

CONSTRUCTION PERMIT
OFFICE OF AIR MANAGEMENT

Schrock Cabinet Company
701 South "N" Street
Richmond, Indiana 47374

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 Part 52.780, with conditions listed on the attached pages.

Construction Permit No.: CP 177-9892-00015	
Issued by: Paul Dubenetzky, Branch Chief Office of Air Management	Issuance Date:

SECTION A

SOURCE SUMMARY

This permit is based on information requested by the Indiana Department of Environmental Management (IDEM), Office of Air Management (OAM). The information describing the source contained in conditions A.1 through A.2 is descriptive information and does not constitute enforceable conditions. However, the Permittee should be aware that a physical change or a change in the method of operation that may render this descriptive information obsolete or inaccurate may trigger requirements for the Permittee to obtain additional permits or seek modification of this permit pursuant to 326 IAC 2, or change other applicable requirements presented in the permit application.

A.1 General Information

The Permittee owns and operates a stationary wood cabinet manufacturing operation.

Responsible Official: Schrock Cabinet Company
Source Address: 701 South "N" Street, Richmond, Indiana, 47374
Mailing Address: P.O. Box 1567, Richmond, Indiana, 47374
SIC Code: 2434
County Location: Wayne
County Status: Attainment for all criteria pollutants
Source Status: Minor Source, under PSD Rules;
Major Source, Section 112 of the Clean Air Act

A.2 Emission Units and Pollution Control Equipment Summary

The source is hereby authorized to construct the following emission units and pollution control devices:

- (a) Monorail Line # 2 surface coating booths, including:
 - (1) Four (4) stain booths identified as # 18 through # 21, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns with dry filters for control, exhausting to stacks # 18 through # 21.
 - (2) Three (3) sealer booths identified as # 22 through # 24, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns, with dry filters for control, exhausting to stacks # 22 through # 24.
 - (3) Two (2) topcoat booths identified as # 25 and # 26, with a maximum capacity of 57 units per hour, utilizing air assisted airless or HVLP spray guns, with dry filters for control, exhausting to stacks # 25 and # 26.
- (b) Monorail Line # 2 natural gas fired drying ovens, including:
 - (1) One (1) drying oven, rated at 0.5 MMBtu per hour, identified as # O5, exhausting at stack # O5.
 - (2) Two (2) dying ovens, each rated at 1.5 MMBtu per hour; identified as # O6 and # O7, exhausting at stacks # O6 and # O7;
- (c) Two (2) natural gas fired air handlers, each rated at 7.5 MMBtu per hour, identified as AH-4 and AH-5, exhausting at stacks # AH-4 and # AH-5.

SECTION B GENERAL CONSTRUCTION AND OPERATION CONDITIONS

THIS SECTION OF THE PERMIT IS BEING ISSUED UNDER THE PROVISIONS OF 326 IAC 2-1 AND 40 CFR 52.780, WITH CONDITIONS LISTED BELOW.

Construction Conditions [326 IAC 2-1-3.4]

B.1 General Construction Conditions

- (a) The data and information supplied in the application shall be considered technical support data for the determination 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).
- (b) 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.

B.2 Effective Date of Permit

Pursuant to IC 13-15-5-3, this permit becomes effective upon its issuance.

B.3 Revocation of Permits [326 IAC 2-1-9(b)]

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.

B.4 Permit Review Rules [326 IAC 2]

Notwithstanding Construction Condition B.5, 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).

B.5 First Time Operation Permit

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 (T177-5977-00015) on May 31, 1996, for the existing source. The equipment being reviewed under this permit shall be incorporated in the submitted Part 70 application.

Operation Conditions

B.6 General Operation Conditions

- (a) The data and information supplied in the application shall be considered technical support data for the determination 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).
- (b) 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.

B.7 Preventive Maintenance Plan [326 IAC 1-6-3]

- (a) If required by specific condition(s) in Section D of this permit, the Permittee shall prepare and maintain Preventive Maintenance Plans (PMP) within ninety (90) days after issuance of this permit, including the following information on each:
 - (1) Identification of the individual(s) responsible for inspecting, maintaining, and repairing emission control devices;
 - (2) A description of the items or conditions that will be inspected and the inspection schedule for said items or conditions;
 - (3) Identification and quantification of the replacement parts that will be maintained in inventory for quick replacement.

If due to circumstances beyond its control, the PMP cannot be prepared and maintained within the above time frame, the Permittee may extend the date an additional ninety (90) days provided the Permittee notifies:

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

- (b) The Permittee shall implement the Preventive Maintenance Plans as necessary to ensure that lack of proper maintenance does not cause or contribute to a violation of any limitation on emissions or potential to emit.
- (c) PMP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM.

B.8 Transfer of Permit [326 IAC 2-1-6]

- (a) In the event that ownership of this source is changed, the Permittee shall notify IDEM, OAM, Permit Branch, within thirty (30) days of the change. Notification shall include a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the Permittee and the new owner.
- (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.

B.9 Permit Revocation [326 IAC 2-1-9(a)]

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).

B.10 Availability of Permit [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.

B.11 Malfunction Condition [326 IAC 1-6-2]

- (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]

B.12 Permit No Defense [326 IAC 2-1-10] [IC 13]

Indiana statutes from IC 13 and rules from 326 IAC, quoted in conditions in this permit, are those applicable at the time the permit was issued. The issuance or possession of this permit shall not alone constitute a defense against an alleged violation of any law, regulation or standard.

SECTION C SOURCE OPERATION CONDITIONS

Entire Source

Emission Limitations and Standards

C.1 PSD Minor Source Status [326 IAC 2-2] [40 CFR 52.21]

The total source potential to emit VOC is limited to less than 250 tons per year. Therefore, the requirements of 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 will not apply.

C.2 Opacity [326 IAC 5-1]

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 in 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.

C.3 Open Burning [326 IAC 4-1] [IC 13-17-9]

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. The previous sentence notwithstanding, the Permittee may open burn in accordance with an open burning approval issued by the Commissioner under 326 IAC 4-1-4.1. 326 IAC 4-1-3 (a)(2)(A) and (B) are not federally enforceable.

C.4 Incineration [326 IAC 4-2][326 IAC 9-1-2]

The Permittee shall not operate an incinerator or incinerate any waste or refuse except as provided in 326 IAC 4-2 and 326 IAC 9-1-2.

