

**CONSTRUCTION PERMIT  
OFFICE OF AIR MANAGEMENT**

**W. G. Hayden/ASP  
54432 N. Adams St.  
Elkhart, Indiana 46514**

is hereby authorized to construct

a modification to the existing permitted wood cabinet manufacturing operation, consisting of either a steel, plastic, or fiberglass finishing line. The facilities included in this modification are as follows:

- (1) one (1) miscellaneous parts finishing line, consisting of the following equipment:
  - (a) six (6) MIG welders;
  - (b) seven (7) HVLP spray guns;
  - (c) ten (10) hand grinders;
  - (d) five (5) hand drills;
  - (e) two (2) band saws;
  - (f) seven (7) paint pumps;
  - (g) one (1) table saw exhausting through one (1) Portable dust collector;

finishing either a maximum of 1500 pounds per hour of steel parts, or a maximum of 200 pounds per hour of plastic parts, or a maximum of 600 pounds per hour of fiberglass parts; and exhausting through seven (7) stacks identified as SV-16 through SV-22 respectively

This permit is issued to the above mentioned company (herein known as the Permittee) under the provisions of 326 IAC 2-1 and 40 CFR 52.780, with conditions listed on the attached pages.

|   |                |
|---|----------------|
| Construction Permit No.: CP-039-9754-00056                              |                |
| Issued by:<br>Paul Dubenetzky, Branch Chief<br>Office of Air Management | Issuance Date: |

## Construction Conditions

### General Construction Conditions

1. That the data and information supplied with the application shall be considered part of this permit. Prior to any proposed change in construction which may affect allowable emissions, the change must be approved by the Office of Air Management (OAM).
2. That this permit to construct does not relieve the permittee of the responsibility to comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder, as well as other applicable local, state, and federal requirements.

### Effective Date of the Permit

3. That pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.
4. That pursuant to 326 IAC 2-1-9(b)(Revocation of Permits), the Commissioner may revoke this permit if construction is not commenced within eighteen (18) months after receipt of this approval or if construction is suspended for a continuous period of one (1) year or more.
5. That notwithstanding Construction Condition No. 6, all requirements and conditions of this construction permit shall remain in effect unless modified in a manner consistent with procedures established for modifications of construction permits pursuant to 326 IAC 2 (Permit Review Rules).

### First Time Operation Permit

6. That this document shall also become a first-time operation permit pursuant to 326 IAC 2-1-4 (Operating Permits) when, prior to start of operation, the following requirements are met:
  - (a) The attached affidavit of construction shall be submitted to the Office of Air Management (OAM), Permit Administration & Development Section, verifying that the facilities were constructed as proposed in the application. The facilities covered in the Construction Permit may begin operating on the date the Affidavit of Construction is postmarked or hand delivered to IDEM.
  - (b) If construction is completed in phases; i.e., the entire construction is not done continuously, a separate affidavit must be submitted for each phase of construction. Any permit conditions associated with operation start up dates such as stack testing for New Source Performance Standards (NSPS) shall be applicable to each individual phase.
  - (c) Permittee shall receive an Operation Permit Validation Letter from the Chief of the Permit Administration & Development Section and attach it to this document.
  - (d) The operation permit will be subject to annual operating permit fees pursuant to 326 IAC 2-7-19 (Fees)

- (e) The Permittee has submitted their Part 70 permit application (T-039-6092-00056) on June 7, 1996 for the existing source. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.
7. That when the facility is constructed and placed into operation the following operation conditions shall be met:

### **Operation Conditions**

#### General Operation Conditions

1. That the data and information supplied in the application shall be considered part of this permit. Prior to any change in the operation which may result in an increase in allowable emissions exceeding those specified in 326 IAC 2-1-1 (Construction and Operating Permit Requirements), the change must be approved by the Office of Air Management (OAM).
2. That the permittee shall comply with the provisions of the Indiana Environmental Management Law (IC 13-11 through 13-20; 13-22 through 13-25; and 13-30), the Air Pollution Control Law (IC 13-17) and the rules promulgated thereunder.

#### Preventive Maintenance Plan

3. That pursuant to 326 IAC 1-6-3 (Preventive Maintenance Plans), the Permittee shall prepare and maintain a preventive maintenance plan, including the following information:
- (a) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices.
- (b) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions.
- (c) Identification of the replacement parts which will be maintained in inventory for quick replacement.

The preventive maintenance plan shall be submitted to IDEM, OAM upon request and shall be subject to review and approval.

#### Transfer of Permit

4. That pursuant to 326 IAC 2-1-6 (Transfer of Permits):
- (a) In the event that ownership of this cabinet manufacturing operation is changed, the Permittee shall notify OAM, Permit Branch, within thirty (30) days of the change. Notification shall include the date or proposed date of said change.
- (b) The written notification shall be sufficient to transfer the permit from the current owner to the new owner.
- (c) The OAM shall reserve the right to issue a new permit.

Permit Revocation

5. That pursuant to 326 IAC 2-1-9(a)(Revocation of Permits), this permit to construct and operate may be revoked for any of the following causes:
- (a) Violation of any conditions of this permit.
  - (b) Failure to disclose all the relevant facts, or misrepresentation in obtaining this permit.
  - (c) Changes in regulatory requirements that mandate either a temporary or permanent reduction of discharge of contaminants. However, the amendment of appropriate sections of this permit shall not require revocation of this permit.
  - (d) Noncompliance with orders issued pursuant to 326 IAC 1-5 (Episode Alert Levels) to reduce emissions during an air pollution episode.
  - (e) For any cause which establishes in the judgment of IDEM, the fact that continuance of this permit is not consistent with purposes of 326 IAC 2-1 (Permit Review Rules).

Availability of Permit

6. That pursuant to 326 IAC 2-1-3(l), the Permittee shall maintain the applicable permit on the premises of this source and shall make this permit available for inspection by the IDEM or other public official having jurisdiction.

