

**CONSTRUCTION PERMIT
OFFICE OF AIR MANAGEMENT**

**Jasper Desk Company, Inc.
415 East Sixth St.
Jasper, IN 47546**

is hereby authorized to construct

One (1) spray paint booth, identified as SB-8, utilizing high volume-low pressure (HVLV) spray technology, with a maximum capacity of coating 6.7 wooden desks per hour, and exhausting through one (1) stack (S/V ID 15).

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-037-9681-00007	
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 permit application (T-037-5991-00007) on June 3, 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 furniture manufacturing company 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]

8. Wood Furniture NESHAP [40CFR Part 63, Subpart JJ]

- (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 December 7, 1998,
- (b) Pursuant to 40 CFR 63, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:

- (1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:
 - (A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of one (1.0) pound VHAP per pound solids.
 - (B) 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. Other thinners have an allowable maximum percent (%) VHAP by weight of ten (10) percent; or
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids; or
 - (D) Use a combination of (A), (B), and (C).
 - (2) Limit VHAP emissions contact adhesives as follows:
 - (A) 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.
 - (B) For all other contact adhesives (except aerosols and contact adhesives applied to nonporous substrates) the VHAP content shall not exceed one (1.0) pound VHAP per pound solids.
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids.
 - (3) The strippable spray booth material shall have a maximum VOC content of eight-tenths pounds VOC per pounds solids.
- (c) Work Practice Standards [40 CFR 63.803]
Pursuant to 40 CFR 63 Subpart JJ, the owner or operator of an affected source 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.
- (1) Operator training course,
 - (2) Leak inspection and maintenance plan,
 - (3) Cleaning and washoff solvent accounting system,
 - (4) Chemical composition of cleaning and washoff solvents,
 - (5) Spray booth cleaning,

- (6) Storage requirements,
- (7) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h),
- (8) Line cleaning,
- (9) Gun cleaning,
- (10) Washoff operations,
- (11) Formulation assessment plan for finishing operations.

Performance Testing

9. If future stack testing is required for VOC and/or VHAP to determine compliance with Operating Condition #8, these tests shall be performed according to 326 IAC 3-6 (Source Sampling Procedures) using the methods specified in the rule or as approved by the Commissioner.
- (a) A test protocol shall be submitted to the OAM, Compliance Data Section, 35 days in advance of the test.
 - (b) The Compliance Data Section shall be notified of the actual test date at least two (2) weeks prior to the date.
 - (c) All test reports must be received by the Compliance Data Section within 45 days of completion of the testing.
 - (d) Whenever the results of the stack test performed exceed the level specified in this permit, appropriate corrective actions shall be implemented within thirty (30) days of receipt of the test results. These actions shall be implemented immediately unless notified by OAM that they are acceptable. The Permittee shall minimize emissions while the corrective actions are being implemented.
 - (e) Whenever the results of the stack test performed exceed the level specified in this permit, a second test to demonstrate compliance shall be performed within 120 days. Failure of the second test to demonstrate compliance may be grounds for immediate revocation of this permit to operate the affected facility.

PSD Minor Source Limit

10. That the input VOC of the spray booth (SB-8) shall be limited to 39 tons per year, rolled on a monthly basis. This is equivalent to a potential to emit VOC of 39 tons per 365 consecutive day period. 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.

11. Record Keeping Requirements

- (a) To document compliance with Operating Condition #8(a)(b), the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (5) shall be complete and sufficient to establish compliance with the VHAP usage limits established in Operating Condition #8:

- (1) Certified product Data Sheet for each finishing material, thinner, contact adhesive and strippable booth coating.
- (2) The HAP content in pounds of VHAP per pounds of solids, as applied, for all finishing materials and contact adhesives used.
- (3) The VOC content in pounds of VOC per pounds of solids, as applied, for each strippable coating used.
- (4) The VHAP content in weight percent of each thinner used.
- (5) Copies of the averaging calculations for each month as well as the data on the quantity of coating and thinners used to calculate the average.

To document compliance with Operating Condition #8(c) the Permittee shall maintain records demonstrating actions have been taken to fulfill the requirements of the Work Practice Implementation Plan.

- (b) A log of information necessary to document compliance with operating condition #10 shall be kept monthly and shall include source-wide quantities, densities, and organic solvent contents of all coatings, solvent thinners and cleaners used, material safety data sheet (MSDS), and the date of use to assure that VOC emissions do not exceed 39.0 tons per year.