C.5 Operation of Equipment

All air pollution control equipment listed in this permit and used to comply with an applicable requirement shall be operated at all times that the emission units vented to the control equipment are in operation.

C.6 Stack Height [326 IAC 1-7]

The Permittee shall comply with the applicable provisions of 326 IAC 1-7 (Stack Height Provisions), for all exhaust stacks through which a potential (before controls) of twenty-five (25) tons per year or more of particulate matter or sulfur dioxide is emitted.

Testing Requirements

C.7 Performance Testing [326 IAC 3-6]

- (a) All testing shall be performed according to the provisions of 326 IAC 3-6 (Source Sampling Procedures), except as provided elsewhere in this permit, utilizing methods approved by IDEM, OAM.

A test protocol, except as provided elsewhere in this permit, 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

no later than thirty-five (35) days prior to the intended test date. The Permittee shall submit a notice of the actual test date to the above address so that it is received at least two weeks prior to the test date.

- (b) All test reports must be received by IDEM, OAM within forty-five (45) days after the completion of the testing. An extension may be granted by the Commissioner, if the source submits to IDEM, OAM, a reasonable written explanation within five (5) days prior to the end of the initial forty-five (45) day period.

Corrective Actions and Response Steps

C.8 Emergency Reduction Plans [326 IAC 1-5-2] [326 IAC 1-5-3]

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 ninety (90) days after the date of issuance 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 episode level. [326 IAC 1-5-3]

C.9 Compliance Monitoring Plan - Failure to Take Response Steps [326 IAC 1-6]

- (a) The Permittee is required to implement a compliance monitoring plan to ensure that reasonable information is available to evaluate its continuous compliance with applicable requirements. This compliance monitoring plan is comprised of:

- (1) This condition;
- (2) The Compliance Determination Requirements in Section D of this permit;

- (3) The Compliance Monitoring Requirements in Section D of this permit;
 - (4) The Record Keeping and Reporting Requirements in Section C (Monitoring Data Availability, General Record Keeping Requirements, and General Reporting Requirements) and in Section D of this permit; and
 - (5) A Compliance Response Plan (CRP) for each compliance monitoring condition of this permit. CRP's shall be submitted to IDEM, OAM, upon request and shall be subject to review and approval by IDEM, OAM. The CRP shall be prepared within ninety (90) days after issuance of this permit by the Permittee and maintained on site, and is comprised of :
 - (A) Response steps that will be implemented in the event that compliance related information indicates that a response step is needed pursuant to the requirements of Section D of this permit; and
 - (B) A time schedule for taking such response steps including a schedule for devising additional response steps for situations that may not have been predicted.
- (b) For each compliance monitoring condition of this permit, appropriate response steps shall be taken when indicated by the provisions of that compliance monitoring condition. Failure to perform the actions detailed in the compliance monitoring conditions or failure to take the response steps within the time prescribed in the Compliance Response Plan, shall constitute a violation of the permit unless taking the response steps set forth in the Compliance Response Plan would be unreasonable.
- (c) After investigating the reason for the excursion, the Permittee is excused from taking further response steps for any of the following reasons:
- (1) The monitoring equipment malfunctioned, giving a false reading. This shall be an excuse from taking further response steps providing that prompt action was taken to correct the monitoring equipment.
 - (2) The Permittee has determined that the compliance monitoring parameters established in the permit conditions are technically inappropriate, has previously submitted a request for an administrative amendment to the permit, and such request has not been denied or;
 - (3) An automatic measurement was taken when the process was not operating; or
 - (4) The process has already returned to operating within "normal" parameters and no response steps are required.
- (d) Records shall be kept of all instances in which the compliance related information was not met and of all response steps taken. In the event of an emergency, the provisions of 326 IAC 2-7-16 (Emergency Provisions) requiring prompt corrective action to mitigate emissions shall prevail.

C.10 Actions Related to Noncompliance Demonstrated by a Stack Test

- (a) When the results of a stack test performed in conformance with Section C - Performance Testing, of this permit exceed the level specified in any condition of this permit, the Permittee shall take appropriate corrective actions. The Permittee shall submit a description of these corrective actions to IDEM, OAM, within thirty (30) days of receipt of the test results. The Permittee shall take appropriate action to minimize emissions from the affected facility while the corrective actions are being implemented. IDEM, OAM shall notify the Permittee within thirty (30) days, if the corrective actions taken are deficient. The Permittee shall submit a description of additional corrective actions taken to IDEM, OAM within thirty (30) days of receipt of the notice of deficiency. IDEM, OAM reserves the authority to use enforcement activities to resolve noncompliant stack tests.
- (b) A retest to demonstrate compliance shall be performed within one hundred twenty (120) days of receipt of the original test results. Should the Permittee demonstrate to IDEM, OAM that retesting in one-hundred and twenty (120) days is not practicable, IDEM, OAM may extend the retesting deadline. Failure of the second test to demonstrate compliance with the appropriate permit conditions may be grounds for immediate revocation of the permit to operate the affected facility.

Record Keeping and Reporting Requirements

C.11 Emission Statement [326 IAC 2-6]

- (a) The Permittee shall submit an annual emission statement certified pursuant to the requirements of 326 IAC 2-6, that 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 emission statement shall meet the following requirements:
- (1) Indicate actual emissions of criteria pollutants from the source, in compliance with 326 IAC 2-6 (Emission Reporting);
 - (2) Indicate actual emissions of other regulated pollutants from the source, for purposes of Part 70 fee assessment.
- (b) The annual emission statement covers the twelve (12) consecutive month time period starting January 1 and ending December 31. The annual emission 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
- (c) The annual emission statement required by this permit shall be considered timely if the date postmarked on the envelope or certified mail receipt, or affixed by the shipper on the private shipping receipt, is on or before the date it is due. If the document is submitted by any other means, it shall be considered timely if received by IDEM, OAM, on or before the date it is due.