Malfunction Condition

7. That pursuant to 326 IAC 1-6-2 (Records; Notice of Malfunction):
- (a) A record of all malfunctions, including startups or shutdowns of any facility or emission control equipment, which result in violations of applicable air pollution control regulations or applicable emission limitations shall be kept and retained for a period of three (3) years and shall be made available to the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM) or appointed representative upon request.
  - (b) When a malfunction of any facility or emission control equipment occurs which lasts more than one (1) hour, said condition shall be reported to OAM, using the Malfunction Report Forms (2 pages). Notification shall be made by telephone or facsimile, as soon as practicable, but in no event later than four (4) daytime business hours after the beginning of said occurrence.
  - (c) Failure to report a malfunction of any emission control equipment shall constitute a violation of 326 IAC 1-6, and any other applicable rules. Information of the scope and expected duration of the malfunction shall be provided, including the items specified in 326 IAC 1-6-2(a)(1) through (6).
  - (d) Malfunction is defined as any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. [326 IAC 1-2-39]

BACT Synthetic Minor Limitation

8. That the input VOC including clean up solvent, when coating plastic or fiberglass surfaces, minus the VOC solvent shipped out, delivered to the applicators of the finishing line spray-booth shall be limited to less than 25 tons per year, rolled on a monthly basis. Therefore, the Best Available control Technology (BACT) requirements of 326 IAC 8-1-6 will not apply.

During the first 12 months of operation, the input raw material usage shall be limited such that the total usage divided by the accumulated months of operation shall not exceed the limit specified.

Compliance with this regulation shall also render the requirements 326 IAC 2-2 (Prevention of Significant Deterioration) not applicable.

PSD Minor Source Limit

9. That the input VOC including clean up solvent, when coating metal surfaces, minus the VOC solvent shipped out, delivered to the applicators of the finishing line spray-booth shall be limited to less than 39 tons per year, rolled on a monthly basis. Therefore, the Prevention of Significant Deterioration (PSD) rules, 326 IAC 2-2 and 40 CFR 52.21, will not apply.

During the first 12 months of operation, the input raw material usage shall be limited such that the total usage divided by the accumulated months of operation shall not exceed the limit specified.

Annual Emission Reporting

10. That pursuant to 326 IAC 2-6 (Emission Reporting), the Permittee must annually submit an emission statement for the source. This statement must be received by April 15 of each year and must comply with the minimum requirements specified in 326 IAC 2-6-4. The annual statement must be submitted to:

Indiana Department of Environmental Management  
Technical Support and Modeling Section, Office of Air Management  
100 North Senate Avenue, P. O. Box 6015  
Indianapolis, Indiana 46206-6015

The annual emission statement covers the twelve (12) consecutive month time period starting December 1 and ending November 30.

Opacity Limitations

11. That pursuant to 326 IAC 5-1-2 (Visible Emission Limitations) except as provided in 326 IAC 5-1-3 (Temporary Exemptions), the visible emissions shall meet the following:
- (a) visible emissions shall not exceed an average of 40% opacity in 24 consecutive readings.
  - (b) visible emissions shall not exceed 60% opacity for more than a cumulative total of 15 minutes (60 readings) in a 6-hour period.

Fugitive Dust Emissions

12. That pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), the permittee shall be in violation of 326 IAC 6-4 (Fugitive Dust Emissions) if any of the criteria specified in 326 IAC 6-4-2(1) through (4) are violated. Observations of visible emissions crossing the property line of the source at or near ground level must be made by a qualified representative of IDEM. [326 IAC 6-4-5(c)].

Particulate Matter Limitations

13. That pursuant to 326 IAC 6-3 (Process Operations):

(1) The following shall apply to the paint spray booths in the Finishing Rooms:

(a) The dry filters for particulate matter overspray control shall be in operation at all times when the Finishing lines in the Finishing Rooms are in operation.

(b) The Finishing lines in the Finishing Room shall comply with 326 IAC 6-3-2(c) using the following equation:

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

(c) Daily inspections shall be performed to verify the placement, integrity and particulate loading of the filters.

(d) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

(2) The particulate matter emissions from the welding operation shall be limited to 0.88 pounds per hour based on a process weight rate of .1 tons per hour and the following equation:

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

Volatile Organic Compound (VOC) Limitations

14. That pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), when coating metal surfaces, the volatile organic compound (VOC) content of coatings applied to the metal product shall be limited to 3.5 pounds of VOC per gallon of coating less water delivered to a coating applicator 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)).

Emission Minimization

15. That pursuant to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), when coating metal surfaces, solvent sprayed from the application equipment during clean up 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.

16. Volatile Organic Compounds (VOC)

Compliance with VOC content limitation contained in Operation Condition 14 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a)(7), using formulation data supplied by the coating manufacturer. IDEM, OAM reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedure specified in 326 IAC 8-1-4.

Open Burning

17. That the permittee shall not open burn any material except as provided in 326 IAC 4-1-3, 326 IAC 4-1-4 or 326 IAC 4-1-6.

Reporting Requirements

18. That a log of information necessary to document compliance with operation permit condition no/s. 8 and 9 shall be maintained. These records shall be kept for at least the past 36 month period and made available upon request to the Office of Air Management (OAM).

- (a) A quarterly summary shall be submitted to:

Indiana Department of Environmental Management  
Compliance Data Section, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within thirty (30) calendar days after the end of the quarter being reported in the format attached. These reports shall include total VOC usage in tons per month. These records shall include the coating, thinner and clean up solvent usage, material safety data sheet (MSDS) and the date of use.

- (b) Unless otherwise specified in this permit, any notice, report, or other submissions required by this permit shall be timely if:

- (i) Postmarked on or before the date it is due; or  
(ii) Delivered by any other method if it is received and stamped by IDEM, OAM, on or before the date it is due.

- (c) All instances of deviations from any requirements of this permit must be clearly identified in such reports.

- (d) Any corrective actions taken as a result of an exceedance of a limit, an excursion from the parametric values, or a malfunction that may have caused excess emissions must be clearly identified in such reports.

- (e) The first report shall cover the period commencing the postmarked submission date of the Affidavit of Construction.

Emergency Reduction Plans

19. Pursuant to 326 IAC 1-5-2 (Emergency Reduction Plans; Submission):

- (a) The Permittee shall prepare written emergency reduction plans (ERPs) consistent with safe operating procedures.

- (b) These ERPs shall be submitted for approval to:

Indiana Department of Environmental Management  
Compliance Branch, Office of Air Management  
100 North Senate Avenue, P.O. Box 6015  
Indianapolis, Indiana 46206-6015

within 180 calendar days from the issuance date of this permit.

