

**CONSTRUCTION PERMIT  
OFFICE OF AIR MANAGEMENT**

**Haas Cabinet Company, Inc.  
625 West Utica Street  
Sellersburg, Indiana 47172**

is hereby authorized to construct a modification to an existing wood component finishing facility, consisting of the following equipment:

- (a) One (1) stain booth, identified as Booth ID # 15, utilizing an air assisted airless spray application system, with a dry filter for particulate matter overspray control, with a maximum production rate of 3200 pounds per hour of kitchen cabinet components;
- (b) One (1) shade booth, identified as Booth ID # 16, utilizing an air atomization spray application system, with a dry filter for particulate matter overspray control, with a maximum production rate of 3200 pounds per hour of kitchen cabinet components; and
- (c) One (1) toner booth, identified as Booth ID # 17, utilizing an air atomization spray application system, with a dry filter for particulate matter overspray control, with a maximum production rate of 3200 pounds per hour of kitchen cabinet components.

Note: Booths # 15, 16, and 17 will replace two existing booths, Booths # 3 and 4.

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-019-9871-00016	
Issued by:  Paul Dubenetzky, Branch Chief 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 application (T-019-5797-00016) on April 26, 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 wood component finishing facility 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]

Annual Emission Reporting

8. 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

9. 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.

Particulate Matter Limitation

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

- (a) The dry filters for particulate matter overspray control shall be in operation at all times when the stain, toner, and shade booths (ID # 15, 16, and 17) are in operation.
- (b) The stain, toner, and shade booths (ID # 15, 16, and 17) 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.

Volatile Organic Compound (VOC) Limitations

11. That pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet coating), the surface coatings applied to wood furniture and/or wood components (Booths # 15, 16 and 17) shall utilize one or more of the following application methods:

Airless Spray Application	Air-Assisted Airless Spray Application
Electrostatic Spray Application	Electrostatic Bell or Disc Application
Heated Airless Spray Application	Roller Coating
Brush or Wipe Application	Dip-and-Drain Application
High Volume Low Pressure HVLP	Aerosol Spray Cans

High volume low pressure spray is an acceptable alternative application of air-assisted airless spray. High volume low pressure (HVLP) spray means technology used to apply coating to a substrate by means of coating application equipment which operates between one-tenth (0.1) and ten (10) pounds per square inch gauge (psig) air pressure measured dynamically at the center of the air cap and at the air horns of the spray system.

12. That pursuant to 326 IAC 8-11 (Wood Furniture Coatings Emission Limits), VOC emissions from the wood furniture coating line shall be limited by by any of the following methods:
- (a) Using topcoats with a VOC content no greater than eight-tenths (0.8) kilogram of VOC per kilogram of solids (kg VOC/kg solids) or eight-tenths (0.8) pounds of VOC per pound of solids (lb VOC/lb solids), as applied.
  - (b) Using a finishing system of sealers with a VOC content no greater than one and nine-tenths (1.9) kg VOC/kg solids or one and nine-tenths (1.9) lb VOC/lb solids, as applied, and topcoats with a VOC content no greater than one and eight-tenths (1.8) kg VOC/kg solids or eight-tenths (1.8) lb VOC/lb solids, as applied.
  - (c) Using sealers and topcoats for sources using acid-cured alkyd amino vinyl sealers or acid-cured alkyd amino conversion varnish topcoats.
  - (d) Using finishing materials such that actual emission are less than or equal to allowable emissions.

The wood furniture coating line will be in compliance with this rule, since it will be using a finishing system of sealers, from Booths # 15, 16 and 17, with a VOC content no greater than 1.9 lbs VOC/lb solids, as applied. There are no topcoats in this line.