SECTION D FACILITY OPERATION CONDITIONS

- (a) Monorail Line # 2 surface coating booths, including:
- (1) Four (4) stain booths identified as # 18 through # 21, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns with dry filters for control, exhausting to stacks # 18 through # 21.
 - (2) Three (3) sealer booths identified as # 22 through # 24, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns, with dry filters for control, exhausting to stacks # 22 through # 23.
 - (3) Two (2) topcoat booths, identified as # 25 and # 26, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns, with dry filters for control, exhausting to stacks # 25 and # 26.
- (b) Monorail Line # 2 natural gas fired drying ovens, including:
- (1) One (1) drying oven, rated at 0.5 MMBtu per hour, identified as # O5, exhausting at stack # O5.
 - (2) Two (2) drying ovens, each rated at 1.5 MMBtu per hour; identified as # O6 and # O7, exhausting at stacks # O6 and # O7;
- (c) Two (2) natural gas fired air handlers, each rated at 7.5 MMBtu per hour, identified as AH-4 and AH-5, exhausting at stacks # AH-4 and # AH-5.

Emission Limitations and Standards

D.1 PSD Minor Limit [326 IAC 2-2] [40 CFR 52.21]

- (a) The input of VOC to all of the existing and new surface coating facilities, including the Case Line, Custom Lines, Monorail Line # 1, Monorail Line # 2, Stack Spray Line, and the UV Flatline shall be limited to 246 tons per twelve (12) consecutive month period.
- (b) VOC input shall include any clean up solvent, minus any VOC solvent shipped out.
- (c) Compliance shall be demonstrated at the end of each month based on the total ton usage for the most recent twelve (12) month period. This VOC usage limitation is equivalent to VOC emissions of 246 tons per twelve (12) month total, rolled on a monthly basis. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable to this modification.
- (d) During the first twelve (12) months of operation, the input of VOC to the coating facilities shall be limited such that the total usage divided by the accumulated months of operation shall not exceed the limit specified.

D.2 Wood Furniture NESHAP [40 CFR 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 November 21, 1997.
- (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; or
 - (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. All other thinners have a ten percent (10.0%) 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 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 (0.8) pounds VOC per pound solids.

D.3 Work Practice Standards [40 CFR 63.803]

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.

D.4 Volatile Organic Compounds (VOC) [326 IAC 8-2-12]

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one 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) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to 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.

D.5 Particulate Matter (PM) [326 IAC 6-3-2(c)]

The PM from each of the nine (9) coating booths (# 18 through # 26) shall not exceed the pound per hour emission rate established as E in the following formula:

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:

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

D.6 Preventive Maintenance Plan

A Preventive Maintenance Plan, in accordance with Section B - Preventive Maintenance Plan, of this permit, is required for these facilities and any control devices.

Compliance Determination Requirements

D.7 Testing Requirements [40 CFR 63]

- (a) Pursuant to 40 CFR 63, Subpart JJ, if the Permittee elects to demonstrate compliance using 63.804(a)(3) or 63.804(c)(2) or 63.804(d)(3) or 63.804(e)(2), performance testing must be conducted in accordance with 40 CFR 63, Subpart JJ and 326 IAC 3-6.
- (b) The Permittee is not required to test this facility by this permit. However, IDEM may require compliance testing at any specific time when necessary to determine if the facility is in compliance. If testing is required by IDEM, compliance with the VOC and PM limits specified in Conditions D.1, D.2 and D.5 shall be determined by a performance test conducted in accordance with Section C - Performance Testing.

D.8 Volatile Organic Compounds (VOC)

Compliance with the VOC content and usage limitations contained in Conditions D.1 and D.2 shall be determined pursuant to 326 IAC 8-1-4(a)(3) and 326 IAC 8-1-2(a) using formulation data supplied by the coating manufacturer. IDEM, OAM, reserves the authority to determine compliance using Method 24 in conjunction with the analytical procedures specified in 326 IAC 8-1-4.

D.9 VOC Emissions

Compliance with Condition D.1 shall be demonstrated at the end of each month based on the total volatile organic compound usage for the most recent twelve (12) month period.

Compliance Monitoring Requirements

D.10 Particulate Matter (PM)

The dry filters for PM control shall be in operation at all times when the Monorail Line # 2 coating booths (# 18 through # 26) are in operation.

D.11 Monitoring

- (a) Daily inspections shall be performed to verify the placement, integrity and particle loading of the filters. To monitor the performance of the dry filters, daily observations shall be made of the overspray from the surface coating booth stacks (#18 through #26) while one or more of the booths are in operation. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (b) Weekly inspections shall be performed of the coating emissions from the stack and the presence of overspray on the rooftops and the nearby ground. The Compliance Response Plan for this unit shall contain troubleshooting contingency and response steps for when a noticeable change in overspray emissions, or evidence of overspray emission is observed. The Compliance Response Plan shall be followed whenever a condition exists which should result in a response step. Failure to take response steps in accordance with Section C - Compliance Monitoring Plan - Failure to Take Response Steps, shall be considered a violation of this permit.
- (c) Additional inspections and preventive measures shall be performed as prescribed in the Preventive Maintenance Plan.

Record Keeping and Reporting Requirements

D.12 Record Keeping Requirements: PSD Minor Limit

To document compliance with Condition D.1, the Permittee shall maintain records in accordance with (1) through (5) below. Records maintained for (1) through (4) shall be taken monthly. Records shall be complete and sufficient to establish compliance with the VOC usage limits and/or the VOC emission limits established in Condition D.1, and to document the quantity of any VOC shipped offsite and deducted from total reported VOC usage.

- (1) The amount and VOC content of each coating material and solvent used. Records shall include purchase orders, invoices, material safety data sheets (MSDS), and any other records necessary to verify the type and amount used. Solvent usage records shall differentiate between those added to coatings and those used as cleanup solvents;
- (2) The quantity of cleanup solvent shipped out each month. Non-VOC waste shall not be commingled with VOC containing waste, if the VOC content of waste shipped offsite is deducted from the reported monthly VOC usage;
- (3) The total VOC usage for each month;
- (4) The weight of VOCs emitted for each compliance period; and

- (5) The results of the laboratory analysis of the VOC content of the solvent collected and drummed for disposal offsite. A representative sample of the VOC solvent to be shipped offsite shall be analyzed each quarter if the solvent VOC content is deducted from the monthly VOC usage reported. After one year from the issuance date of this permit the source may request to have the frequency of analysis changed. Volatile Organic Compound (VOC) is defined in 326 IAC 1-2-90.