- (c) If the ERP is disapproved by IDEM, OAM, the Permittee shall have an additional thirty (30) days to resolve the differences and submit an approvable ERP.
  - (d) These ERPs shall state those actions that will be taken, when each episode level is declared, to reduce or eliminate emissions of the appropriate air pollutants.
  - (e) Said ERPs shall also identify the sources of air pollutants, the approximate amount of reduction of the pollutants, and a brief description of the manner in which the reduction will be achieved.
  - (f) Upon direct notification by IDEM, OAM, that a specific air pollution episode level is in effect, the Permittee shall immediately put into effect the actions stipulated in the approved ERP for the appropriate level. [326 IAC 1-5-3]
20. Any change or modification which may increase potential emissions of VOC when coating plastic or fiberglass surfaces to 25 tons per twelve (12) consecutive month period, or, any change or modification which may increase potential emissions of VOC when coating metal surfaces to 40 tons per twelve (12) consecutive month period, from the equipment covered in this permit, must be approved by the Office of Air Management (OAM) before such change may occur.

**Indiana Department of Environmental Management  
Office of Air Management  
Compliance Data Section**

**Quarterly Report**

Company Name: W. G. Hayden/ASP  
Location: 54432 N. Adams St., Elkhart, Indiana 46514  
Permit No.:CP-039-9754-00056  
Source: Plastic or Fiberglass Surface Coating  
Pollutant: VOC  
Limit: 24 tons/ 12 month consecutive period

**Year:** \_\_\_\_\_

| Month   | VOC usage  | VOC usage          | VOC usage      |
|---------|------------|--------------------|----------------|
|         | This Month | Previous 11 Months | 12 Month Total |
| Month 1 |            |                    |                |
| Month 2 |            |                    |                |
| Month 3 |            |                    |                |

Submitted by: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**Indiana Department of Environmental Management  
Office of Air Management  
Compliance Data Section**

**Quarterly Report**

Company Name: W. G. Hayden/ASP  
Location: 54432 N. Adams St., Elkhart, Indiana 46514  
Permit No.:CP-039-9754-00056  
Source: Metal Surface Coating  
Pollutant: VOC  
Limit: 39 tons/ 12 month consecutive period

**Year:** \_\_\_\_\_

| Month   | VOC usage  | VOC usage          | VOC usage      |
|---------|------------|--------------------|----------------|
|         | This Month | Previous 11 Months | 12 Month Total |
| Month 1 |            |                    |                |
| Month 2 |            |                    |                |
| Month 3 |            |                    |                |

Submitted by: \_\_\_\_\_

Title/Position: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

**MALFUNCTION REPORT**

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT  
OFFICE OF AIR MANAGEMENT  
FAX NUMBER - (317) 233-5967**

**This form should only be used to report malfunctions applicable to Rule 326 IAC 1-6  
and to qualify for the exemption under 326 IAC 1-6-4.**

THIS FACILITY MEETS THE APPLICABILITY REQUIREMENTS BECAUSE: IT HAS POTENTIAL TO EMIT 25 LBS/HR PARTICULATES ? \_\_\_\_\_, 100 LBS/HR VOC ? \_\_\_\_\_, 100 LBS/HR SULFUR DIOXIDE ? \_\_\_\_\_ OR 2000 LBS/HR OF ANY OTHER POLLUTANT ? \_\_\_\_\_ EMISSIONS FROM MALFUNCTIONING CONTROL EQUIPMENT OR PROCESS EQUIPMENT CAUSED EMISSIONS IN EXCESS OF APPLICABLE LIMITATION \_\_\_\_\_.

THIS MALFUNCTION RESULTED IN A VIOLATION OF: 326 IAC \_\_\_\_\_ OR, PERMIT CONDITION # \_\_\_\_\_ AND/OR PERMIT LIMIT OF \_\_\_\_\_

THIS INCIDENT MEETS THE DEFINITION OF 'MALFUNCTION' AS LISTED ON THE NEXT PAGE ?    Y    N

THIS MALFUNCTION IS OR WILL BE LONGER THAN THE ONE (1) HOUR REPORTING REQUIREMENT ?    Y    N

COMPANY: W. G. Hayden/ASP PHONE NO. (616) 476-2183

LOCATION: (CITY AND COUNTY) Elkhart, Elkhart County

PERMIT NO. CP-039-9754 AFS PLANT ID: 039-00056 AFS POINT ID: \_\_\_\_\_ INSP: Greg Wingstrom  
CONTROL/PROCESS DEVICE WHICH MALFUNCTIONED AND REASON: \_\_\_\_\_

DATE/TIME MALFUNCTION STARTED: \_\_\_\_/\_\_\_\_/19\_\_\_\_ AM / PM

ESTIMATED HOURS OF OPERATION WITH MALFUNCTION CONDITION:

DATE/TIME CONTROL EQUIPMENT BACK-IN SERVICE \_\_\_\_/\_\_\_\_/19\_\_\_\_ AM/PM

TYPE OF POLLUTANTS EMITTED: TSP, PM-10, SO<sub>2</sub>, VOC, OTHER: \_\_\_\_\_

ESTIMATED AMOUNT OF POLLUTANT EMITTED DURING MALFUNCTION: \_\_\_\_\_

MEASURES TAKEN TO MINIMIZE EMISSIONS:

REASONS WHY FACILITY CANNOT BE SHUTDOWN DURING REPAIRS:

CONTINUED OPERATION REQUIRED TO PROVIDE ESSENTIAL\* SERVICES: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT INJURY TO PERSONS: \_\_\_\_\_

CONTINUED OPERATION NECESSARY TO PREVENT SEVERE DAMAGE TO EQUIPMENT: \_\_\_\_\_

INTERIM CONTROL MEASURES: (IF APPLICABLE) \_\_\_\_\_

MALFUNCTION REPORTED BY:

\_\_\_\_\_  
TITLE: \_\_\_\_\_  
(SIGNATURE IF FAXED)

