

FINAL DRAFT/PROPOSED CAAPP PERMIT  
MasterBrand Cabinets, Inc. - Arthur  
I.D. No.: 139404AAH  
Application No.: 95120059  
May 15, 2001

217/782-2113

**TITLE V - CLEAN AIR ACT PERMIT PROGRAM (CAAPP) PERMIT  
and  
TITLE I PERMIT<sup>1</sup>**

PERMITTEE

MasterBrand Cabinets, Inc. - Arthur  
Attn: David P. Blackmore  
217 South Oak Street  
Arthur, Illinois 61911

<u>Application No.:</u> 95120059	<u>I.D. No.:</u> 139404AAH
<u>Applicant's Designation:</u>	<u>Date Received:</u> December 6, 1995
<u>Operation of:</u> Wood Cabinet Manufacturing	
<u>Date Issued:</u> TO BE DETERMINED	<u>Expiration Date<sup>2</sup>:</u> DATE
<u>Source Location:</u> 217 South Oak Street, Arthur, Moultrie County	
<u>Responsible Official:</u> Paul Spivey, Vice President of Manufacturing and Technology	

This permit is hereby granted to the above-designated Permittee to OPERATE a wood cabinet manufacturing plant, pursuant to the above referenced permit application. This permit is subject to the conditions contained herein.

If you have any questions concerning this permit, please contact Robert Bernoteit at 217/782-2113.

Donald E. Sutton, P.E.  
Manager, Permit Section  
Division of Air Pollution Control

DES:RWB

cc: Illinois EPA, FOS, Region 3  
USEPA

<sup>1</sup> This permit may contain terms and conditions which address the applicability, and compliance if determined applicable, of Title I of the Clean Air Act and regulations promulgated thereunder, including 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part

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203 - Major Stationary Sources Construction and Modification. Any such terms and conditions are identified within the permit.

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Except as provided in condition 8.7 of this permit.



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1.0 SOURCE IDENTIFICATION

1.1 Source

MasterBrand Cabinets, Inc. - Arthur  
217 South Oak Street  
Arthur, Illinois 61911  
217/543-3311

I.D. No.: 139404AAH  
Standard Industrial Classification: 2434, Wood Kitchen Cabinets

1.2 Owner/Parent Company

Fortune Brands, Inc.  
300 Tower Parkway  
Lincolnshire, Illinois 60069-3640

1.3 Operator

MasterBrand Cabinets, Inc.  
217 South Oak Street  
Arthur, Illinois 61911

David P. Blackmore, Environmental Engineer  
Phone: 217/543-3311 Ext. 8515

1.4 General Source Description

MasterBrand Cabinets, Inc. (formerly, Schrock Cabinet Company) is located at 217 South Oak Street in Arthur, Illinois. The source manufactures, assembles, applies coating to, and finishes wooden cabinets and their components. The main areas of the source include the finishing department, mill room, assembly area, paint kitchen and boiler rooms.

2.0 LIST OF ABBREVIATIONS/ACRONYMS USED IN THIS PERMIT

acfm	Actual cubic feet per minute
Act	Environmental Protection Act [415 ILCS 5/1 et seq.]
AP-42	Compilation of Air Pollution Emission Factors, Volume 1, Stationary Point and Other Sources (and Supplements A through F), USEPA, Office of Air Quality Planning and Standards, Research Triangle Park, NC 27717
ASTM	American Society for Testing and Materials
BACT	Best Available Control Technology
BIFMA	Business and Institutional Furniture Manufacturers Association
Btu	British thermal unit
CAA	Clean Air Act [42 U.S.C. Section 7401 et seq.]
CAAPP	Clean Air Act Permit Program
CAM	Compliance Assurance Monitoring
cfm	cubic feet per minute
CFR	Code of Federal Regulations
CH <sub>4</sub>	Methane
cm	centimeter
CO	Carbon Monoxide
ERMS	Emissions Reduction Market System
°F	degrees Fahrenheit
ft	foot
ft <sup>3</sup>	cubic foot
gal	gallon
gr	grains
HAP	Hazardous Air Pollutants
HEAF	High Efficiency Air Filter
hr	hour
HVLP	High Volume Low Pressure
IAC	Illinois Administrative Code
I.D. No.	Identification Number of Source, assigned by Illinois EPA
ILCS	Illinois Compiled Statutes
Illinois EPA	Illinois Environmental Protection Agency
in	inch
K	Kelvin
kg	kilogram
kW	kilowatt
l	liter
lb	pound
m	meter
m <sup>3</sup>	cubic meter
MACT	Maximum Achievable Control Technology