D.13 Record Keeping Requirements: NESHAP

- (a) To document compliance with Condition D.2, 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 Condition D.2.
- (1) Certified Product Data Sheet for each finishing material, thinner, clean up solvent, 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) When the averaging compliance method is used, 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.
- (b) To document compliance with Condition D.3, the Permittee shall maintain records demonstrating actions have been taken to fulfill the Work Practice Implementation Plan.

D.14 Record Keeping Requirements: Particulate Matter

To document compliance with Condition D.10 and D.11, the Permittee shall maintain a log of daily overspray observations, daily and weekly inspections, and those additional inspections prescribed by the Preventive Maintenance Plan.

D.15 Reporting Requirements: PSD Minor Limit

- (a) A quarterly summary of the information to document compliance with Condition D.1 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

using the reporting form located at the end of this permit, or the equivalent, within thirty (30) days after the end of the quarter being reported.

- (b) Records used to determine VOC use shall include the coating, thinner and clean up solvent usage, material safety data sheet (MSDS) and any additional information necessary to determine the VOC content, and the date of use. The laboratory analysis of the representative VOC content and the quantity of the solvent collected and drummed for disposal offsite shall be used to determine the VOC shipped offsite, if the solvent VOC content is deducted from the monthly VOC usage reported.

- (c) A material safety data sheet (MSDS) and any additional information necessary to determine the VOC content for each coating and solvent shall be available for inspection at the facility, and the most accurate information available shall be used in determining VOC usage. The VOC content of the solvent collected and drummed for disposal offsite shall be reported in each quarterly report if the solvent VOC content is deducted from the monthly VOC usage reported.

D.16 Reporting Requirements: NESHAP

- (a) A semi-annual Continuous Compliance Report to document compliance with Condition D.2 and the Certification form, shall be submitted within thirty (30) days after the end of the six (6) months being reported.

For the first year following the compliance date, the Continuous Compliance Reports shall cover the following months:

- (1) November 21, 1997 through May 20, 1998.
 - (2) May 21 through November 30, 1998.
 - (3) December 1 through December 31, 1998.
- (b) Following the first year of reporting, the semi-annual Continuous Compliance Report shall be submitted on a calendar year basis with the reporting periods ending June 30 and December 31.
 - (c) The reports required in (a) and (b) of this condition 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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

**INDIANA DEPARTMENT OF ENVIRONMENTAL MANAGEMENT
OFFICE OF AIR MANAGEMENT
COMPLIANCE DATA SECTION
P.O. Box 6015
100 North Senate Avenue
Indianapolis, Indiana 46206-6015
Phone: 317-233-5674
Fax: 317-233-5967**

**PART 70 OPERATING PERMIT
EMERGENCY/DEVIATION OCCURRENCE REPORT**

Source Name: Schrock Cabinet Company
Source Address: 701 South "N" Street, Richmond, Indiana 47374
Mailing Address: P.O. Box 1567, Richmond, Indiana 47374
Permit No./Plt ID: CP 177-9892-00015

This form consists of 2 pages

Page 1 of 2

Check either No. 1 or No.2	
9	1. This is an emergency as defined in 326 IAC 2-7-1(12) C The Permittee must notify the Office of Air Management (OAM), within four (4) business hours (1-800-451-6027 or 317-233-5674, ask for Compliance Section); and C The Permittee must submit notice in writing or by facsimile within two (2) days (Facsimile Number: 317-233-5967), and follow the other requirements of 326 IAC 2-7-16
9	2. This is a deviation, reportable per 326 IAC 2-7-5(3)(c) C The Permittee must submit notice in writing within ten (10) calendar days

If any of the following are not applicable, mark N/A

Facility/Equipment/Operation:
Control Equipment:
Permit Condition or Operation Limitation in Permit:
Description of the Emergency/Deviation:
Describe the cause of the Emergency/Deviation:

If any of the following are not applicable, mark N/A

Page 2 of 2

Date/Time Emergency/Deviation started:
Date/Time Emergency/Deviation was corrected:
Was the facility being properly operated at the time of the emergency/deviation? Y N Describe:
Type of Pollutants Emitted: TSP, PM-10, SO ₂ , VOC, NO _x , CO, Pb, other:
Estimated amount of pollutant(s) emitted during emergency/deviation:
Describe the steps taken to mitigate the problem:
Describe the corrective actions/response steps taken:
Describe the measures taken to minimize emissions:
If applicable, describe the reasons why continued operation of the facilities are necessary to prevent imminent injury to persons, severe damage to equipment, substantial loss of capital investment, or loss of product or raw materials of substantial economic value:

Form Completed by: _____
Title / Position: _____
Date: _____
Phone: _____

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

Quarterly Report
 VOC Usage - PSD Minor Limit

Source Name: Schrock Cabinet Company
 Source Address: 701 South "N" Street, Richmond, Indiana 47374
 Mailing Address: P.O. Box 1567, Richmond, Indiana 47374
 Permit No./Plt ID: CP 177-9892-00015
 Facility: surface coating
 Parameter: VOC
 Limit: 246 tons per year

YEAR: _____

Month	Column 1	Column 2	Column 3	Column 4	Column 5
	Total VOC This Month	VOC Drummed for Offsite Disposal This Month	VOC Usage This Month (Column 1 - Column 2)	Previous 11 Months	12 Month Total (Column 3 + Column 4)
1					
2					
3					

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: _____

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

Semi-Annual Report

VOC and VHAP Usage - Wood Furniture NESHAP

Source Name: Schrock Cabinet Company
 Source Address: 701 South "N" Street, Richmond, Indiana 47374
 Mailing Address: P.O. Box 1567, Richmond, Indiana 47374
 Permit No./Plt ID: CP 177-9892-00015
 Facility: Surface Coating
 Parameter: VOC and VHAPs - NESHAP
 Limit:
 (1) Finishing operations -1.0 lb VHAP/lb Solids
 (2) Thinners used for on-site formulation of washcoats, basecoats and enamels
 - 3% VHAP content by weight
 (3) All other thinner mixtures - 10% VHAP content by weight
 (4) Foam adhesives meeting the upholstered seating flammability requirements
 - 1.8 lb VHAP/lb Solids
 (5) All other contact adhesives - 1.0 lb VHAP/lb Solids
 (6) Strippable spray booth material - 0.8 pounds VOC per pound solids