MALFUNCTION RECORDED BY: \_\_\_\_\_ DATE: \_\_\_\_\_ TIME: \_\_\_\_\_



## Indiana Department of Environmental Management Office of Air Management

### Technical Support Document (TSD) for New Construction and Operation

#### Source Background and Description

Source Name: W.G. Hayden/ASP  
Source Location: 54432 N. Adams St., Elkhart, IN  
County: Elkhart  
Construction Permit No.: CP-039-9754-00056  
SIC Code: 3499, 3089  
Permit Reviewer: Phillip Ritz/EVP

The Office of Air Management (OAM) has reviewed an application from W.G. Hayden/ASP relating to the construction and operation of a modification to the current wood cabinet manufacturing plant, consisting of the following equipment:

- (1) one (1) miscellaneous parts finishing line, consisting of the following equipment:
  - (a) six (6) MIG welders;
  - (b) seven (7) HVLP spray guns;
  - (c) ten (10) hand grinders;
  - (d) five (5) hand drills;
  - (e) two (2) band saws;
  - (f) seven (7) paint pumps;
  - (g) one (1) table saw exhausting through one (1) Portable dust collector;

finishing either a maximum of 1500 pounds per hour of steel parts, or a maximum of 200 pounds per hour of plastic parts, or a maximum of 600 pounds per hour of fiberglass parts; and exhausting through seven (7) stacks identified as SV-16 through SV-22 respectively

### Stack Summary

| Stack ID | Operation      | Height (feet) | Diameter (feet) | Flow Rate (acfm) | Temperature (°F) |
|----------|----------------|---------------|-----------------|------------------|------------------|
| SV-16    | HVLP Spray Gun | 17.5          | 2.66            | 8395             | Ambient          |
| SV-17    | HVLP Spray Gun | 24.5          | 2               | 7000             | Ambient          |
| SV-18    | HVLP Spray Gun | 18.0          | 2               | 7000             | Ambient          |
| SV-19    | HVLP Spray Gun | 17.5          | 2               | 7000             | Ambient          |
| SV-20    | HVLP Spray Gun | 20.5          | 2               | 7000             | Ambient          |
| SV-21    | HVLP Spray Gun | 17.0          | 2               | 7000             | Ambient          |
| SV-22    | HVLP Spray Gun | 17.0          | 2.66            | 7000             | Ambient          |

### Recommendation

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

Information, unless otherwise stated, used in this review was derived from the application and additional information submitted by the applicant.

An application for the purposes of this review was received on May 13, 1998, with additional information received on June 11, 1998 and June 15, 1998.

### Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations (4 pages).

**Total Potential and Allowable Emissions**

Indiana Permit Allowable Emissions Definition (after compliance with applicable rules, based on 8,760 hours of operation per year for the new finishing line at maximum capacity):

| Pollutant                            | Allowable Emissions (tons/year) | Potential Emissions (tons/year) |
|--------------------------------------|---------------------------------|---------------------------------|
| Particulate Matter (PM)              | --                              | 149.77                          |
| Particulate Matter (PM10)            | --                              | 149.77                          |
| Sulfur Dioxide (SO <sub>2</sub> )    | --                              | 0.0                             |
| Volatile Organic Compounds (VOC)     | --                              | 194.39                          |
| Carbon Monoxide (CO)                 | --                              | 0.0                             |
| Nitrogen Oxides (NO <sub>x</sub> )   | --                              | .0.0                            |
| Single Hazardous Air Pollutant (HAP) | --                              | 23.52                           |
| Combination of HAPs                  | --                              | 53.12                           |

- (a) The potential emissions before control are used for the permitting determination.
- (b) Allowable emissions (as defined in the Indiana Rule) of VOC are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.
- (3) Allowable emissions (as defined in the Indiana Rule) of a single hazardous air pollutant (HAP) are greater than 10 tons per year and/or the allowable emissions of any combination of the HAPs are greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, a construction permit is required.

**County Attainment Status**

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NOx) are precursors for the formation of ozone. Therefore, VOC and NOx emissions are considered when evaluating the rule applicability relating to the ozone standards. Elkhart County has been designated as maintenance for ozone. Therefore, VOC and NOx emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Elkhart County has been classified as attainment or unclassifiable for all other criteria pollutants. Therefore, these emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (c) Fugitive Emissions  
 Since this type of operation is not one of the 28 listed source categories under 326 IAC 2-2 and since there are no applicable New Source Performance Standards that were in effect on August 7, 1980, the fugitive PM emissions are not counted toward determination of PSD and Emission Offset applicability.

**Source Status**

Existing Source PSD Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity):

| Pollutant       | Emissions (ton/yr) |
|-----------------|--------------------|
| PM              | 0.3                |
| PM10            | 0.2                |
| SO <sub>2</sub> | --                 |
| VOC             | 354.0              |
| CO              | 0.1                |
| NO <sub>x</sub> | 0.3                |

- (a) This existing source is a major stationary source because at least one regulated attainment pollutant is emitted at a rate of 250 tons per year or greater. This existing source is not one of the 28 listed source categories. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements apply.
- (b) These emissions were based on the Facility Quick Look Report dated June 4, 1998. Note: VOC emissions were based on potential uncontrolled emissions, while all other pollutants were based on estimated emissions.

**Proposed Modification**

PTE from the proposed modification (based on 8,760 hours of operation per year at rated capacity including enforceable emission control and production limits):

| Pollutant             | PM (ton/yr) | PM10 (ton/yr) | SO <sub>2</sub> (ton/yr) | VOC (ton/yr)    | CO (ton/yr) | NO <sub>x</sub> (ton/yr) | HAPS total (ton/yr) |
|-----------------------|-------------|---------------|--------------------------|-----------------|-------------|--------------------------|---------------------|
| Proposed Modification | 3.26        | 3.26          | --                       | *24.00 or 39.00 | --          | --                       | 12.81               |
| PSD Threshold Level   | 25          | 15            | 40                       | 40              | 100         | 25                       | --                  |

This modification to an existing major stationary source is minor because the emissions increase is less than the PSD significant levels. \*When coating plastic or fiberglass surfaces, this source will limit VOC input to 24 tons per year to avoid the requirements of 326 IAC 8-1-6 (New Facilities: General Reduction Requirements). When coating metal surfaces, this source will limit VOC input to 39 tons per year to avoid the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

**Part 70 Permit Determination**

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 (T-039-6092-00056) application on June 7, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

### Federal Rule Applicability

- (a) There are no New Source Performance Standards (326 IAC 12), 40 CFR Part 60, applicable to this facility.
- (b) There are no National Emission Standards for Hazardous Air Pollutants (NESHAP), 40 CFR Part 63, applicable to this facility.