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Mft <sup>3</sup>	Million cubic feet
Mg	Metric Tonnes or Megagrams
mmBtu	Million British thermal units
mmscf	Million Standard Cubic Feet
mo	month
MSDS	Material Safety Data Sheet
MW	Megawatt
NAAQS	National Ambient Air Quality Standard
NESHAP	National Emission Standards for Hazardous Air Pollutants
NO <sub>x</sub>	Nitrogen Oxides
NSPS	New Source Performance Standards
OSHA	Occupational Safety and Health Administration
PM	Particulate Matter
PM <sub>10</sub>	Particulate matter with an aerodynamic diameter less than or equal to a nominal 10 microns as measured by applicable test or monitoring methods
ppm	parts per million
PSD	Prevention of Significant Deterioration
psi	pound per square inch
psia	pounds per square inch absolute
psig	pounds per square inch gauge
RMP	Risk Management Plan
SCC	Source Classification Code
scf	standard cubic feet
SIC	Standard Industrial Classification
SO <sub>2</sub>	Sulfur Dioxide
T	Ton
T1	Title I - identifies Title I conditions that have been carried over from an existing permit
T1N	Title I New - identifies Title I conditions that are being established in this permit
T1R	Title I Revised - identifies Title I conditions that have been carried over from an existing permit and subsequently revised in this permit
TANKS	USEPA Emission Estimating Program for Storage Tanks
tpy	tons per year
TOC	Total Organic Compounds
USEPA	United States Environmental Protection Agency
UFAC	Upholstered Furniture Action Council
VHAP	Volatile Hazardous Air Pollutant
VMT	Vehicle Mile Traveled
VOC	Volatile Organic Compounds
VOL	Volatile Organic Liquid
VOM	Volatile Organic Material

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Wt	Weight
yr	year

### 3.0 INSIGNIFICANT ACTIVITIES

#### 3.1 Identification of Insignificant Activities

The following activities at the source constitute insignificant activities as specified in 35 IAC 201.210:

- 3.1.1 Activities determined by the Illinois EPA to be insignificant activities, pursuant to 35 IAC 201.210(a)(1) and 201.211, as follows:

Natural Gas Fired Space Heaters (< 10 mmBtu/hr)  
Natural Gas Fired Boilers (< 3 mmBtu/hr)  
Sawdust Auger  
Individual Woodworking Units Controlled by Cyclones  
and Filters

- 3.1.2 Activities that are insignificant activities based upon maximum emissions, pursuant to 35 IAC 201.210(a)(2) or (a)(3), as follows:

None

- 3.1.3 Activities that are insignificant activities based upon their type or character, pursuant to 35 IAC 201.210(a)(4) through (18), as follows:

None

- 3.1.4 Activities that are considered insignificant activities pursuant to 35 IAC 201.210(b).

#### 3.2 Compliance with Applicable Requirements

Insignificant activities are subject to applicable requirements notwithstanding status as insignificant activities. In particular, in addition to regulations of general applicability, such as 35 IAC 212.301 and 212.123 (Condition 5.2.2), the Permittee shall comply with the following requirements, as applicable:

- 3.2.1 For each cold cleaning degreaser, the Permittee shall comply with the applicable equipment and operating requirements of 35 IAC 215.182, 218.182, or 219.182.

- 3.2.2 For each particulate matter process emission unit, the Permittee shall comply with the applicable particulate matter emission limit of 35 IAC 212.321 or 212.322. For example, the particulate matter emissions from a process emission unit shall not exceed 0.55 pounds per hour if the emission unit's process weight rate is 100 pounds per hour or less, pursuant to 35 IAC 266.110.
- 3.2.3 For each organic material emission unit that uses organic material, e.g., a mixer or printing line, the Permittee shall comply with the applicable VOM emission limit of 35 IAC 215.301, 218.301, or 219.301, which requires that organic material emissions not exceed 8.0 pounds per hour or do not qualify as photochemically reactive material as defined in 35 IAC 211.4690.

### 3.3 Addition of Insignificant Activities

- 3.3.1 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type that is identified in Condition 3.1, until the renewal application for this permit is submitted, pursuant to 35 IAC 201.212(a).
- 3.3.2 The Permittee must notify the Illinois EPA of any proposed addition of a new insignificant activity of a type addressed by 35 IAC 201.210(a) and 201.211 other than those identified in Condition 3.1, pursuant to Section 39.5(12)(b) of the Act.
- 3.3.3 The Permittee is not required to notify the Illinois EPA of additional insignificant activities present at the source of a type identified in 35 IAC 201.210(b).

4.0 SIGNIFICANT EMISSION UNITS AT THIS SOURCE

Emission Unit	Description	Date Constructed	Emission Control Equipment
B1	George Koch Son Stain Spray Booth B1 (Monorail #1 (West))	June, 1987	Filter F1
B2	George Koch Son Stain Spray Booth B2 (Monorail #1 (West))	June, 1987	Filter F2
B3	JBI Inc. Stain Spray Booth B3 (Monorail #1 (West))	October, 1997	Filter F3
B4	JBI Inc. Stain Spray Booth B4 (Monorail #1 (West))	October, 1997	Filter F4
B5	Young & Bertke Sealer Spray Booth B5 (Monorail #1 (West))	December, 1993	Filter F5
B6	Young & Bertke Sealer Spray Booth B6 (Monorail #1 (West))	December, 1993	Filter F6
B7	Young & Bertke Topcoat Spray Booth B7 (Monorail #1 (West))	July, 1994	Filter F7
B8	Young & Bertke Topcoat Spray Booth B8 (Monorail #1 (West))	July, 1994	Filter F8
B9	Stain Spray Booth B9 (Monorail #2 (East))	January, 1990	Filter F9
B10	Stain Spray Booth B10 (Monorail #2 (East))	January, 1990	Filter F10
B11	JBI Inc. Stain Spray Booth B11 (Monorail #2 (East))	October, 1997	Filter F11
B12	JBI Inc. Stain Spray Booth B12 (Monorail #2 (East))	October, 1997	Filter F12
B13	Young & Bertke Sealer Spray Booth B13 (Monorail #2 (East))	July, 1992	Filter F13
B14	Young & Bertke Sealer Spray Booth B14 (Monorail #2 (East))	July, 1992	Filter F14
B15	Young & Bertke Topcoat Spray Booth B15 (Monorail #2 (East))	July, 1992	Filter F15
B16	Young & Bertke Topcoat Spray Booth B16 (Monorail	July, 1992	Filter F16