Hazardous Air Pollutant (HAP) Limitations

13. That pursuant to the National Emission Standards for Wood Furniture Manufacturing Operations, 40 CFR 63, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:
- (a) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:
    - (1) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of one (1.0) pound VHAP per pound solids.
    - (2) Use compliant finishing materials in which all stains, washcoats, sealers, topcoats, basecoats and enamels have a maximum VHAP content of one (1.0) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of washcoats, basecoats, and enamels have a three percent (3.0%) maximum VHAP content by weight. Solvent and thinner mixtures used for other purposes have a ten percent (10%) maximum VHAP content by weight; or
    - (3) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids; or

- (4) Use a combination of (A), (B), and (C).
- (b) Limit VHAP emissions contact adhesives as follows:
  - (1) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed 1.8 pound VHAP per pound solids.
  - (2) For all other contact adhesives the VHAP content shall not exceed one (1.0) pound VHAP per pound solids.
  - (3) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids.
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- (c) The strippable spray booth material shall have a maximum VOC content of eight-tenths pounds VOC per pounds solids.

Work Practice Standards [40 CFR 63.803]

14. The owner or operator of an affected source subject to this subpart shall prepare and maintain a written work practice implementation plan within sixty (60) calendar days after the compliance date. The work practice implementation plan must define environmentally desirable work practices for each wood furniture manufacturing operation and at a minimum address each of the following work practice standards as defined under 40 CFR 63.803.
- (a) Operator training course.
  - (b) Leak inspection and maintenance plan.
  - (c) Cleaning and washoff solvent accounting system.
  - (d) Chemical composition of cleaning and washoff solvents.
  - (e) Spray booth cleaning.
  - (f) Storage requirements.
  - (g) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h).
  - (h) Line cleaning.
  - (i) Gun cleaning.
  - (j) Washoff operations.
  - (k) Formulation assessment plan for finishing operations.

Compliance Procedures and Monitoring Requirements

15. (a) That the Permittee shall demonstrate compliance with operation condition no.12 by maintaining documentation that uses EPA Method 24\* data, or data from an equivalent or alternative method to determine the VOC and solids content of the as-supplied finishing material. If solvent or other VOC is added to the finishing material before application, the wood furniture coating line shall maintain documentation showing the VOC content of the finishing material as applied in pounds of VOC per pound of solids.
- (b) That the Permittee shall demonstrate continuous compliance by using compliant materials, maintaining records that demonstrate the finishing materials are compliant, and submitting a compliance certification with the semiannual report required by operation condition no. 16. The compliance certification requirements shall be as follows:

- (i) State that compliant sealers and topcoats have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance. The wood furniture coating line is in violation of the standard whenever a noncompliance material, as determined by records or by a sample of the finishing material, is used. Use of a noncompliant material is a separate violation for each day the noncompliant material is used.
- (ii) The compliance certification shall be signed by a responsible official.

\*Copies of EPA Method 24 may be obtained from the Government Printing Office, Washington D.C. 20402. Copies of the pertinent sections of the referenced materials are also available from the Department of Environmental Management, Office of Air Management, 100 North Senate Avenue, Indianapolis, Indiana, 46204-2220.

#### Record Keeping Requirements

16. That the Permittee shall maintain records of the following:
- (a) A list of each finishing material subject to the emission limits in operation condition no. 12.
  - (b) The VOC and solids content, as applied, of each finishing material subject to the emission limits in operation condition no. 12, and copies of data sheets documenting how the as-applied values are determined.

#### Reporting Requirements

17. That a log of information necessary to document compliance with operation permit condition nos. 11 and 12 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 semiannual 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 each six (6) month period being reported. These reports shall include the information required by operation condition no. 12, a statement of whether the wood furniture coating line was in compliance or noncompliance, and if the wood furniture coating line was not in compliance, the measures taken to bring it into compliance. These records shall also 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.

Open Burning

18. 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.

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 date on which this wood furniture coating line commences operation.
- (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.
- (g) 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 to emit of Booths #15, 16, and 17 to greater than 129 tons per year, shall require an Emission Offset Permit pursuant to 326 IAC 2-3, before such change may occur.
21. The existing booths #3 and 4 must be removed before Booths #15, 16, and 17 can begin operation so that the requirements of 326 IAC 2-3 (Emission Offset) do not apply.