YEAR: _____

Month	Finishing Operations (lb VHAP/lb Solid)	Thinners used for on-site formulation (% by weight)	All other thinner mixtures (% by weight)	Foam adhesives (upholstered) (lb VHAP/lb Solid)	Contact adhesives (lb VHAP/lb Solid)	Strippable spray booth material (lb VOC/lb Solid)
1						
2						
3						
4						
5						
6						

9 No deviation occurred in this six month period.

9 Deviation/s occurred in this six month period.
 Deviation has been reported on:

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

**Indiana Department of Environmental Management
Office of Air Management**

Technical Support Document (TSD) for New Construction and Operation

Source Background and Description

Source Name: Schrock Cabinet Company
Source Location: 701 South "N" Street, Richmond, Indiana, 47374
County: Wayne
SIC Code: 2434
Construction Permit No.: CP 177-9892-00015
Permit Reviewer: Vickie Cordell

The Office of Air Management (OAM) has reviewed an application from Schrock Cabinet Company relating to the construction and operation of a monorail surface coating line for a wood cabinet manufacturing operation, consisting of the following equipment:

- (a) Monorail Line # 2 surface coating booths, including:
 - (1) Four (4) stain booths identified as # 18 through # 21, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns with dry filters for control, exhausting to stacks # 18 through # 21.
 - (2) Three (3) sealer booths identified as # 22 through # 24, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns, with dry filters for control, exhausting to stacks # 22 through # 24.
 - (3) Two (2) topcoat booths identified as # 25 and # 26, with a maximum throughput of 57 units per hour, utilizing air assisted airless or HVLP spray guns, with dry filters for control, exhausting to stacks # 25 and # 26.
- (b) Monorail Line # 2 natural gas fired drying ovens, including:
 - (1) One (1) drying oven, rated at 0.5 MMBtu per hour, identified as # O5, exhausting at stack # O5.
 - (2) Two (2) drying ovens, each rated at 1.5 MMBtu per hour; identified as # O6 and # O7, exhausting at stacks # O6 and # O7;
- (c) Two (2) natural gas fired air handlers, each rated at 7.5 MMBtu per hour, identified as AH-4 and AH-5, exhausting at stacks # AH-4 and # AH-5.

Existing Approvals

The source has been operating under previous approvals including, but not limited to, the following:

- (1) OP 89-05-91-0186, OP 89-05-91-0187, OP 89-05-91-0188, OP 89-05-91-0189, and OP 89-05-91-0190, issued on May 1, 1991; and
- (2) Registrations issued on April 17, 1986, and November 30, 1987.

Stack Summary

Stack ID	Operation	Height (feet)	Diameter (feet)	Flow Rate (acfm)	Temperature (°F)
#O5	Stain Oven #O5	25	2	2160	180
#O6	Sealer Oven #O6	25	2	2160	180
#O7	Topcoat Oven #O7	25	2	2160	180
18	stain spray booth	25	2.83	15,000	ambient
19	stain spray booth	25	2.83	15,000	ambient
20	stain spray booth	25	2.83	15,000	ambient
21	stain spray booth	25	2.83	15,000	ambient
22	sealer spray booth	25	2.83	15,000	ambient
23	sealer spray booth	25	2.83	15,000	ambient
24	sealer spray booth	25	2.83	15,000	ambient
25	topcoat spray booth	25	2.83	15,000	ambient
26	topcoat spray booth	25	2.83	15,000	ambient

Enforcement Issue

There are no enforcement actions pending.

Recommendation

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

Unless otherwise stated, information 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 30, 1998, with additional information received on July 29, 1998.

Emission Calculations

See Appendix A of this document for detailed emissions calculations (pages 1 through 4).

Total Potential and Allowable Emissions

Indiana Permit Allowable Emissions Definition for the new facilities, Monorail Line # 2 (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)	-----	214.1
Particulate Matter (PM-10)	-----	214.1
Sulfur Dioxide (SO ₂)	-----	0
Volatile Organic Compounds (VOC)	-----	660.2
Carbon Monoxide (CO)	-----	1.7
Nitrogen Oxides (NO _x)	-----	8.1
Single Hazardous Air Pollutant (HAP)	-----	120.2
Combination of HAPs	-----	305.9

Allowable emissions (as defined in the Indiana Rule) of PM and VOC are greater than 25 tons per year, the allowable emissions 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, Sections 1 and 3, a construction permit is required.

County Attainment Status

- (a) Volatile organic compounds (VOC) and oxides of nitrogen (NO_x) are precursors for the formation of ozone. Therefore, VOC emissions are considered when evaluating the rule applicability relating to the ozone standards. Wayne County has been designated as attainment or unclassifiable for ozone. Therefore, VOC and NO_x emissions were reviewed pursuant to the requirements for Prevention of Significant Deterioration (PSD), 326 IAC 2-2 and 40 CFR 52.21.
- (b) Wayne 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 and Part 70 Definition (emissions after controls, based on 8,760 hours of operation per year at rated capacity):

Pollutant	Emissions (ton/yr)
PM	96.7
PM10	not specified
SO ₂	131.9
VOC	1403.0
CO	59.4
NO _x	38.4

- (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 AIRS Facility Quick Look Report, dated April 1, 1998.

Actual Emissions

The following table shows the actual emissions from the source. This information is based on the AIRS Facility Quick Look Report, dated April 1, 1998, and reflects the 1996 OAM emission data.

Pollutant	Emissions (ton/yr)
PM	5.1
PM-10	not specified
SO ₂	5.6
VOC	162.4
CO	4.1
NO _x	2.3

The source has not actually emitted at major source levels and may elect to take a source wide limit to be a minor source pursuant to PSD.

Limited Potential to Emit / Source Status

Proposed Source PSD, 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):

Process/facility	Limited Potential to Emit (tons/year)						
	PM	PM-10	SO ₂	VOC	CO	NO _x	HAPs
New and existing surface coating: Case Line, Custom Lines, Monorail Lines 1 and 2, Stack Spray Line, and UV Flatline	78.2	78.2	0.0	246.0	0.0	0.0	112.0
Existing natural gas combustion	5.7	5.7	0.3	2.6	10.1	48.2	0.0
New natural gas combustion	1.0	1.0	0.0	0.4	1.7	8.1	0.0
Total Emissions	84.9	84.9	0.3	249.0	11.8	56.3	112.0

- (a) This existing source is **not** a major stationary source because no attainment regulated pollutant is emitted at a rate of 250 tons per year or more, and it is not in one of the 28 listed source categories.
- (b) The VOC emissions were based on a source-wide VOC limit of 249 tons per year; all other emissions were based on the Facility Quick Look Report, dated 1996.