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	#2 (East))		
B25	Trim Spray Booth B25	1977	Filter F25
B26	Trim Spray Booth B26	1977	Filter F26
B27	Trim Spray Booth B27 (Mini Monorail)	January, 1990	Filter F27
B30	Preseal Spray Booth B30 (Monorail #1 (West))	October, 1997	Filter F30
Emission Unit	Description	Date Constructed	Emission Control Equipment
B31	Preseal Spray Booth B31 (Monorail #2 (East))	October, 1997	Filter F31
Kewanee Boiler	Kewanee Type C Natural Gas-Fired Boiler (Kewanee Boiler, 11.65 mmBtu/hr)	September, 1977	None
Fugitive PM Emissions	Paved/Unpaved Traffic Areas, Parking Lots, and Roadways	--	None

5.0 OVERALL SOURCE CONDITIONS

5.1 Source Description

5.1.1 This permit is issued based on the source requiring a CAAPP permit as a major source of VOM and HAP emissions.

5.2 Applicable Regulations

5.2.1 Specific emission units at this source are subject to particular regulations as set forth in Section 7 (Unit-Specific Conditions) of this permit.

5.2.2 In addition, emission units at this source are subject to the following regulations of general applicability:

- a. No person shall cause or allow the emission of fugitive particulate matter from any process, including any material handling or storage activity, that is visible by an observer looking generally overhead at a point beyond the property line of the source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 IAC 212.301 and 212.314.

Compliance with this requirement is considered to be assured by the inherent nature of operations at this source, as demonstrated by historical operation.

- b. The emission of smoke or other particulate matter from any emission unit shall not exceed an opacity of greater than 30 percent, except that an opacity of greater than 30 percent but less than 60 percent shall be allowed for a period or periods aggregating 8 minutes in any 60 minute period provided that such opaque emissions permitted during any 60 minute period shall occur from only one such emission unit located within a 305 meter (1000 feet) radius from the center point of any other such emission unit owned or operated by the Permittee, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period, pursuant to 35 IAC 212.123 and 212.124.

5.2.3 This stationary source is subject to the NESHAP for Wood Furniture Manufacturing Operations, 40 CFR Part 63

Subparts A and JJ because the source is engaged, either in part or in whole, in the manufacture of wood furniture or wood furniture components and that is located at a plant site that is a major source as defined in 40 CFR 63.2. The Illinois EPA is administering NESHAP in Illinois on behalf of the USEPA under a delegation agreement.

#### 5.2.4 Ozone Depleting Substances

The Permittee shall comply with the standards for recycling and emissions reduction of ozone depleting substances pursuant to 40 CFR Part 82, Subpart F, except as provided for motor vehicle air conditioners in Subpart B of 40 CFR Part 82:

- a. Persons opening appliances for maintenance, service, repair, or disposal must comply with the required practices pursuant to 40 CFR 82.156.
- b. Equipment used during the maintenance, service, repair, or disposal of appliances must comply with the standards for recycling and recovery equipment pursuant to 40 CFR 82.158.
- c. Persons performing maintenance, service, repair, or disposal of appliances must be certified by an approved technician certification program pursuant to 40 CFR 82.161.

#### 5.2.5 Risk Management Plan

Should this stationary source, as defined in 40 CFR Section 68.3, become subject to the Accidental Release Prevention regulations in 40 CFR Part 68, then the owner or operator shall submit [40 CFR 68.215(a)(2)(i) and (ii)]:

- a. A compliance schedule for meeting the requirements of 40 CFR Part 68 by the date provided in 40 CFR 68.10(a); or
- b. A certification statement that the source is in compliance with all requirements of 40 CFR Part 68, including the registration and submission of the Risk Management Plan (RMP), as part of the annual

compliance certification required by 40 CFR Part 70 or 71.

- 5.2.6 a. Should this stationary source become subject to a regulation under 40 CFR Parts 60, 61, or 63, or 35 IAC after the date issued of this permit, then the owner or operator shall, in accordance with the applicable regulation(s), comply with the applicable requirements by the date(s) specified and shall certify compliance with the applicable requirements of such regulation(s) as part of the annual compliance certification, as required by 40 CFR Part 70 or 71.
- b. No later than upon the submittal for renewal of this permit, the owner or operator shall submit, as part of an application, the necessary information to address either the non-applicability of, or demonstrate compliance with all applicable requirements of any potentially applicable regulation which was promulgated after the date issued of this permit.