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MALFUNCTION REPORTED BY: \_\_\_\_\_ TITLE: \_\_\_\_\_  
(SIGNATURE IF FAXED)

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

REV 3/96

FAX NUMBER - (317) 233-5967

\*SEE NEXT PAGE

**Please note - 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.**

**326 IAC 1-6-1                      Applicability of rule**

Sec. 1.                      The requirements of this rule (326 IAC 1-6) shall apply to the owner or operator of any facility which has the potential to emit twenty-five (25) pounds per hour of particulates, one hundred (100) pounds per hour of volatile organic compounds or SO<sub>2</sub>, or two thousand (2,000) pounds per hour of any other pollutant; or to the owner or operator of any facility with emission control equipment which suffers a malfunction that causes emissions in excess of the applicable limitation.

**326 IAC 1-2-39                      "Malfunction" definition**

Sec. 39.                      Any sudden, unavoidable failure of any air pollution control equipment, process, or combustion or process equipment to operate in a normal and usual manner. (Air Pollution Control Board; 326 IAC 1-2-39; filed Mar 10, 1988, 1:20 p.m. : 11 IR 2373)

**\*Essential services** are interpreted to mean those operations, such as, the providing of electricity by power plants. Continued operation solely for the economic benefit of the owner or operator shall not be sufficient reason why a facility cannot be shutdown during a control equipment shutdown.

If this item is checked on the front, please explain rationale:

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## Indiana Department of Environmental Management Office of Air Management

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

#### Source Background and Description

Source Name: Haas Cabinet Company, Inc.  
 Source Location: 625 West Utica Street, Sellersburg, IN 47172  
 County: Clark  
 Construction Permit No.: CP-019-9871-00016  
 SIC Code: 2434  
 Permit Reviewer: Yvette de los Angeles/EVP

The Office of Air Management (OAM) has reviewed an application from Haas Cabinet Company, Inc. relating to the construction and operation of a modification to an existing wood component finishing facility, consisting of the following equipment:

- (a) One (1) stain booth, identified as Booth ID # 15, utilizing an air assisted airless spray application system, with a dry filter for particulate matter overspray control, with a maximum production rate of 3200 pounds per hour of kitchen cabinet components;
- (b) One (1) shade booth, identified as Booth ID # 16, utilizing an air atomization spray application system, with a dry filter for particulate matter overspray control, with a maximum production rate of 3200 pounds per hour of kitchen cabinet components; and
- (c) One (1) toner booth, identified as Booth ID # 17, utilizing an air atomization spray application system, with a dry filter for particulate matter overspray control, with a maximum production rate of 3200 pounds per hour of kitchen cabinet components.

Note: Booths # 15, 16, and 17 will replace two existing booths, Booths # 3 and 4.

#### Stack Summary

Stack ID	Operation	Height (feet)	Diameter (inches)	Flow Rate (acfm)	Temperature (°F)
15	stain booth	20	22 x 22	8,240	ambient
16	shade booth	20	14 x 18	7,063	ambient
17	toner booth	20	24	8,000	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 June 23, 1998.

## Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations (2 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 at rated capacity):

Pollutant	Allowable Emissions (tons/year)	Potential Emissions (tons/year)
Particulate Matter (PM)	1.08	1.79
Particulate Matter (PM10)	1.08	1.79
Sulfur Dioxide (SO <sub>2</sub> )	---	0.00
Volatile Organic Compounds (VOC)	---	117.02
Carbon Monoxide (CO)	---	0.00
Nitrogen Oxides (NO <sub>x</sub> )	---	0.00
Single Hazardous Air Pollutant (HAP)	---	3.85
Combination of HAPs	---	10.73

- (a) Allowable emissions are determined from the applicability of rule 326 IAC 6-3. See attached spreadsheets for detailed calculations.
- (b) Allowable emissions (as defined in the Indiana Rule) of VOC is greater than 25 tons per year. Therefore, pursuant to 326 IAC 2-1, Sections 1 and 3, a construction permit is required.

## County Attainment Status

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO<sub>x</sub>) are precursors for the formation of ozone. Therefore, VOC and NO<sub>x</sub> emissions are considered when evaluating the rule applicability relating to the ozone standards. Clark County has been designated as nonattainment for ozone. Therefore, VOC and NO<sub>x</sub> emissions were reviewed pursuant to the requirements for Emission Offset, 326 IAC 2-3.
- (b) Clark 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.