Volatile Organic Compound (VOC) Limitations

12. That pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet coating), the surface coatings applied to wood furniture and/or wood components 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.

Annual Emission Reporting

13. 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 July 1 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 January 1 and ending December 31.

Opacity Limitations

14. 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

15. 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)].
16. 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 paint booth is in operation.
 - (b) The paint operation shall comply with 326 IAC 6-3-2(c) using the following equation:

(use this equation if P is equal to or less than 60,000 lbs/hr (30 tons/hr)):

$$E = 4.10P^{0.67}$$
 where: E = rate of emission in pounds per hour,
P = 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.

Reporting Requirements

17. That a log of information necessary to document compliance with operation permit condition no.10 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 the following:

1. Source-wide VOC usage in tons per month, including coating, thinner and clean up solvent usage, material safety data sheets (MSDS) and the dates of use;
2. A log of information necessary to document compliance with operating condition #8, including the following:
 - (A) An Initial Compliance Report to document compliance with Operating Condition #8 and the Certification form, shall be submitted within sixty (60) calendar days following the compliance date of December 7, 1998. The initial compliance report must include data from the entire month that the compliance date falls.
 - (B) A semi-annual Continuous Compliance Report to document compliance with Operating Condition #8, and the Certification form, shall be submitted to the above address within thirty (30) days after the end of the six (6) months being reported.

The six (6) month periods shall cover the following months:

- (1) January 1 through June 30.
- (2) July 1 through December 30.

The six (6) month period shall begin on the first day of the month after which the operation commences

- (b) Unless otherwise specified in this permit, any notice, report, or other submissions required by this permit shall be timely if:
 - (1) Postmarked on or before the date it is due; or
 - (2) 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

18. 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. If after this time, the Permittee does not submit an approvable ERP, IDEM, OAM, shall supply such a plan.
- (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]

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION**

Quarterly Report

Source Name: Jasper Desk Company, Inc
Source Address: 415 East Sixth St., Jasper, Indiana 47546
Mailing Address: 415 East Sixth St., Jasper, Indiana 47546
Facility: Spray Booth 8 (SB-8)
Limit: VOC usage limited to 39 tons per year, rolled monthly.

YEAR: _____

Month	VOC Usage	VOC Usage	VOC Usage
	This Month (tons)	Previous 11 Months (tons)	12 Month Total (tons/yr)

- 9 No deviation occurred in this quarter.
- 9 Deviation/s occurred in this quarter.
Deviation has been reported on: _____

Submitted by: _____
Title / Position: _____
Signature: _____
Date: _____
Phone: _____

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 ? X, 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: Jasper Desk Company, Inc. PHONE NO. (812) 482-4132

LOCATION: (CITY AND COUNTY) Jasper, Dubois County

PERMIT NO. 037-9681 AFS PLANT ID: 037-00007 AFS POINT ID: S/V ID 15 INSP: RCS
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, SO2, 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: _____

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 SO₂, 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:

Indiana Department of Environmental Management Office of Air Management

Technical Support Document (TSD) for New Construction and Operation

Source Background and Description

Source Name: Jasper Desk Company, Inc.
 Source Location: 415 East Sixth St., Jasper, Indiana 47546
 County: Dubois
 Construction Permit No.: CP-037-9681-00007
 SIC Code: 2521
 Permit Reviewer: Jeremy Magliaro/EVP

The Office of Air Management (OAM) has reviewed an application from Jasper Desk Company, Inc. relating to the construction and operation of a new surface coating booth, consisting of the following equipment:

- (a) One (1) spray paint booth, identified as SB-8, utilizing high volume-low pressure (HVLP) spray technology, with a maximum capacity of coating 6.7 wooden desks per hour, and exhausting through one (1) stack (S/V ID 15).

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
15	SB-8	46	2	8,500	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.

A complete application for the purposes of this review was received on April 15, 1998.