Part 70 Permit Determination

326 IAC 2-7 (Part 70 Permit Program)

This existing source has submitted their Part 70 (T-177-5977-00015) application on May 31, 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 63 applicable to this facility.

Pursuant to 40 CFR Part 63, Subpart JJ, National Emission Standards for Wood Furniture Manufacturing Operations, this woodworking operation is subject to 40 CFR Part 63, Subpart JJ (National Emission Standards for Wood Furniture Manufacturing Operations), with a compliance date of November 21, 1997.

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;

or
 - (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. All other thinners have a ten percent (10.0%) 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 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 (0.8) pounds VOC per pound solids.

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.

State Rule Applicability

326 IAC 2-2; 40 CFR 52.21 (PSD Minor Limit)

- (a) The input of VOC to all of the existing and new surface coating facilities, including the Case Line, Custom Lines, Monorail Line # 1, Monorail Line # 2, Stack Spray Line, and the UV Flatline shall be limited to 246 tons per twelve (12) consecutive month period.
- (b) VOC input shall include any clean up solvent, minus any VOC solvent shipped out.
- (c) Compliance shall be demonstrated at the end of each month based on the total ton usage for the most recent twelve (12) month period. This VOC usage limitation is equivalent to VOC emissions of 246 tons per twelve (12) month total, rolled on a monthly basis. Compliance with this limit makes 326 IAC 2-2 (Prevention of Significant Deterioration) and 40 CFR 52.21 not applicable to this modification.
- (d) During the first twelve (12) months of operation, the input of VOC to the coating facilities shall be limited such that the total usage divided by the accumulated months of operation shall not exceed the limit specified.

326 IAC 2-6 (Emission Reporting)

This source is subject to 326 IAC 2-6 (Emission Reporting), because it has the potential to emit more than one hundred (100) tons per year of VOC. Pursuant to this rule, the owner/operator of the source must annually submit an emission statement for the source. The annual statement must be received by July 1 of each year and contain the minimum requirement as specified in 326 IAC 2-6-4. The submittal should cover the period defined in 326 IAC 2-6-2(8)(Emission Statement Operating Year).

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)

The particulate matter (PM) from each of the coating booths 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 operation at all times the coating booths are in operation, in order to comply with this limit.

326 IAC 8-2-12 (Volatile Organic Compounds (VOC))

Pursuant to 326 IAC 8-2-12 (Wood Furniture and Cabinet Coating), the surface coating applied to wood furniture and cabinets shall utilize one 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) Spray Application is an accepted alternative method of application for Air Assisted Airless Spray Application. HVLP spray is the technology used to apply coating to 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.

Air Toxic Emissions

Indiana presently requests applicants to provide information on emissions of the 187 hazardous air pollutants (HAPs) 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) Part 70 Application Form GSD-08.

- (a) This source will emit levels of air toxics greater than those that constitute major source applicability according to Section 112 of the 1990 Clean Air Act Amendments. However, due to the source-wide VOC limit there is no increase in potential HAP emissions from the levels previously permitted.
- (b) See attached calculations for detailed air toxic calculations (Appendix A page 2).

Conclusion

The construction of this monorail surface coating line will be subject to the conditions of the attached proposed **Construction Permit No. CP-177-9892-00015**.

Indiana Department of Environmental Management Office of Air Management

Addendum to the Technical Support Document for New Construction and Operation

Source Name: Schrock Cabinet Company
 Source Location: 701 South "N" Street, Richmond, Indiana, 47374
 County: Wayne
 Construction Permit No.: CP-177-9892-00015
 SIC Code: 2434
 Permit Reviewer: Vickie Cordell

On (date), the Office of Air Management (OAM) had a notice published in the (newspaper), (location), Indiana, stating that (company name) had applied for a construction permit to construct and operate (facility, equipment) with control. 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.

On (date), (Company name) submitted comments on the proposed construction permit. The summary of the comments and corresponding responses is as follows (changes are bolded for emphasis):

(summarized and answer comments here)

Comment 1:

Response 1: Operation Condition No. originally proposed as follows:
(write the condition here, do not bold the existing conditions)

B.6 General Operation Conditions

- (a) ~~The data and information supplied in the application shall be considered part of this permit.~~
The data and information supplied in the application shall be considered technical support data for the determination 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).

D.16 Reporting Requirements: NESHAP

- (a) ~~An Initial Compliance Report to document compliance with Condition D.1.2 and the Certification form shall be submitted within sixty (60) days following the compliance date of November 21, 1997. 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 Condition D.1.2 and the Certification form, shall be submitted within thirty (30) days after the end of the six (6) months being reported.

For the first year following the compliance date, the Continuous Compliance Reports shall cover the following months:

- (1) November 21, 1997 through May 20, 1998.

(2) May 21 through November 30, 1998.

(3) December 1 through December 31, 1998.

~~(e)~~(b) Following the first year of reporting, the semi-annual Continuous Compliance Report shall be submitted on a calendar year basis with the reporting periods ending June 30 and December 31.

~~(e)~~(c) The reports required in (a), ~~(b)~~ and ~~(e)~~(b) of this condition 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

and

United States Environmental Protection Agency, Region V
Air and Radiation Division, Air Enforcement Branch - Indiana (AE-17J)
77 West Jackson Boulevard
Chicago, Illinois 60604-3590

Use the following sentence, if the comments were made by OAM staff, do not indicate the name of the staff who made the comments, because OAM changes should be considered as changes initiated by Permit Branch.

Upon further review, OAM has made the following changes (changes are bolded for emphasis:

(summarized and answer comments here)

Comment 2:

Response 2:

Comment 3:

Response 3:

Examples of Responses:

1. The Office of Air Management (OAM) routinely performs air quality analyses to insure that issuance of a permit or registration will not result in a violation of any state or federal air regulations and standards. A permit would be denied if the application does not meet the requirement of 326 IAC 2 or if the source would pose a threat to public health.
2. Air pollution control rules do not regulate plant location decisions. It is the OAM's understanding that the facility is acceptable under local zoning requirements. Local governments have jurisdiction on zoning issues.