### State Rule Applicability

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

This existing source is a major stationary source because VOC is emitted at a rate of 250 tons per year or more. This modification to an existing major stationary source is not major because the emission increases will be limited at levels lower than the PSD significant levels when coating plastic or fiberglass. When coating metal, emission increases will be limited to 39 tons per year. Therefore, pursuant to 326 IAC 2-2, and 40 CFR 52.21, the PSD requirements do not apply.

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

This facility is subject to 326 IAC 2-6 (Emission Reporting), because the source has the potential to emit more than 10 tons/yr of VOC in Elkhart County. Pursuant to this rule, the owner/operator of this facility must annually submit an emission statement of the facility. The annual statement must be received by April 15 of each year and must contain the minimum requirements as specified in 326 IAC 2-6-4.

#### 326 IAC 5-1 (Visible Emissions Limitations)

Pursuant to 326 IAC 5-1-2 (Visible Emissions Limitations), except as provided in 326 IAC 5-1-3 (Temporary Exemptions), visible emissions shall meet the following, unless otherwise stated in this permit:

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) consecutive readings as determined by 326 IAC 5-1-4,
- (b) Visible emissions shall not exceed sixty percent (60%) opacity for more than a cumulative total of fifteen (15) minutes (sixty (60) readings) in a six (6) hour period.

#### 326 IAC 6-3-2 (Process Operations)

(1) Pursuant to 326 IAC 6-3-2(c), the PM from the finishing line, shall not exceed the pound per hour emission rate established in E in the following formula:

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

$$E=4.10P^{0.67}$$

Where E=rate of emission in pounds per hour; and  
P=process weight rate in tons per hour

- (2) The particulate matter emissions from the welding operation shall be limited to 0.88 pounds per hour based on a process weight rate of .1 tons per hour and the following equation:

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

- (a)  $E = 4.10(.1^{0.67}) = 0.88$  pounds per hour which is equal to 3.85 tons per year

The source will comply with the requirements of 326 IAC 6-3-2 by using a portable dust collector. (See Appendix A (Process Particulate Emissions) page 3 of 4 for detailed emission calculations.)

#### 326 IAC 6-4 (Fugitive Dust Emissions)

This source is subject to 326 IAC 6-4 for fugitive dust emissions. Pursuant to 326 IAC 6-4 (Fugitive Dust Emissions), fugitive dust shall not be visible crossing the boundary or property line of a source. Observances of visible emissions crossing property lines may be refuted by factual data expressed in 326 IAC 6-4-2(1), (2) or (3).

#### 326 IAC 8-1-6 (New Facilities: General Reduction Requirements)

When coating plastic or fiberglass surfaces, new facilities, which have potential emissions of (25 tons) or more per year, located anywhere in the state, which are not otherwise regulated by other provisions of this article (326 IAC 8), shall reduce VOC emissions using best available control technology (BACT). When applying surface coatings to plastic or fiberglass, this finishing line will limit VOC usage to 24 tons per twelve (12) consecutive month period. This will limit the potential to emit VOC to less than 25 tons per year. Therefore, the requirements under 326 IAC 8-1-6 (New Facilities General Reduction Requirements), are not applicable.

#### 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations)

When coating metal surfaces, this source is subject to 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations), because it has the potential to emit greater than fifteen pounds of VOC per day. Pursuant to this rule, 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 VOC in excess of 3.5 pounds per gallon of coating excluding water, delivered to a coating applicator 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)).

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.

Based on the MSDS submitted by the applicant and the calculations made, this source is in compliance with 326 IAC 8-2-9 (Miscellaneous Metal Coating Operations).

No other 326 IAC 8 rules apply.

## **Air Toxic Emissions**

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants set out in the Clean Air Act Amendments of 1990. These pollutants are either carcinogenic or otherwise considered toxic and are commonly used by industries. They are listed as air toxics on the Office of Air Management (OAM) Construction Permit Application Form Y.

- (a) This proposed modification will emit levels of air toxics less than those that constitute major source applicability according to Section 112 of the Clean Air Act.
- (b) See attached spreadsheets for detailed air toxic calculations (Appendix A, pages 2 and 4 of 4 )

## **Conclusion**

The construction of this modification to the existing wood manufacturing operation will be subject to the conditions of the attached proposed **Construction Permit No. CP-039-9754-00056**.

## Indiana Department of Environmental Management Office of Air Management

### Addendum to the Technical Support Document for New Construction and Operation

Source Name: W.G. Hayden/ASP  
Source Location: 54432 N. Adams St., Elkhart, IN 46514  
County: Elkhart  
Construction Permit No.: CP-039-9754-00056  
SIC Code: 3499, 3089  
Permit Reviewer: Phillip Ritz

On June 27, 1998, the Office of Air Management (OAM) had a notice published in the Elkhart Truth, Elkhart, Indiana, stating that W. G. Hayden/ASP had applied for a construction permit to construct and operate a modification to the existing wood cabinet manufacturing operation, consisting of a miscellaneous parts finishing line capable of finishing either a maximum of 1500 pounds per hour of steel parts, or a maximum of 200 pounds per hour of plastic parts, or a maximum of 600 pounds per hour of fiberglass parts; and exhausting through seven (7) stacks identified as SV-16 through SV-22 respectively. The notice also stated that OAM proposed to issue a permit for this installation and provided information on how the public could review the proposed permit and other documentation. Finally, the notice informed interested parties that there was a period of thirty (30) days to provide comments on whether or not this permit should be issued as proposed.