## Source Status

Existing Source Emission Offset, Part 70 or FESOP Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity and/ or as otherwise limited):

Pollutant	Emissions (ton/yr)
PM	10.22
PM10	10.22
SO <sub>2</sub>	0.00
VOC	159.60
CO	0.00
NO <sub>x</sub>	0.00

- (a) This existing source is a major stationary source because VOC is emitted at a rate of 100 tons per year or greater.
- (b) These emissions were based on the Construction Permit (CP019-8354-00016) issued to the source on June 25, 1997.

**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 limit, where applicable):

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)
Proposed Modification	0.02	0.02	0.00	117.02*	0.00	0.00
Contemporaneous Increases	---	---	---	---	---	---
Contemporaneous Decreases (b)	---	---	---	90.00**	---	---
Net Emissions	0.02	0.02	0.00	27.02	0.00	0.00
PSD or Offset Significant Level	25	15	40	40	100	40

\* 117.02 tons per year are potential emissions of new Booths # 15, 16, and 17.

\*\* 90.00 tons per year are actual 1996 and 1997 emissions of existing Booths #3 and 4.

- (a) This modification to an existing major stationary source is not major because the emissions increase is less than the Emission Offset significant levels. Therefore, pursuant to 326 IAC 2-3, the Emission Offset requirements do not apply.
- (b) The stain, shade and toner booths are replacing two existing booths (Booths # 3 & 4), which reported total VOC emissions of 90 tons per year for 1996 and 1997. Therefore, Emission Offset requirements will not apply because the VOC emissions from the proposed stain, shade and toner booth minus the two existing booths will be less than the significant level.

## Part 70 Permit Determination

### 326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 (T-019-5797-00016) application on April 26, 1996. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

## Federal Rule Applicability

There are no New Source Performance Standards (326 IAC 12) and 40 CFR Part 60 applicable to this facility.

### 40 CFR Part 63, Subpart JJ, National Emission Standards for Wood Furniture Manufacturing Operations

- (a) The wood furniture coating operation is subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP), 326 IAC 20-14, (40 CFR 63, Subpart JJ), with a compliance date of November 21, 1997, since the source emitted 50 tons or more of hazardous air pollutants in 1996.
- (b) Pursuant to 40 CFR 63, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:
- (c) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:
  - (1) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of one (1.0) pound VHAP per pound solids.
  - (2) Use compliant finishing materials in which all stains, washcoats, sealers, topcoats, basecoats and enamels have a maximum VHAP content of one (1.0) pound VHAP per pound solid, as applied. Thinners used for on-site formulation of washcoats, basecoats, and enamels have a three percent (3.0%) maximum VHAP content by weight. Solvent and thinner mixtures used for other purposes have a ten percent (10%) maximum VHAP content by weight; or
  - (3) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids; or
  - (4) Use a combination of (A), (B), and (C).
- (d) Limit VHAP emissions contact adhesives as follows:
  - (1) For foam adhesives used in products that meet the upholstered seating flammability requirements, the VHAP content shall not exceed 1.8 pound VHAP per pound solids.
  - (2) For all other contact adhesives the VHAP content shall not exceed one (1.0) pound VHAP per pound solids.



- (3) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids.
  
- (e) The strippable spray booth material shall have a maximum VOC content of eight-tenths pounds VOC per pounds solids.

### State Rule Applicability

#### 326 IAC 2-3 (Emission Offset)

This facility is not subject to 326 IAC 2-3 (Emission Offset), however the existing source is a major Emission Offset source. Therefore, any modification to this source which has the potential to emit of any of the criteria pollutants greater than the major modification thresholds, would be subject to the requirements of 326 IAC 2-3. To avoid these requirements, the potential emissions from any modification to this source must be limited below the major modification thresholds. For VOC, the net emission increase from any modification must be limited to 39 tons per year. The stain, shade and toner booths are replacing two existing booths (Booths #3 and 4), which reported total actual VOC emissions of 90 tons per year for 1996 and 1997. Therefore, the allowable VOC emissions from the proposed stain, shade and toner booths cannot exceed 129 tons per year (90 tons per year contemporaneous decrease + 39 tons per year limited emissions).