3. Although OAM has no regulatory authority to limit noise from facilities, OAM staff have discussed this with the company who have indicated that they will be modifying the exhaust to lower the noise level.
4. OAM tries to address specific questions regarding impacts on plant and animal life when this issue comes up during the comment period. The construction permit rules require that a permit be issued if the applicant is required to comply with permit conditions detailing the requirements of the air pollution control rules and any other conditions necessary to protect public health.
5. OAM believes neither air nor water quality will be adversely affected by the emissions from the permitted facilities.
6. The air quality analyses conducted demonstrates that air quality in the vicinity of the plant will continue to comply with the air quality standards.
7. No significant impact on public health or welfare are expected to occur as a result of the emissions from the proposed facility.

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

**Company Name: Schrock Cabinet Company
Address City IN Zip: 701 South "N" Street, Richmond, Indiana 47374
Permit No/Plt ID: CP 177-9892-00015
Reviewer: V. Cordell
Date: August 21, 1998**

Booth ID	Material	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
Spray Booths: Topcoats	Aqua Plaz LF Clear	8.62	63.25%	50.77%	12.48%	52.48%	31.65%	0.050	57.0	2.26	1.08	3.07	73.58	13.43	19.77	3.40	50%
2 booths: 25 & 26	WW Rel Plaz	7.95	62.77%	0%	62.77%	0%	29.31%	0.050	57.0	4.99	4.99	14.22	341.33	62.29	18.47	17.03	50%
	Matador 60 Turbo	10.89	23.69%	0%	23.69%	0%	63.44%	0.050	57.0	2.58	2.58	7.35	176.46	32.20	51.87	4.07	50%
	Catalyst 2750	7.32	85.38%	0%	85.38%	0%	7.42%	0.003	57.0	6.25	6.25	1.07	25.65	4.68	0.40	84.26	50%
	Rel Var Retarder	6.75	100.00%	0%	100.00%	0%	0%	0.005	57.0	6.75	6.75	1.92	46.17	8.43	0.00	n/a	50%
thinner:	Winter Topcoat Reducer	7.26	100.00%	0%	100.00%	0%	0%	0.006	57.0	7.26	7.26	2.48	59.59	10.88	0.00	n/a	50%
Spray Booths: Stains	Nat. Light Toner	6.89	93.18%	0.02%	93.16%	0.02%	4.41%	0.050	57.0	6.42	6.42	18.29	439.04	80.12	2.93	145.55	50%
4 booths: 18 - 21	Burgundy Wipe Stain	8.17	69.17%	0%	69.17%	0%	79.14%	0.050	57.0	5.65	5.65	16.11	386.54	70.54	15.72	7.14	50%
	Nutmeg No-Wipe Stain	7.23	90.53%	0%	90.53%	0%	4.26%	0.050	57.0	6.55	6.55	18.65	447.70	81.71	4.27	153.65	50%
	Frost Toner	7.76	88.51%	0%	88.51%	0%	2.90%	0.050	57.0	6.87	6.87	19.57	469.80	85.74	5.57	236.84	50%
thinner:	Clear No-Wipe Stain	6.57	98.04%	0%	98.04%	0%	1.36%	0.002	57.0	6.44	6.44	0.73	17.62	3.22	0.03	473.62	50%
Spray Booths: Sealers	Rel Prime Sealer	7.62	72.57%	0%	72.57%	0%	20.24%	0.080	57.0	5.53	5.53	25.22	605.19	110.45	20.87	27.32	50%
3 booths: 22 - 24	Bernyl Surface White	10.78	32.41%	0%	32.41%	0%	48.74%	0.080	57.0	3.49	3.49	15.93	382.36	69.78	72.76	7.17	50%
	Catalyst 2750	7.32	85.38%	0%	85.38%	0%	7.42%	0.003	57.0	6.25	6.25	1.07	25.65	4.68	0.40	84.26	50%
thinner:	Thinner 219	7.13	100.00%	0%	100.00%	0%	0%	0.004	57.0	7.13	7.13	1.63	39.02	7.12	0.00	n/a	50%
9 Spray Booths: 18 - 26	Reducer	7.25	100.00%	0%	100.00%	0%	0.00%	0.008	57.0	7.25	7.25	3.31	79.34	14.48	0.00	n/a	100%

State Potential Emissions

Add worst case coating to all solvents**

150.63

3615.04

659.75

213.08

METHODOLOGY

* All materials "as supplied".

** Sum of coatings as shown is worst case for this operation.

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)

Total = Worst Coating + Sum of all solvents used

HAP Emission Calculations

Company Name: Schrock Cabinet Company
Plant Lo: 701 South "N" Street, Richmond, Indiana 47374
County: Wayne
Permit No. / Plt ID: CP 177-9892-00015
Permit Reviewer: V. Cordell
Date: August 21, 1998

Topcoats (booths 25 & 26)

Material	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl ketone	Weight % Cumene	Weight % Xylene	Weight % Ethyl Benzene	Weight % Formaldehyde	Toluene Emissions (ton/yr)	MEK Emissions (ton/yr)	Methanol Emissions (ton/yr)	M. Isobutyl ketone Emissions (ton/yr)	Glycol Ethers Emissions (ton/yr)	Xylene Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Total State Potential Emissions from Indiv. Material (ton/yr)
Topcoats																				
Aua Plaz LF Clear	8.62	0.05000	57.000			11.00%						0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	11.84
WW Rel Plaz	7.95	0.05000	57.000			11.00%			19.70%	4.80%	0.30%					0.00	19.55	4.76	0.30	24.31
Matador 60 Turbo	10.89	0.05000	57.000						30.00%		0.20%	0.00	0.00	0.00	0.00	0.00	40.78	0.00	0.27	40.78
Catalyst 2750	7.320	0.00300	57.000	60.00%								3.29	0.00	0.00	0.00	0.00	0.00	0.00	0.00	3.29
Rel Var Retarder	6.750	0.00500	57.000									0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Winter Reducer	7.260	0.00600	57.000	100.00%								10.88	0.00	0.00	0.00	0.00	0.00	0.00	0.00	10.88

Stains (booths 18 - 21)