Upon further review by the OAM, the following revisions shall be incorporated into Construction Permit CP-039-9754-00056:

- (A) Operating Condition #16 of the Construction Permit paragraph, the first sentence which reads "Compliance with VOC content limitation contained in Operation Condition 13 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a)(7), using", has been changed to read as follows:

"Compliance with VOC content limitation contained in Operation Condition 14 shall be determined pursuant to 326 IAC 8-1-4(a)(3)(A) and 326 IAC 8-1-2(a)(7), using"

- (B) Operating Condition #18 of the Construction Permit paragraph, the first sentence which reads "That a log of information necessary to document compliance with operation permit condition no/s. 8 and 13 shall be maintained.", has been changed to read as follows:

"That a log of information necessary to document compliance with operation permit condition no/s. 8 and 9 shall be maintained."

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

W. G. Hayden/ASP  
62705 Lake View Drive  
Vandalia, MI 49095

**Affidavit of Construction**

I, \_\_\_\_\_, being duly sworn upon my oath, depose and say:  
(Name of the Authorized Representative)

1. I live in \_\_\_\_\_ County, Indiana and being of sound mind and over twenty-one (21) years of age, I am competent to give this affidavit.
  
2. I hold the position of \_\_\_\_\_ for \_\_\_\_\_,  
(Title) (Company Name)
  
3. By virtue of my position with \_\_\_\_\_, I have personal  
(Company Name)  
knowledge of the representations contained in this affidavit and am authorized to make these representations on behalf of \_\_\_\_\_.  
(Company Name)
  
4. I hereby certify that W. G. Hayden/ASP, 54432 N. Adams Street, Elkhart, Indiana 46514, has constructed the finishing line (consisting of: six (6) MIG welders, seven (7) HVLSP spray guns, ten (10) hand grinders, five (5) hand drills, two (2) band saws, seven (7) paint pumps, and one (1) table saw exhausting through one (1) Portable dust collector, and exhausting through seven (7) stacks identified as SV-16 through SV-22 respectively) in conformity with the requirements and intent of the construction permit application received by the Office of Air Management on May 7, 1998, and as permitted pursuant to **Construction Permit No. CP-039-9754, Plant ID No. 039-00056** issued on \_\_\_\_\_.
  
5. I hereby certify that W. G. Hayden/ASP, Inc. is subject to the Title V program and has submitted a Title V operating permit application (T-039-6092-00056) on June 7, 1996. The equipment covered under this permit shall be incorporated in the submitted Part 70 application.

Further Affiant said not.

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

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Date

STATE OF INDIANA)  
)SS

COUNTY OF \_\_\_\_\_ )

Subscribed and sworn to me, a notary public in and for \_\_\_\_\_ County and State of Indiana on this \_\_\_\_\_ day of \_\_\_\_\_, 19 \_\_\_\_\_.

My Commission expires: \_\_\_\_\_

\_\_\_\_\_  
Signature

\_\_\_\_\_  
Name (typed or printed)

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

**Company Name:** W.G. Hayden/ASP  
**Address City IN Zip:** 54432 N. Adams Street, Elkhart, Indiana 46514  
**CP:** 039-9754  
**Plt ID:** 039-00056  
**Reviewer:** Phillip Ritz  
**Date:** May 13, 1998

| Potential Emissions (uncontrolled):              |                  |                  |                                   |                |                   |                |                           |                       |                     |   |                                  |                               |                              |                             |                              |                    |                     |  |  |  |
|--|------------------|------------------|-----------------------------------|----------------|-------------------|----------------|---------------------------|-----------------------|---------------------|---|----------------------------------|-------------------------------|------------------------------|-----------------------------|------------------------------|--------------------|---------------------|--|--|--|
| Material (as applied)                            | Process          | Density (lb/gal) | Weight % Volatile (H2O& Organics) | Weight % Water | Weight % Organics | Volume % Water | Volume % Non-Vol (solids) | Gal of Mat (gal/unit) | Maximum (unit/hour) | Pounds VOC per gallon of coating less water | Pounds VOC per gallon of coating | Potential VOC pounds per hour | Potential VOC pounds per day | Potential VOC tons per year | Particulate Potential ton/yr | lb VOC /gal solids | Transfer Efficiency |  |  |  |
| <b>1</b>   |                  |                  |                                   |                |                   |                |                           |                       |                     |   |                                  |                               |                              |                             |                              |                    |                     |  |  |  |
| Base maker 7175K                                 | Fiberglass parts | 7.47             | 79.10%                            | 0.00%          | 79.90%            | 0.00%          | 15.53%                    | 0.030                 | 50.00               | 6.0   | 5.97                             | 8.96                          | 214.92                       | 39.22                       | 2.57                         | 51.26              | 0.75                |  |  |  |
| Clear 7600s                                      | Fiberglass parts | 7.82             | 55.90%                            | 0.00%          | 63.80%            | 0.00%          | 29.80%                    | 0.030                 | 50.00               | 5.0   | 4.99                             | 7.48                          | 179.52                       | 32.76                       | 5.66                         | 22.31              | 0.75                |  |  |  |
| Primer 181                                       | Fiberglass parts | 11.14            | 41.29%                            | 0.00%          | 40.92%            | 0.00%          | 36.30%                    | 0.015                 | 50.00               | 4.6   | 4.56                             | 3.42                          | 82.05                        | 14.97                       | 5.37                         | 16.74              | 0.75                |  |  |  |
| Solvent 170s                                     | Fiberglass parts | 6.33             | 100.00%                           | 0.00%          | 100.00%           | 0.00%          | 0.00%                     | 0.009                 | 50.00               | 6.3   | 6.33                             | 2.85                          | 68.36                        | 12.48                       | 0.00                         | ERR                | 0.75                |  |  |  |
| <b>Total Potential Emissions:</b>                |                  |                  |                                   |                |                   |                |                           |                       |                     |   |                                  | <b>22.70</b>                  | <b>544.86</b>                | <b>99.44</b>                | <b>13.60</b>                 |                    |                     |  |  |  |
| <b>2</b>   |                  |                  |                                   |                |                   |                |                           |                       |                     |   |                                  |                               |                              |                             |                              |                    |                     |  |  |  |
| Base maker 7175K                                 | Plastic parts    | 7.47             | 79.10%                            | 0.00%          | 79.90%            | 0.00%          | 15.53%                    | 0.030                 | 50.00               | 6.0   | 5.97                             | 8.96                          | 214.92                       | 39.22                       | 2.57                         | 51.26              | 0.75                |  |  |  |
| Clear 7600s                                      | Plastic parts    | 7.82             | 55.90%                            | 0.00%          | 63.80%            | 0.00%          | 29.80%                    | 0.030                 | 50.00               | 5.0   | 4.99                             | 7.48                          | 179.52                       | 32.76                       | 5.66                         | 22.31              | 0.75                |  |  |  |
| Primer 181                                       | Plastic parts    | 11.14            | 41.29%                            | 0.00%          | 40.92%            | 0.00%          | 36.30%                    | 0.015                 | 50.00               | 4.6   | 4.56                             | 3.42                          | 82.05                        | 14.97                       | 5.37                         | 16.74              | 0.75                |  |  |  |
| Solvent 170s                                     | Plastic parts    | 6.33             | 100.00%                           | 0.00%          | 100.00%           | 0.00%          | 0.00%                     | 0.009                 | 50.00               | 6.3   | 6.33                             | 2.85                          | 68.36                        | 12.48                       | 0.00                         | ERR                | 0.75                |  |  |  |
| <b>Total Potential Emissions:</b>                |                  |                  |                                   |                |                   |                |                           |                       |                     |   |                                  | <b>22.70</b>                  | <b>544.86</b>                | <b>99.44</b>                | <b>13.60</b>                 |                    |                     |  |  |  |
| <b>3</b>   |                  |                  |                                   |                |                   |                |                           |                       |                     |   |                                  |                               |                              |                             |                              |                    |                     |  |  |  |
| Primer N-4721                                    | Steel parts      | 10.55            | 21.33%                            | 0.00%          | 21.33%            | 0.00%          | 30.63%                    | 0.329                 | 50.00               | 2.3   | 2.25                             | 37.02                         | 888.42                       | 162.14                      | 149.50                       | 9.80               | 0.75                |  |  |  |
| Solvent-Naptha                                   | Steel parts      | 6.20             | 100.00%                           | 0.00%          | 100.00%           | 0.00%          | 0.00%                     | 0.02                  | 50.00               | 6.2   | 6.20                             | 6.20                          | 148.80                       | 27.16                       | 0.00                         | ERR                | 0.75                |  |  |  |
| <b>Total Potential Emissions (uncontrolled):</b> |                  |                  |                                   |                |                   |                |                           |                       |                     |   |                                  | <b>43.22</b>                  | <b>1037.22</b>               | <b>189.29</b>               | <b>149.50</b>                |                    |                     |  |  |  |
| Potential Emissions (controlled):                |                  |                  |                                   |                |                   |                |                           |                       |                     |   |                                  |                               |                              |                             |                              |                    |                     |  |  |  |
| <b>Total Potential Emissions:</b>                |                  |                  |                                   |                |                   |                |                           |                       |                     | Limited Efficiency VOC                      | Control Efficiency PM            | Limited* VOC lbs per Hour     | Limited* VOC lbs per Day     | Limited* VOC tons per Year  | Controlled PM tons/yr        |                    |                     |  |  |  |
|  |                  |                  |                                   |                |                   |                |                           |                       |                     | 87.32%                                      | 98.00%                           | 5.48                          | 131.52                       | 24.00                       | 2.99                         |                    |                     |  |  |  |