5.2.7 Episode Action Plan

- a. If the source is required to have an episode action plan pursuant to 35 IAC 244.142, the Permittee shall maintain at the source and have on file with the Illinois EPA a written episode action plan (plan) for reducing the levels of emissions during yellow alerts, red alerts, and emergencies, consistent with safe operating procedures. The plan shall contain the information specified in 35 IAC 244.144.
- b. The Permittee shall immediately implement the appropriate steps described in this plan should an air pollution alert or emergency be declared.
- c. If a change occurs at the source which requires a revision of the plan (e.g., operational change, change in the source contact person), a copy of the revised plan shall be submitted to the Illinois EPA for review within 30 days of the change. Such plans shall be further revised if disapproved by the Illinois EPA.
- d. For sources required to have a plan pursuant to 35 IAC 244.142, a copy of the original plan and any subsequent revisions shall be sent to:

- i. Illinois EPA, Compliance Section; and
- ii. For sources located in Cook County and outside of the city of Chicago: Cook County Department of Environmental Control; or
- iii. For sources located within the city of Chicago: Chicago Department of Environmental Control.

5.3 Non-Applicability of Regulations of Concern

None

5.4 Source-Wide Operational and Production Limits and Work Practices

In addition to the source-wide requirements in the Standard Permit Conditions in Section 9, the Permittee shall fulfill the following source-wide operational and production limitations and/or work practice requirements:

- 5.4.1 Work practice implementation plan. Each owner or operator of an affected source subject to 40 CFR 63 Subpart JJ shall prepare and maintain a written work practice implementation plan that defines environmentally desirable work practices for each wood furniture manufacturing operation and addresses each of the work practice standards presented in Conditions 5.4.2, 7.1.5(a) through 7.1.5(i), and 7.1.9(a), (see also 40 CFR 63.803(b) through (l)). The plan shall be developed no more than 60 days after the compliance date. The written work practice implementation plan shall be available for inspection by the Illinois EPA or USEPA upon request. If the Illinois EPA or USEPA determines that the work practice implementation plan does not adequately address each of the topics specified in Conditions 5.4.2, 7.1.5(a) through 7.1.5(i), and 7.1.9(a) (see also 40 CFR 63.803(b) through (l)) or that the plan does not include sufficient mechanisms for ensuring that the work practice standards are being implemented, the Illinois EPA or USEPA may require the affected source to modify the plan. Revisions or modifications to the plan do not require a revision of the source's Title V permit [40 CFR 63.803(a)].

5.4.2 Operator training course. Pursuant to 40 CFR 63.803(b), each owner or operator of an affected source shall train all new and existing personnel, including contract personnel, who are involved in finishing, gluing, cleaning, and washoff operations, use of manufacturing equipment, or implementation of the requirements of 40 CFR 63 Subpart JJ. All new personnel, those hired after the compliance date of the standard, shall be trained upon hiring. All existing personnel, those hired before the compliance date of the standard, shall be trained within six months of the compliance date of the standard. All personnel shall be given refresher training annually. The affected source shall maintain a copy of the training program with the work practice implementation plan. The training program shall include, at a minimum, the following:

- a. A list of all current personnel by name and job description that are required to be trained [40 CFR 63.803(b)(1)];
- b. An outline of the subjects to be covered in the initial and refresher training for each position or group of personnel [40 CFR 63.803(b)(2)];
- c. Lesson plans for courses to be given at the initial and the annual refresher training that include, at a minimum, appropriate application techniques, appropriate cleaning and washoff procedures, appropriate equipment setup and adjustment to minimize finishing material usage and overspray, and appropriate management of cleanup wastes [40 CFR 63.803(b)(3)]; and
- d. A description of the methods to be used at the completion of initial or refresher training to demonstrate and document successful completion [40 CFR 63.803(b)(4)].

## 5.5 Source-Wide Emission Limitations

### 5.5.1 Permitted Emissions for Fees

The annual emissions from the source, not considering insignificant activities as addressed by Section 3.0 of this permit, shall not exceed the following limitations.

The overall source emissions shall be determined by adding emissions from all emission units. Compliance with these limits shall be determined on a calendar year basis. These limitations (Condition 5.5.1) are set for the purpose of establishing fees and are not federally enforceable.

Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Nitrogen Oxides (NO <sub>x</sub> )	9.0
Particulate Matter (PM)	40.5
Sulfur Dioxide (SO <sub>2</sub> )	0.1
Volatile Organic Material (VOM)	363.4
HAP, not included in VOM or PM	-----
TOTAL	413.0

5.5.2 Emissions of Hazardous Air Pollutants

Source-wide emission limitations for HAPs as listed in Section 112(b) of the CAA are not set. This source is considered to be a major source of HAPs.

5.5.3 Other Source-Wide Emission Limitations

Other source-wide emission limitations are not set for this source pursuant to either the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21, Illinois EPA rules for Major Stationary Sources Construction and Modification, 35 IAC Part 203, or Section 502(b)(10) of the CAA. However, there may be unit specific emission limitations set forth in Section 7 of this permit pursuant to these rules.

5.6 General Recordkeeping Requirements

5.6.1 Emission Records

The Permittee shall maintain records of the following items for the source to demonstrate compliance with Condition 5.5.1, pursuant to Section 39.5(7)(b) of the Act:

Total annual emissions on a calendar year basis for the emission units covered by Section 7 (Unit Specific Conditions) of this permit.