Material	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl ketone	Weight % Cumene	Weight % Xylene	Weight % Ethyl Benzene	Weight % Formaldehyde	Toluene Emissions (ton/yr)	MEK Emissions (ton/yr)	Methanol Emissions (ton/yr)	M. Isobutyl ketone Emissions (ton/yr)	Cumene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Total State Potential Emissions from Indiv. Material (ton/yr)	
Nat. Lt. Toner	6.89	0.05000	57.000	10.30%	62.70%		2.30%					8.86	53.93	0.00	1.98	0.00	0.00	0.00	0.00	0.00	64.76
Burgundy Wipe	8.17	0.05000	57.000	3.23%		0.01%			16.95%	3.86%		3.29	0.00	0.01	0.00	0.00	17.28	3.94	0.00	24.52	
Nutmeg No-Wipe	7.23	0.05000	57.000	16.80%					5.22%			15.16	0.00	0.00	0.00	0.00	4.71	0.00	0.00	19.87	
Frost Toner	7.760	0.05000	57.000	16.50%	7.70%		0.02%					15.98	7.46	0.00	0.02	0.00	0.00	0.00	0.00	23.46	
Clear No-Wipe	6.570	0.00200	57.000	20.15%								0.66	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.66	

Sealers (booths 22 - 24)

Material	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl ketone	Weight % Cumene	Weight % Xylene	Weight % Ethyl Benzene	Weight % Formaldehyde	Toluene Emissions (ton/yr)	MEK Emissions (ton/yr)	Methanol Emissions (ton/yr)	M. Isobutyl ketone Emissions (ton/yr)	Cumene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Total State Potential Emissions from Indiv. Material (ton/yr)
Rel Prime	7.62	0.08000	57.000	14.90%			10.70%		8.30%	2.00%	0.20%	22.68	0.00	16.28	0.00	0.00	12.63	3.04	0.00	54.64
Beryll Surf. Wht.	10.78	0.08000	57.000						10.00%			0.00	0.00	0.00	0.00	0.00	21.53	0.00	0.00	21.53
Catalyst 2750	7.32	0.00300	57.000						60.00%			0.00	0.00	0.00	0.00	0.00	3.29	0.00	0.00	3.29
Thinner 219	7.130	0.00400	57.000	19.00%								1.35	0.00	0.00	0.00	0.00	0.00	0.00	0.00	1.35

Solvent (booths 18 - 26)

Material	Density (Lb/Gal)	Gal of Mat (gal/unit)	Maximum (unit/hour)	Weight % Toluene	Weight % MEK	Weight % Methanol	Weight % M. Isobutyl ketone	Weight % Cumene	Weight % Xylene	Weight % Ethyl Benzene	Weight % Formaldehyde	Toluene Emissions (ton/yr)	MEK Emissions (ton/yr)	Methanol Emissions (ton/yr)	M. Isobutyl ketone Emissions (ton/yr)	Cumene Emissions (ton/yr)	Xylene Emissions (ton/yr)	Ethyl Benzene Emissions (ton/yr)	Formaldehyde Emissions (ton/yr)	Total State Potential Emissions from Indiv. Material (ton/yr)
Reducer	7.25	0.00800	57.000					1.50%	3.00%	0.50%		0.00	0.00	0.00	0.00	0.22	0.43		0.07	0.72

Maximum HAPs from all new booths, tons/year:	82.15	61.39	28.13	2.00	0.22	120.21	11.82	0.57	305.91
	Total HAPs								

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

**Appendix A: Emission Calculations
Natural Gas Combustion Only
MM Btu/hr 0.3 - < 10**

Company Name: Schrock Cabinet Company
Address City IN Zip: 701 South "N" Street, Richmond, IN 47374
CP/Plt ID #: CP 177-9892-00015
Reviewer: V. Cordell
Date: July 29, 1998

Heat Input Capacity*
MMBtu/hr

Potential Throughput
MMCF/yr

18.5

162.1

Pollutant

Emission Factor in lb/MMCF	PM	PM10	SO2	NOx	VOC	CO
	11.9	11.9	0.6	100.0	5.3	21.0
Potential Emission in pounds/day	5.3	5.3	0.3	44.4	2.4	9.3
Potential Emission in tons/yr	1.0	1.0	0.0	8.1	0.4	1.7

Methodology

*Combined capacity of two (2) 1.5 MMBtu/hr sealer drying ovens, one (1) 0.5 MMBtu/hr stain drying oven, and two (2) 7.5 MMBtu air handlers.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low NOx Burner = 17, Flue gas recirculation = 36

Emission Factors for CO: uncontrolled = 21, Low NOx Burner = 15, Flue gas recirculation = ND

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

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, and 1.4-2, as amended 10/96; VOC from FIRE Version 5.0; SCC #1-03-006-03

Emission (pounds/day) = Throughput (MMCF/yr) / 8760 hrs/yr x Emission Factor (lb/MMCF) x 24 hrs/day

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

**Appendix A: Emission Calculations
 Natural Gas Combustion Only
 MM Btu/hr 0.3 - < 10
 Existing drying ovens and air make up units**

Company Name: Schrock Cabinet Company
Address City IN Zip: 701 South "N" Street, Richmond, IN 47374
CP/Plt ID #: 177-9892-00015
Reviewer: V. Cordell
Date: September 4, 1998

Heat Input Capacity*
 MMBtu/hr

Potential Throughput
 MMCF/yr

110.0

963.6

Pollutant

	PM	PM10	SO2	NOx	VOC	CO
Emission Factor in lb/MMCF	11.9	11.9	0.6	100.0	5.3	21.0
Potential Emission in pounds/day	31.4	31.4	1.6	264.0	14.0	55.4
Potential Emission in tons/yr	5.7	5.7	0.3	48.2	2.6	10.1

Methodology

*Estimated, worst case combined capacity of all existing natural gas combustion facilities at the source, including drying ovens and air make up units.

MMBtu = 1,000,000 Btu

MMCF = 1,000,000 Cubic Feet of Gas

Emission Factors for NOx: uncontrolled = 100, Low Nox Burner = 17, Flue gas recirculation = 36

Emission Factors for CO: uncontrolled = 21, Low NOx Burner = 15, Flue gas recirculation = ND

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

Emission Factors from AP 42, Chapter 1.4, Tables 1.4-1, and 1.4-2, as amended 10/96; VOC from FIRE Version 5.0; SCC #1-03-006-03

Emission (pounds/day) = Throughput (MMCF/yr) / 8760 hrs/yr x Emission Factor (lb/MMCF) x 24 hrs/day

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