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

This facility is subject to 326 IAC 2-6 (Emission Reporting), because the source emits more than 10 tons/yr of VOC in Clark 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 5-1-2 (Visible Emission Limitations)

This facility is subject to 326 IAC 5-1-2 (Visible Emission Limitations). This requires that the visible emissions meet the following:

- (a) Visible emissions shall not exceed an average of forty percent (40%) opacity in twenty-four (24) hour consecutive readings.
  
- (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 (Particulate Emissions Limitations)

The stain, toner and shade booths (ID # 15, 16, and 17) are subject to particulate matter limitations under 326 IAC 6-3-2. Pursuant to this rule, particulate emissions from the coating booths shall be limited based on the following equation:

$$E = 4.10 P^{0.67} \text{ (for process weights less than 60,000 lbs/hr)}$$

where E = maximum allowable rate of emission (lbs/hr)  
P = process weight (tons/hr)

Compliance is shown by the use of dry filters for particulate control.

**326 IAC 8-2-12 (Surface Coating Emission Limitations for Wood Furniture and Cabinet Coating)**

This facility is subject to 326 IAC 8-2-12 (Surface Coating Emission Limitations for Wood Furniture and Cabinet Coating). This rule requires that all coating material, with the exception of no more than ten (10) gallons of coating per day used for touch-up and repair operations, use one (1) or more of the following application systems: airless spray, air assisted airless spray, electrostatic spray, electrostatic bell or disc, heated airless spray, roller coat, brush or wipe, dip-and-drain application systems, high volume low pressure (HVLP) or aerosol spray cans.

The stain, toner, and shade booths (ID # 15, 16, and 17) will be in compliance with this rule. The stain and toner booths (ID #15 and 17) will utilize an air assisted airless spray application system to comply with this rule. The usage of coating material in the shade booth (ID # 16), used for touch-up operations, will not exceed ten (10) gallons of coating per day and will comply with this rule.

**326 IAC 8-11 (Wood Furniture Coatings Emission Limits)**

This facility is subject to 326 IAC 8-11 (Wood Furniture Coatings Emission Limits). This requires Haas Cabinet Co., Inc. to limit VOC emissions from the wood furniture coating line by any of the following methods:

- (a) Using topcoats with a VOC content no greater than eight-tenths (0.8) kilogram of VOC per kilogram of solids (kg VOC/kg solids) or eight-tenths (0.8) pounds of VOC per pound of solids (lb VOC/lb solids), as applied.
- (b) Using a finishing system of sealers with a VOC content no greater than one and nine-tenths (1.9) kg VOC/kg solids or one and nine-tenths (1.9) lb VOC/lb solids, as applied, and topcoats with a VOC content no greater than one and eight-tenths (1.8) kg VOC/kg solids or eight-tenths (1.8) lb VOC/lb solids, as applied.
- (c) Using sealers and topcoats for sources using acid-cured alkyd amino vinyl sealers or acid-cured alkyd amino conversion varnish topcoats.
- (d) Using finishing materials such that actual emission are less than or equal to allowable emissions.

The wood furniture coating line will be in compliance with this rule, since it will be using a finishing system of sealers, from Booths # 15, 16 and 17, with a VOC content no greater than 1.9 lbs VOC/lb solids, as applied. There are no topcoats in this line.

**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 modification will emit levels of air toxics less than those which constitute a major source according to Section 112 of the 1990 Amendments to Clean Air Act.
- (b) See attached spreadsheets for detailed air toxic calculations.

## **Conclusion**

The construction of this modification to the existing wood component finishing facility will be subject to the conditions of the attached proposed **Construction Permit No. CP-019-9871-00016**.

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

Haas Cabinet Company, Inc.  
625 West Utica Street  
Sellersburg, Indiana Z47172

**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 Haas Cabinet Company, Inc., 625 West Utica Street, Sellersburg, Indiana, 47172, has constructed the stain, shade and toner booths (Unit ID # 15, 16, and 17) in conformity with the requirements and intent of the construction permit application received by the Office of Air Management on June 23, 1998 and as permitted pursuant to **Construction Permit No. CP-019-9871, Plant ID No. 019-00016** issued on \_\_\_\_\_  
\_\_\_\_\_
5. I hereby certify that Haas Cabinet Company, Inc. is now subject to the Title V program and has submitted a Title V operating permit application on April 26, 1996.