5.6.2 NESHAP for Wood Furniture Manufacturing Operations Recordkeeping Requirements

- a. The owner or operator of an affected source subject to 40 CFR 63 Subpart JJ shall fulfill all recordkeeping requirements of 40 CFR 63.10, according to the applicability criteria in 40 CFR 63.800(d) [40 CFR 63.806(a)].
- b. Pursuant to 40 CFR 63.806(e), the owner or operator of an affected source subject to the work practice standards in Condition 5.4 (see also 40 CFR 63.803) shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:
  - i. Records demonstrating that the operator training program required by Condition 5.4.2 (see also 40 CFR 63.803(b)) is in place [40 CFR 63.806(e)(1)];
  - ii. Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed [40 CFR 63.806(e)(6)].
- c. The owner or operator of an affected source shall maintain all records in accordance with the requirements of 40 CFR 63.10(b)(1) [40 CFR 63.806(j)].

5.6.3 General Records for Fugitive Emissions from Road Dust

- a. The Permittee shall maintain a record of the maximum aggregate annual emissions of fugitive PM from the traffic areas at the source (i.e., road dust) estimated based on the applicable emission factors and formulas specified by Condition 5.9.1, with supporting calculations, so as to demonstrate compliance with the limits in Condition 5.5.
- b. This record shall be updated upon construction of additional roadways or parking areas or other permanent change to the source, that alters the maximum aggregate emissions of PM.

#### 5.6.4 Retention and Availability of Records

- a. All records and logs required by this permit shall be retained for at least five years from the date of entry (unless a longer retention period is specified by the particular recordkeeping provision herein), shall be kept at a location at the source that is readily accessible to the Illinois EPA or USEPA, and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request.
- b. The Permittee shall retrieve and print, on paper during normal source office hours, any records retained in an electronic format (e.g., computer) in response to an Illinois EPA or USEPA request for records during the course of a source inspection.

### 5.7 General Reporting Requirements

#### 5.7.1 General Source-Wide Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the source with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken.

#### 5.7.2 Annual Emissions Report

The annual emissions report required pursuant to Condition 9.7 shall contain emissions information for the previous calendar year.

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5.7.3 The owner or operator of an affected source subject to 40 CFR 63 Subpart JJ shall fulfill all reporting requirements of 40 CFR 63.7 through 40 CFR 63.10 (40 CFR 63 Subpart A, General Provisions) according to the applicability criteria in 40 CFR 63.800(d) [40 CFR 63.807(a)].

5.8 General Operational Flexibility/Anticipated Operating Scenarios

N/A

5.9 General Compliance Procedures

5.9.1 General Procedures for Calculating Fugitive Emissions from Roadways

- a. For the purpose of estimating fugitive PM emissions from the paved roadways at the source, the emission factors and formulas in Sections 13.2.1 of AP-42, Volume I, Fifth Edition, Supplement D, October, 1997 are acceptable.
- b. For the purpose of estimating fugitive PM emissions from the unpaved roadways at the source, the emission factors and formulas in Sections 13.2.2 of AP-42, Volume I, Fifth Edition, Supplement E, September, 1998 are acceptable.

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6.0 NOT APPLICABLE TO THIS PERMIT

7.0 UNIT SPECIFIC CONDITIONS

7.1 Units 01: Paint/Coating Operations  
 Controls 01: Filters

7.1.1 Description

The coating process lines at this source consist of two overhead monorail lines and three off-line booths. Milled and sanded wood cabinet pieces are sent to the finishing department, where stain, sealer, and topcoat are pneumatically applied to kitchen cabinetry on coating lines "Monorail #1" (booths B1 through B8, and B30) and "Monorail #2" (booths B9 through B16, and B31). The cabinet coating is dried in natural gas-fired ovens after each of the sealer and topcoat application steps. Touchup and specially sized items are coated in the trim booths (B25 and B26). Each coating booth has a filter to control particulate matter emissions.

7.1.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
B1	George Koch Son Stain Spray Booth B1 (Monorail #1 (West))	Filter F1
B2	George Koch Son Stain Spray Booth B2 (Monorail #1 (West))	Filter F2
B3	JBI Inc. Stain Spray Booth B3 (Monorail #1 (West))	Filter F3
B4	JBI Inc. Stain Spray Booth B4 (Monorail #1 (West))	Filter F4
B5	Young & Bertke Sealer Spray Booth B5 (Monorail #1 (West))	Filter F5
B6	Young & Bertke Sealer Spray Booth B6 (Monorail #1 (West))	Filter F6
B7	Young & Bertke Topcoat Spray Booth B7 (Monorail #1 (West))	Filter F7
B8	Young & Bertke Topcoat Spray Booth B8 (Monorail #1 (West))	Filter F8
B9	Stain Spray Booth B9 (Monorail #2 (East))	Filter F9
B10	Stain Spray Booth B10 (Monorail #2 (East))	Filter F10
B11	JBI Inc. Stain Spray Booth B11	Filter F11

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	(Monorail #2 (East))	
B12	JBI Inc. Stain Spray Booth B12 (Monorail #2 (East))	Filter F12
B13	Young & Bertke Sealer Spray Booth B13 (Monorail #2 (East))	Filter F13
B14	Young & Bertke Sealer Spray Booth B14 (Monorail #2 (East))	Filter F14
Emission Unit	Description	Emission Control Equipment
B15	Young & Bertke Topcoat Spray Booth B15 (Monorail #2 (East))	Filter F15
B16	Young & Bertke Topcoat Spray Booth B16 (Monorail #2 (East))	Filter F16
B25	Trim Spray Booth B25	Filter F25
B26	Trim Spray Booth B26	Filter F26
B27	Trim Spray Booth B27 (Mini Monorail)	Filter F27
B30	Preseal Spray Booth B30 (Monorail #1 (West))	Filter F30
B31	Preseal Spray Booth B31 (Monorail #2 (East))	Filter F31