Emissions Calculations

See Appendix A (Emissions Calculation Spreadsheets) for detailed calculations (two (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)	--	5.29
Particulate Matter (PM10)	--	5.29
Sulfur Dioxide (SO ₂)	--	--
Volatile Organic Compounds (VOC)	--	80.30
Carbon Monoxide (CO)	--	--
Nitrogen Oxides (NO _x)	--	--
Single Hazardous Air Pollutant (HAP)	--	41.90
Combination of HAPs	--	46.22

- (a) The potential emissions 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.
- (c) Allowable emissions (as defined in the Indiana Rule) of a single hazardous air pollutant (HAP) are greater than 10 tons per year and 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. Dubois County has been designated as attainment or unclassifiable 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) Dubois 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 Part 70 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	18.05
PM10	18.05
SO ₂	--
VOC	293.26
CO	--
NO _x	--

- (a) This existing source is a major stationary source because at least one attainment regulated pollutant is emitted at a rate of 250 tons per year.
- (b) These emissions were based on the Part 70 application submitted by the company.

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 ₂ (ton/yr)	VOC (ton/yr)	CO (ton/yr)	NO _x (ton/yr)
Proposed Modification	1.06	1.06	--	39.0	--	--
PSD Threshold Level	25	15	40	40	100	40

The source shall limit VOC usage at booth SB-8 to 39 tons per year to avoid the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration).

This modification to an existing minor stationary source is not major because the emission increase is less than the PSD significant levels. 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-037-5991-00007) application on June 3, 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 (40 CFR Part 60), 326 IAC 12, that are 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 December 7, 1998.
- (b) Pursuant to 40 CFR 63, Subpart JJ, the wood furniture coating operations shall comply with the following conditions:
 - (1) Limit the Volatile Hazardous Air Pollutants (VHAP) emissions from finishing operations as follows:
 - (A) Achieve a weighted average volatile hazardous air pollutant (VHAP) content across all coatings of one (1.0) pound VHAP per pound solids.
 - (B) 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
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids; or
 - (D) Use a combination of (A), (B), and (C).
 - (2) Limit VHAP emissions contact adhesives as follows:
 - (A) 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.
 - (B) For all other contact adhesives (except aerosols and contact adhesives applied to nonporous substrates) the VHAP content shall not exceed (1.0) pound for pound VHAP per pound solids.
 - (C) Use a control device to limit emissions to one (1.0) pound VHAP per pound solids.
 - (3) The strippable spray booth material shall have a maximum VOC content of eight-tenths pounds VOC per pounds solids.

(c) Work Practice Standards [40 CFR 63.803]

Pursuant to 40 CFR 63 Subpart JJ, the owner or operator of an affected source 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.

- (1) Operator training course;
- (2) Leak inspection and maintenance plan;
- (3) Cleaning and washoff solvent accounting system;
- (4) Chemical composition of cleaning and washoff solvents;
- (5) Spray booth cleaning;
- (6) Storage requirements;
- (7) Conventional air spray guns shall only be used under the circumstances defined under 40 CFR 63.803(h);
- (8) Line cleaning;
- (9) Gun cleaning;
- (10) Washoff operations; and
- (11) Formulation assessment plan for finishing operations.

State Rule Applicability

326 IAC 2-2 (Prevention of Significant Deterioration)

The source has existing potential VOC emissions of 293.26 tons per year, therefore, pursuant to 326 IAC 2-2 (Prevention of Significant Deterioration), it is a major source. The potential VOC emissions from this modification shall be limited to 39 tons per year to avoid the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration). This construction will qualify as a minor modification to a major source.

326 IAC 2-6 (Emission Reporting)

This facility is subject to 326 IAC 2-6 (Emission Reporting), because the source emits more than 100 tons/yr of VOC. 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 July 1 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 thirty percent (30%) 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)

Pursuant to 326 IAC 6-3-2 (Process Operations) the particulate matter (PM) overspray from SB-8 shall be limited by the following:

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:

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

The dry filters shall be in place at all times the surface coating booth (SB-8) is in operation.

326 IAC 6-4 (Fugitive Dust Emissions)

The wood furniture manufacturing plant shall comply with the fugitive dust limitations outlined in 326 IAC 6-4 (Fugitive Dust Emissions). No fugitive dust emissions shall be visible crossing the boundary or property line of the source.

326 IAC 8-2-12 (Wood Furniture and Cabinet Coating)

The spray booth SB-8 will apply coatings to wooden desks, therefore, it is subject to the requirements of 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating). Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coatings applied to wood furniture and/or wood components 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

Spray Booth SB-8 utilizes HVLP spray technology, and is therefore in compliance with 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating).