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:** Haas Cabinet Company, Inc,  
**Address City IN Zip:** 625 West Utica Street, Sellersburg, IN 47172  
**CP:** 019-9871  
**Pit ID:** 019-00016  
**Reviewer:** Yvette de los Angeles  
**Date:** July 17, 1998

State 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	
Stain booth	Booth ID # 15	7.40	94.00%	0.00%	94.00%	0.00%	6.00%	0.0057	595.00	7.0	6.96	23.59	566.19	103.33	1.65	154.58	75.00%	
Shade booth	Booth ID #16	6.70	98.00%	0.00%	98.00%	0.00%	2.00%	0.0004	595.00	6.6	6.57	1.56	37.50	6.84	0.07	656.60	50.00%	
Toner booth	Booth ID #17	6.70	98.00%	0.00%	98.00%	0.00%	2.00%	0.0004	595.00	6.6	6.57	1.56	37.50	6.84	0.07	656.60	50.00%	
<b>Total State Potential Emissions:</b>												<b>26.72</b>	<b>641.20</b>	<b>117.02</b>	<b>1.79</b>			
Federal Potential Emissions (controlled):																		
<b>Total Federal Potential Emissions:</b>														Control Efficiency PM	Controlled PM tons/yr			
														99.00%	0.02			

**Methodology:**

Pounds of VOC per Gallon Coating less Water = (Density (lb/gal) \* Weight % Organics) / (1-Volume % water)  
Pounds of VOC per Gallon Coating = (Density (lb/gal) \* Weight % Organics)  
Potential VOC Pounds per Hour = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr)  
Potential VOC Pounds per Day = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (24 hr/day)  
Potential VOC Tons per Year = Pounds of VOC per Gallon coating (lb/gal) \* Gal of Material (gal/unit) \* Maximum (units/hr) \* (8760 hr/yr) \* (1 ton/2000 lbs)  
Particulate Potential Tons per Year = (units/hour) \* (gal/unit) \* (lbs/gal) \* (1- Weight % Volatiles) \* (1-Transfer efficiency) \*(8760 hrs/yr) \*(1 ton/2000 lbs)  
Pounds VOC per Gallon of Solids = (Density (lbs/gal) \* Weight % organics) / (Volume % solids) \* Transfer Efficiency  
Total = Worst Coating + Sum of all solvents used  
Controlled emission rate = uncontrolled emission rate \* (1 - control efficiency)

**HAP Emission Calculations**

**Company Name:** Haas Cabinet Company, Inc.  
**Address City IN Zip:** 625 West Utica Street, Sellersburg, IN 47172  
**CP:** 019-9871  
**Plt ID:** 019-00016  
**Reviewer:** Yvette de los Angeles  
**Date:** July 17, 1998

Material	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % Cumene	Weight % Methyl Ethyl Ketone	Weight % Toluene	Weight % Xylene	Cumene Emissions (ton/yr)	Methyl Ethyl Ketone Emissions (ton/yr)	Toluene Emissions (ton/yr)	Xylene Emissions (ton/yr)	TOTAL HAP EMISSIONS (TON/YEAR)
Stain booth	7.4	0.0057	595.00	1.20%	0.00%	0.00%	3.50%	1.32	0.00	0.00	3.85	5.17
Shade booth	6.7	0.0004	595.00	0.00%	21.60%	18.20%	0.00%	0.00	1.51	1.27	0.00	2.78
Toner booth	6.7	0.0004	595.00	0.00%	21.60%	18.20%	0.00%	0.00	1.51	1.27	0.00	2.78

**Total State Potential Emissions** **1.32**      **3.02**      **2.54**      **3.85**      **10.73**

**METHODOLOGY**

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

**Compliance with 326 IAC 6-3-2**

The following calculations determine compliance with 326 IAC 6-3-2 for process weight up to 30 tons per hour:

$$\text{limit} = 4.10 * P^{0.67}$$

where P = 30 lbs/hr = 0.015 tons/hr

$$\begin{aligned} \text{limit} &= 4.10 * 0.015^{0.67} = 0.25 \text{ lbs/hr} \\ &= 1.08 \text{ tons/yr} \end{aligned}$$