\*Limiting the potential VOC usage to 24 tons/year to comply with 326 IAC 8-1-6 (general reduction requirements: this equates to a 87.32% VOC usage limitation [24/189.29 = 0.1268= 12.68% of potential capacity])

Metals Line has the higher VOC emissions. Therefore, it is used to determine the control efficiency needed to limit VOC to 24 tpy.

Shading indicates the operation with the worst-case potential to emit VOC.

**Methodology:**

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

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

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

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

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

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

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

Total = Worst Coating + Sum of all solvents used

Controlled emission rate = uncontrolled emission rate \* (1 - control efficiency)

- 1: Fiberglass Parts line Emission Calculations
- 2: Plastic Parts line Emission Calculations
- 3: Steel Parts line Emission Calculations

**HAP Emission Calculations**

**Company Name:** W.G. Hayden/ASP  
**Address City IN Zip:** 54432 N. Adams Street, Elkhart, Indiana 46514  
**CP:** 039-9754  
**Pit ID:** 039-00056  
**Reviewer:** Phillip Ritz  
**Date:** May 13, 1998

| Material         | Density<br>(lb/gal) | Gal of Mat<br>(gal/unit) | Maximum<br>(unit/hour) | Weight %<br>Xylene | Weight %<br>Toluene | Weight %<br>Ethyl benzene | Weight %<br>MEK | Weight %<br>MIK | Weight %<br>Cumene | Xylene Emissions<br>(ton/yr) | Toluene Emissions<br>(ton/yr) | Ethyl benzene<br>Emissions (ton/yr) | MEK Emissions<br>(ton/yr) | MIBK Emissions<br>(ton/yr) | Cumene Emissions<br>(ton/yr) | Total HAP Emissions<br>(ton/yr) |
|------------------|---------------------|--------------------------|------------------------|--------------------|---------------------|---------------------------|-----------------|-----------------|--------------------|------------------------------|-------------------------------|-------------------------------------|---------------------------|----------------------------|------------------------------|---------------------------------|
| Base maker 7175K | 7.47                | 0.030                    | 50.00                  | 17.45%             | 13.95%              | 3.95%                     | 1.13%           | 0.00%           | 0.45%              | 8.57                         | 6.85                          | 1.94                                | 0.55                      | 0.00                       | 0.22                         | 18.13                           |
| Clear 7600s      | 7.82                | 0.030                    | 50.00                  | 22.00%             | 7.00%               | 5.60%                     | 6.40%           | 7.20%           | 0.00%              | 11.30                        | 3.59                          | 2.88                                | 3.29                      | 3.70                       | 0.00                         | 24.75                           |
| Primer 181       | 11.14               | 0.015                    | 50.00                  | 10.00%             | 15.00%              | 3.00%                     | 0.00%           | 0.00%           | 0.00%              | 3.66                         | 5.49                          | 1.10                                | 0.00                      | 0.00                       | 0.00                         | 10.25                           |
| Solvent 170s     | 6.33                | 0.009                    | 50.00                  | 0.00%              | 0.00%               | 0.00%                     | 0.00%           | 0.00%           | 0.00%              | 0.00                         | 0.00                          | 0.00                                | 0.00                      | 0.00                       | 0.00                         | 0.00                            |

