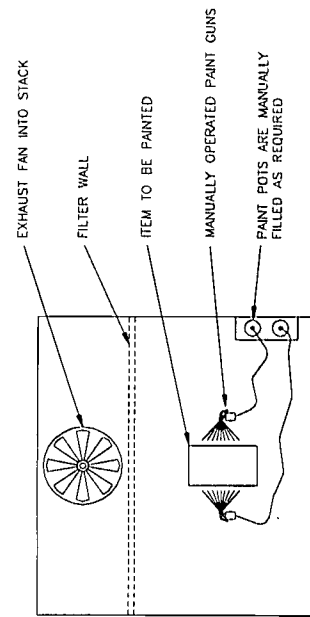
Industrial Heat Transfer Equipment

ADVANTAGE ENGINEERING INCORPORATED

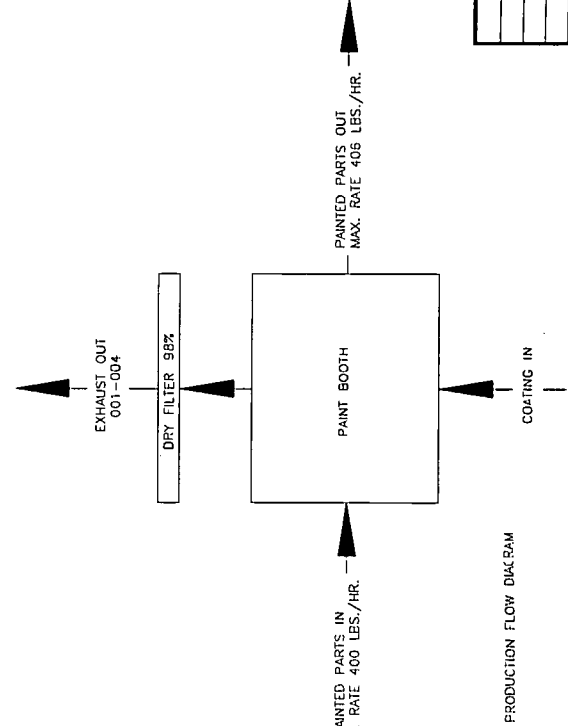
222 E. 1ST ST. S.O. BOX 407 GREENWOOD, INDIANA 46142

PHONE: 317 827-0725 FAX: 317 827-1277

PLANT LAYOUT			
OVERHEAD VIEW			
PAINT BOOTH STACK LOCATION			
DATE	DESIGNED	DRAWN	CHECKED
9/23/93		C. CLOPP	
SCALE	1/32" = 1'-0"	DRAWING NO.	2812



OVERHEAD PAINT BOOTH DETAIL (TYPICAL)  
(ENLARGED/NOT TO SCALE)



PRODUCTION FLOW DIAGRAM

REV.	DESCRIPTION	DATE	INITIAL



STATE OF INDIANA  
DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT

FORM Y4  
7-29-91

Air Toxic Pollutants

	CAS NUMBER	CHEMICAL NAME	EMISSION POINTS	MAXIMUM EMISSION RATE (POUNDS/HRI)
X				
	00088062	2,4,6-Trichlorophenol		
	00121448	Triethylamine		
	01582098	Trifluralin		
	00540841	2,2,4-Trimethylpentane		
	00108054	Vinyl acetate		
	00593602	Vinyl bromide		
	00075014	Vinyl Chloride		
	00075354	Vinylidene chloride (1,1-Dichloroethylene)		
XX	01330207	Xylenes (isomers and mixture)	Booth	12.5
	00095476	o-Xylenes		
	00108383	m-Xylenes		
	00106423	p-Xylenes		
		Antimony Compounds		
		Arsenic Compounds (inorganic including arsine)		
		Beryllium Compounds		
		Cadmium Compounds		
		Chromium Compounds		
		Cobalt Compounds		
		Coke Oven Emissions		
		Cyanide Compounds <sup>1</sup>		
XX		Glycol ethers <sup>2</sup>	Booth	2.0
		Lead Compounds		
		Manganese Compounds		
		Mercury Compounds		
		Mineral Fibers <sup>3</sup>		
		Nickel Compounds		
		Polycyclic Organic Matter <sup>4</sup>		
		Radionuclides (Including Radon) <sup>5</sup>		
		Selenium Compounds		
		NONE OF THE COMPOUNDS LISTED ON FORMS Y1 THROUGH Y4 WILL BE EMITTED FROM THE EQUIPMENT LISTED IN THIS APPLICATION.		

NOTE: FOR ALL LISTINGS ABOVE WHICH CONTAIN THE WORD "COMPOUND" AND FOR GLYCOL ETHERS THESE LISTINGS ARE DEFINED AS INCLUDING ANY UNIQUE CHEMICAL SUBSTANCE THAT CONTAINS THE NAMED CHEMICAL AS PART OF THAT CHEMICAL'S INFRASTRUCTURE.

- 1 X'CN where X=H' or any other group where a formal dissociation may occur. For example KCN or Ca(CN)<sub>2</sub>
- 2 includes mono- and di- ethers of ethylene glycol, diethylene glycol, and triethylene glycol R-(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>-OR' where: n= 1, 2, or 3; R= alkyl or aryl groups; and R'= R, H, or groups which, when removed, yield glycol ethers with the structure R-(OCH<sub>2</sub>CH<sub>2</sub>)<sub>n</sub>-OH. Polymers are excluded from the glycol category.
- 3 includes mineral fiber emissions from facilities manufacturing or processing glass, rock, or slag fibers (or other mineral derived fibers) of average diameter 1 micrometer or less.
- 4 includes organic compounds with more than one benzene ring, and which have a boiling point greater than or equal to 100 degrees Celsius.
- 5 a type of atom which spontaneously undergoes radioactive decay.

DO NOT SEND ENTIRE MATERIAL SAFETY DATA SHEETS (MSDS). The required sections are: Section I (Product Identification), Section II (Composition Information), and Section III (Physical Property Information).