7.1.3 Applicability Provisions and Applicable Regulations

- a. The painting/coating spray booths listed in Condition 7.1.2 are "affected coating lines" for the purpose of these unit-specific conditions.
- b. Each affected coating line is subject to the emission limits identified in Condition 5.2.2.
- c. The affected coating lines are subject to the NESHAP for Wood Furniture Manufacturing Operations, 40 CFR Part 63 Subparts A and JJ because the source is engaged, either in part or in whole, in the manufacture of wood furniture or wood furniture components and that is located at a plant site that is a major source as defined in 40 CFR 63.2. The Illinois EPA is administering NESHAP in Illinois on behalf of the USEPA under a delegation agreement. Pursuant to 40 CFR 63.802(a), each owner or operator of an existing affected source subject to 40 CFR 63 Subpart JJ shall:

- i. Limit VHAP emissions from finishing operations by meeting the emission limitations for existing sources presented in Table 3 of 40 CFR 63 Subpart JJ, using any of the compliance methods in Condition 7.1.12(a) (see also 40 CFR 63.804(a)). To determine VHAP emissions from a finishing material containing formaldehyde or styrene, the owner or operator of the affected source shall use the methods presented in Condition 7.1.5(i)(ii) (see also 40 CFR 63.803(1)(2)) for determining styrene and formaldehyde usage [40 CFR 63.802(a)(1)].
  - ii. Limit HAP emissions from strippable spray booth coatings by using coatings that contain no more than 0.8 kg VOC/kg solids (0.8 lb VOC/lb solids), as applied [40 CFR 63.802(a)(3)].
- d. The affected coating lines are subject to 35 IAC 212.321(a), which provides that:
- No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit which, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 (see also Attachment 1) [35 IAC 212.321(a)].
- e. No person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission unit to exceed 2000 ppm, [35 IAC 214.301].
  - f. Pursuant to 35 IAC 215.204(1), no owner or operator of a Wood Furniture Coating line shall cause or allow the emission of volatile organic material to exceed the following limitations on coating materials, excluding water and any compounds which are specifically exempted from the definition of volatile organic material pursuant to 35 IAC Part 215, delivered to the coating applicator:

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- i. Clear topcoat [35 IAC 215.204(1)(1)]:  

$\frac{\text{kg/l}}{0.67}$	$\frac{\text{lb/gal}}{5.6}$
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- ii. Opaque stain [35 IAC 215.204(1)(2)]:  

$\frac{\text{kg/l}}{0.56}$	$\frac{\text{lb/gal}}{4.7}$
----------------------------	-----------------------------
  
- iii. Pigmented coat [35 IAC 215.204(1)(3)]:  

$\frac{\text{kg/l}}{0.60}$	$\frac{\text{lb/gal}}{5.0}$
----------------------------	-----------------------------
  
- iv. Repair coat [35 IAC 215.204(1)(4)]:  

$\frac{\text{kg/l}}{0.67}$	$\frac{\text{lb/gal}}{5.6}$
----------------------------	-----------------------------

v. Sealer [35 IAC 215.204(1)(5)]:

$$\frac{\text{kg/l}}{0.67} \qquad \frac{\text{lb/gal}}{5.6}$$

vi. Semi-transparent stain [35 IAC 215.204(1)(6)]:

$$\frac{\text{kg/l}}{0.79} \qquad \frac{\text{lb/gal}}{6.6}$$

vii. Wash coat [35 IAC 215.204(1)(7)]:

$$\frac{\text{kg/l}}{0.73} \qquad \frac{\text{lb/gal}}{6.1}$$

g. Pursuant to 35 IAC 215.207(a), owners or operators of coating lines subject to Condition 7.1.3(f) (see also 35 IAC 215.204) may comply with this Condition rather than with Condition 7.1.3(f) (see also 35 IAC 215.204). The methods or procedures used to determine emissions of volatile organic material under this Condition shall be approved by the Illinois EPA in accordance with 35 IAC 201. Emissions of volatile organic material from sources subject to Condition 7.1.3(f) (see also 35 IAC 215.204) are allowable, notwithstanding the limitations in Condition 7.1.3(f) (see also 35 IAC 215.204), if the combined actual emissions from selected coating lines at the coating plant, but not including coating lines or other emission sources constructed or modified after July 1, 1979, is less than or equal to the combined allowable emissions as determined by the following equations:

$$E_{\text{all}} = \sum_{j=1}^m \sum_{i=1}^n (A_i B_i)$$

$$E_{\text{ACT}} = \sum_{j=1}^m \sum_{i=1}^n (C_i B_i (1 - D_i))_j$$

i. Pursuant to 35 IAC 215.207(b),  $A_i$  shall be determined by the following formula:

$$A_i = \frac{R_i}{1 - \frac{R_i}{S_i}}$$

ii. Pursuant to 35 IAC 215.207(c), as used in Condition 7.1.3(g) and (g)(i) (see also 35 IAC 215.207(a) and (b)), symbols mean the following:

$E_{ALL}$  = The allowable volatile organic material emissions from the coating plant in kg/day (lb/day).