326 IAC 8-11 (Wood Furniture Coatings)

This rule applies to any wood manufacturing operation with potential VOC emissions of twenty-five (25) tons or more per year, located in Lake, Porter, Clark, or Floyd counties. Jasper Desk Company, Inc., is located in Dubois county, therefore, this rule does not 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 greater than those that constitute major source applicability according to Section 112 of the Clean Air Act. The concentrations of these air toxics were modeled and found to be (in worst case possible) as follows: The concentrations of these air toxics were compared to the Permissible Exposure Limits (PEL) developed by the Occupational Safety and Health Administration (OSHA). The Office of Air Management (OAM) does not have at this time any specific statutory or regulatory authority over these substances.
- (b) The applicant has been notified in writing that the air toxic emissions exceed the major source applicability levels stated by Section 112 of the Clean Air Act Amendments, and that it would be beneficial, both to the applicant and to the public, for the applicant to take steps to reduce or eliminate these air toxic emissions.

Air Toxic Emissions

Pollutant	Rate (lb/hr)	Rate @ 8,760 hr/yr (ton/yr)	Modeled Concentration (Fg/m3)	OSHA PEL (Fg/m3)	% OSHA PEL
Xylene	0.02	0.09	699.4	435,000	0.00
Toluene	1.00	4.38	699.4	752,000	0.01
Formaldehyde	0.02	0.09	699.4	93,000	0.19
Glycol Ethers	0.99	4.32	699.4	606,000	0.01
Methyl ethyl ketone (MEK)	0.76	3.35	699.4	590,000	0.01
Methanol	9.57	41.90	699.4	260,000	0.32

- (c) See attached spreadsheets for detailed air toxic calculations.

Conclusion

The construction of this surface coating booth will be subject to the conditions of the attached proposed **Construction Permit No. CP-037-9681-00007**.

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

Jasper Desk Company, Inc.
415 East Sixth Street
Jasper, Indiana 47546

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 Jasper Desk Company, Inc., 415 East Sixth St., Jasper, Indiana, 47546, has constructed the spray booth in conformity with the requirements and intent of the construction permit application received by the Office of Air Management on April 15, 1998 and as permitted pursuant to **Construction Permit No. CP-037-9681**, **Plant ID No. 037-00007** issued on _____.

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: Jasper Desk Company, Inc.
Address City IN Zip: 415 East Sixth St, Jasper, IN 47546
CP: 037-9681
PI ID: 037-00007
Reviewer: JM/EVP
Date:

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	
NGR Stain	SB-8	6.84	98.40%	0.00%	98.40%	0.00%	0.00%	0.234	6.70	6.7	6.73	10.55	253.25	46.22	0.30	ERR	0.6	
Precatolyzed sealer	SB-8	7.52	73.20%	0.00%	73.20%	0.00%	19.50%	0.211	6.70	5.5	5.50	7.78	186.77	34.08	4.99	47.05	0.6	
Total State Potential Emissions:												18.33	440.02	80.30	5.29			
Federal Potential Emissions (controlled):																		
										Control Efficiency:		Controlled VOC lbs per Hour	Controlled VOC lbs per Day	Controlled VOC tons per Year	Controlled PM tons/yr			
										VOC	PM							
Total Federal Potential Emissions:										0.00%	80.00%	18.33	440.02	80.30	1.06			

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)

Material	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % Xylene	Weight % Toluene	Weight % Formaldehyde	Weight % MEK	Weight % Glycol Ethers	Weight % Methanol	Xylene Emissions (ton/yr)	Toluene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Methyl ethyl ketone (MEK) (ton/yr)	Glycol Ethers Emissions (ton/yr)	Methanol Emissions (ton/yr)	Total Emissions (ton/yr)
NGR Stain	6.84	0.234	6.70	0.00%	0.00%	0.00%	0.00%	9.20%	89.20%	0.00	0.00	0.00	0.00	4.32	41.90	46.22
Precatolyzed sealer	7.52	0.211	6.70	0.20%	9.40%	0.20%	7.20%	0.00%	0.00%	0.09	4.38	0.09	3.35	0.00	0.00	7.92

Total State Potential Emissions 0.09 4.38 0.09 3.35 4.32 41.90

The worst case single HAP is methanol = 41.90 tons per year.
 The worst case total HAPs = 45.70 tons per year.

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