Total Potential Emissions

|                   |                                |                                 |                                     |                           |                           |                              |                                     |
|-------------------|--------------------------------|---------------------------------|-------------------------------------|---------------------------|---------------------------|------------------------------|-------------------------------------|
|                   | <b>23.52</b>                   | <b>15.93</b>                    | <b>5.91</b>                         | <b>3.84</b>               | <b>3.70</b>               | <b>0.22</b>                  | <b>53.12</b>                        |
| Limit Efficiency* | Limited                        | Limited                         | Limited                             | Limited                   | Limited                   | Limited                      | <b>LIMITED</b>                      |
| HAP               | Xylene Emissions<br>(ton/year) | Toluene Emissions<br>(ton/year) | Ethyl benzene<br>Emissions (ton/yr) | MEK Emissions<br>(ton/yr) | MIK Emissions<br>(ton/yr) | Cumene Emissions<br>(ton/yr) | <b>HAP EMISSIONS<br/>(ton/year)</b> |
| 75.85%            | <b>5.68</b>                    | <b>3.85</b>                     | <b>1.43</b>                         | <b>0.93</b>               | <b>0.89</b>               | <b>0.02</b>                  | <b>12.80</b>                        |

\*The source will limit the VOC input into the finishing line to 24 tons/yr.

\*\*Mn emissions from welding (see Appendix A p 4 of 4 for calculations).

If the fiberglass/plastics operation is performed, this is equivalent to an 24/99.44 = x = (75.85%) usage limit.

|                      |                            |                             |
|----------------------|----------------------------|-----------------------------|
| <b>LIMITED</b>       | <b>Manganese Emissions</b> | <b>Total HAPS Emissions</b> |
| <b>HAP EMISSIONS</b> | <b>(not limited)**</b>     | <b>After Limiting</b>       |
| <b>(ton/year)</b>    | <b>(ton/year)</b>          | <b>(ton/year)</b>           |
| <b>12.80</b>         | <b>0.01</b>                | <b>12.81</b>                |

**METHODOLOGY**

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

**Appendix A: Process Particulate Emissions**

**Company Name:** W.G. Hayden/ASP  
**Address City IN Zip:** 54432 N. Adams Street, Elkhart, Indiana 46514  
**CP:** 039-9754  
**Plt ID:** 039-00056  
**Reviewer:** Phillip Ritz  
**Date:** May 13, 1998

**Potential Emissions (tons/year)****A. Portable Dust Collector**

| Process   | No. of Units | Grain Loading per Actual Cubic Foot of Outlet Air | Air to Cloth Ratio Air Flow (acfm/ft <sup>2</sup> ) | Total Filter Area (ft <sup>2</sup> ) | Control Efficiency | Total (tons/yr) |
|---|--------------|---|---|--------------------------------------|--------------------|-----------------|
| Portable Dust Collector                                     | 1            | 0.00006   | 6.0   | 200                                  | 99.00%             | 0.27            |
| Total Emissions Based on Rated Capacity at 8,760 Hours/Year |              |   |   |                                      |                    | <b>0.27</b>     |

**Potential Emissions (tons/year)****A. Portable Dust Collector**

| Process   | No. of Units | Grain Loading per Actual Cubic Foot of Outlet Air | Air to Cloth Ratio Air Flow (acfm/ft <sup>2</sup> ) | Total Filter Area (ft <sup>2</sup> ) | Control Efficiency | Total (tons/yr) |
|---|--------------|---|---|--------------------------------------|--------------------|-----------------|
| Portable Dust Collector   | 1            | 0.00006   | 6.0   | 200                                  | 99.00%             | 0.00            |
| Total Emissions Based on Rated Capacity at 8,760 Hours/Year and source controls |              |   |   |                                      |                    | <b>0.00</b>     |

**Methodology:**State Potential (uncontrolled):

Portable Dust Collector (tons/yr) = No. Units \* Loading (grains/acf) \* Air/Cloth Ratio (acfm/ft<sup>2</sup>) \* Filter Area (ft<sup>2</sup>) \* 1 lb/7,000 grains \* 60 min/hr \* 8760 hr/yr \* 1 ton/2,000 lbs \* 1/(1-Control Efficiency)

Federal Potential (controlled):

Baghouse (tons/yr) = No. Units \* Loading (grains/acf) \* Air/Cloth Ratio (acfm/ft<sup>2</sup>) \* Filter Area (ft<sup>2</sup>) \* 1 lb/7,000 grains \* 60 min/hr \* 8760 hr/yr \* 1 ton/2,000 lbs \* 1/(1-Control Efficiency)

**Appendix A: Emission Calculations**  
**Insignificant Activity Emissions of Pollutants Limited Below Major Thresholds (HAPs)**

**Company Name:** W.G. Hayden/ASP  
**Address City IN Zip:** 54432 N. Adams Street, Elkhart, Indiana 46514  
**CP:** 039-9754  
**Plt ID:** 039-00056  
**Reviewer:** Phillip Ritz  
**Date:** May 13, 1998

| Type of Welding       | Maximum Electrode Consumption (lb/hr) | Emission Factors     |                    |                       |                    | Emissions        |                |                   |                | <b>TOTAL</b> tons/yr |
|-----------------------|---------------------------------------|----------------------|--------------------|-----------------------|--------------------|------------------|----------------|-------------------|----------------|----------------------|
|                       |                                       | Chromium lb/1,000 lb | Cobalt lb/1,000 lb | Manganese lb/1,000 lb | Nickel lb/1,000 lb | Chromium tons/yr | Cobalt tons/yr | Manganese tons/yr | Nickel tons/yr |                      |
| Metal Inert Gas (MIG) | 4.80                                  | 0                    | 0                  | 0.5                   | 0                  | 0.00             | 0.00           | 0.01              | 0.00           | <b>0.01</b>          |

Methodology:

Emissions (tons/yr) = Maximum Consumption (lbs/hr) \* Emission Factor (lb/1,000 lb) \* (8,760 hr/yr) \* (1 ton/2,000 lbs)

Emission Factors from SARA 313 Reporting Guides.