$A_i$  = The allowable emission limit for a coating pursuant to Condition 7.1.3(f) (see also 35 IAC 215.204) expressed in kg/l (lbs/gal) of coating solids.

$B_i$  = The volume of coating solids in l/day (gal/day) in a coating as delivered to the coating line.

$m$  = The number of coating lines included in the combined emission rate.

$n$  = The number of different coatings delivered to a coating line.

$E_{ACT}$  = The actual volatile organic material emissions from the coating plant in kg/day (lbs/day).

$C_i$  = The weight of volatile organic material per volume of solids in kg/l (lb/gal) for a coating.

$D_i$  = The control efficiency by which emissions of volatile organic material from a coating are reduced through the use of control equipment.

$R_i$  = The applicable volatile organic material emission limit pursuant to Condition 7.1.3(f) (see also 35 IAC 215.204), for a coating in kg/l (lb/gal).

$S_i$  = The density of the volatile organic material in a coating in kg/l (lb/gal).

#### 7.1.4 Non-Applicability of Regulations of Concern

- a. The affected coating lines are not subject to 35 IAC 212.324, Process Emission Units In Certain Areas, because the source is not located in a non-attainment area for PM<sub>10</sub>, as identified in 35 IAC 212.324(a)(1).
- b. No coating line subject to the limitations of Condition 7.1.3(f) (see also 35 IAC 215.204) is required to meet 35 IAC 215.301 or 215.302 after the date by which the coating line is required to meet Condition 7.1.3(f) (see also 35 IAC 215.204) [35 IAC 215.209].
- c. The curing and drying ovens associated with the affected coating lines are not subject to 35 IAC 216.121, Emissions of Carbon Monoxide from Fuel Combustion Emission Units, because the actual heat input is less than 2.9 MW (10 mmBtu/hr) and the curing and drying ovens associated with the affected coating lines are not by definition fuel combustion emission units.
- d. The curing and drying ovens associated with the affected coating lines are not subject to 35 IAC 217.121, Emissions of Nitrogen Oxides from New Fuel Combustion Emission Sources, because the actual heat input is less than 73.2 MW (250 mmBtu/hr) and the curing and drying ovens associated with the affected coating lines are not by definition fuel combustion emission units.
- e. This permit is issued based on the affected coating lines not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected coating lines are subject to a NESHAP proposed after November 15, 1990, pursuant to 40 CFR 64.2(b)(1)(i).

7.1.5 Operational and Production Limits and Work Practices

- a. Inspection and maintenance plan. Pursuant to 40 CFR 63.803(c), each owner or operator of an affected source shall prepare and maintain with the work practice implementation plan a written leak inspection and maintenance plan that specifies:

- i. A minimum visual inspection frequency of once per month for all equipment used to transfer or apply coatings, adhesives, or organic HAP solvents [40 CFR 63.803(c)(1)];
- ii. An inspection schedule [40 CFR 63.803(c)(2)];
- iii. Methods for documenting the date and results of each inspection and any repairs that were made [40 CFR 63.803(c)(3)];
- iv. Pursuant to 40 CFR 63.803(c)(4), the timeframe between identifying the leak and making the repair, which adheres, at a minimum, to the following schedule:
  - A. A first attempt at repair (e.g., tightening of packing glands) shall be made no later than five calendar days after the leak is detected [40 CFR 63.803(c)(4)(i)]; and
  - B. Final repairs shall be made within 15 calendar days after the leak is detected, unless the leaking equipment is to be replaced by a new purchase, in which case repairs shall be completed within three months [40 CFR 63.803(c)(4)(ii)].
- b. Chemical composition of cleaning and washoff solvents. Each owner or operator of an affected source shall not use cleaning or washoff solvents that contain any of the pollutants listed in Table 4 to 40 CFR 63 Subpart JJ, in concentrations subject to MSDS reporting as required by OSHA [40 CFR 63.803(e)].
- c. Spray booth cleaning. Each owner or operator of an affected source shall not use compounds containing more than 8.0 percent by weight of VOC for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, or metal filters, or plastic filters unless the spray booth is being refurbished. If the spray booth is being refurbished, that is the spray booth coating or other protective material used to cover the booth is being replaced, the affected source shall use no more than

1.0 gallon of organic HAP solvent per booth to prepare the surface of the booth prior to applying the booth coating [40 CFR 63.803(f)].

- d. Storage requirements. Each owner or operator of an affected source shall use normally closed containers for storing finishing, gluing, cleaning, and washoff materials [40 CFR 63.803(g)].
- e. Application equipment requirements. Pursuant to 40 CFR 63.803(h), each owner or operator of an affected source shall use conventional air spray guns to apply finishing materials only under any of the following circumstances:
  - i. To apply finishing materials that have a VOC content no greater than 1.0 lb VOC/lb solids, as applied [40 CFR 63.803(h)(1)];
  - ii. Pursuant to 40 CFR 63.803(h)(2), for touchup and repair under the following conditions:
    - A. The touchup and repair occurs after completion of the finishing operation [40 CFR 63.803(h)(2)(i)]; or
    - B. The touchup and repair occurs after the application of stain and before the application of any other type of finishing material, and the materials used for touchup and repair are applied from a container that has a volume of no more than 2.0 gallons [40 CFR 63.803(h)(2)(ii)].
  - iii. When spray is automated, that is, the spray gun is aimed and triggered automatically, not manually [40 CFR 63.803(h)(3)];
  - iv. When emissions from the finishing application station are directed to a control device [40 CFR 63.803(h)(4)];
  - v. The conventional air gun is used to apply finishing materials and the cumulative total usage of that finishing material is no more

than 5.0 percent of the total gallons of finishing material used during that semiannual period [40 CFR 63.803(h)(5)]; or

- vi. Pursuant to 40 CFR 63.803(h)(6), the conventional air gun is used to apply stain on a part for which it is technically or economically infeasible to use any other spray application technology. The affected source shall demonstrate technical or economic infeasibility by submitting to the Illinois EPA or USEPA a videotape, a technical report, or other documentation that supports the affected source's claim of technical or economic infeasibility. The following criteria shall be used, either independently or in combination, to support the affected source's claim of technical or economic infeasibility:
  - A. The production speed is too high or the part shape is too complex for one operator to coat the part and the application station is not large enough to accommodate an additional operator [40 CFR 63.803(h)(6)(i)]; or
  - B. The excessively large vertical spray area of the part makes it difficult to avoid sagging or runs in the stain [40 CFR 63.803(h)(6)(ii)].
- f. Line cleaning. Each owner or operator of an affected source shall pump or drain all organic HAP solvent used for line cleaning into a normally closed container [40 CFR 63.803(i)].
- g. Gun cleaning. Each owner or operator of an affected source shall collect all organic HAP solvent used to clean spray guns into a normally closed container [40 CFR 63.803(j)].
- h. Washoff operations. Pursuant to 40 CFR 63.803(k), each owner or operator of an affected source shall control emissions from washoff operations by:

- i. Using normally closed tanks for washoff [40 CFR 63.803(k)(1)]; and
  - ii. Minimizing dripping by tilting or rotating the part to drain as much solvent as possible [40 CFR 63.803(k)(2)].
- i. Formulation assessment plan for finishing operations. Pursuant to 40 CFR 63.803(l), each owner or operator of an affected source shall prepare and maintain with the work practice implementation plan a formulation assessment plan that:
- i. Identifies VHAP from the list presented in Table 5 of 40 CFR 63 Subpart JJ that are being used in finishing operations by the affected source [40 CFR 63.803(l)(1)];
  - ii. Establishes a baseline level of usage by the affected source, for each VHAP identified in Condition 7.1.5(i)(i) (see also 40 CFR 63.803(l)(1)). The baseline usage level shall be the highest annual usage from 1994, 1995, or 1996, for each VHAP identified in Condition 7.1.5(i)(i) (see also 40 CFR 63.803(l)(1)). For formaldehyde, the baseline level of usage shall be based on the amount of free formaldehyde present in the finishing material when it is applied. For styrene, the baseline level of usage shall be an estimate of unreacted styrene, which shall be calculated by multiplying the amount of styrene monomer in the finishing material, when it is applied, by a factor of 0.16. Sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system, which is determined using the equation in 40 CFR 63.805(d) or (e) [40 CFR 63.803(l)(2)].
  - iii. Tracks the annual usage of each VHAP identified in Condition 7.1.5(i)(i) (see also 40 CFR 63.803(l)(1)) by the affected source that is present in amounts subject to MSDS reporting as required by OSHA [40 CFR 63.803(l)(3)].

- iv. Pursuant to 40 CFR 63.803(1)(4), if, after November 1998, the annual usage of the VHAP identified in Condition 7.1.5(i)(i) (see also 40 CFR 63.803(1)(1)) exceeds its baseline level, then the owner or operator of the affected source shall provide a written notification to the Illinois EPA that describes the amount of the increase and explains the reasons for exceedance of the baseline level. The following explanations would relieve the owner or operator from further action, unless the affected source is not in compliance with any State regulations or requirements for that VHAP:
- A. The exceedance is no more than 15.0 percent above the baseline level [40 CFR 63.803(1)(4)(i)];
  - B. Usage of the VHAP is below the de minimis level presented in Table 5 of 40 CFR 63 Subpart JJ for that VHAP (sources using a control device to reduce emissions may adjust their usage based on the overall control efficiency of the control system, which is determined using the procedures in 40 CFR 63.805(d) or (e) [40 CFR 63.803(1)(4)(ii)]);
  - C. The affected source is in compliance with its State's air toxic regulations or guidelines for the VHAP [40 CFR 63.803(1)(4)(iii)]; or
  - D. The source of the pollutant is a finishing material with a VOC content of no more than 1.0 kg VOC/kg solids (1.0 lb VOC/lb solids), as applied [40 CFR 63.803(1)(4)(iv)].
- v. If none of the above explanations are the reason for the increase, the owner or operator shall confer with the Illinois EPA to discuss the reason for the increase and whether there are practical and reasonable technology-based

solutions for reducing the usage. The evaluation of whether a technology is reasonable and practical shall be based on cost, quality, and marketability of the product, whether the technology is being used successfully by other wood furniture manufacturing operations, or other criteria mutually agreed upon by the Illinois EPA and owner or operator. If there are no practical and reasonable solutions, the facility need take no further action. If there are solutions, the owner or operator shall develop a plan to reduce usage of the pollutant to the extent feasible. The plan shall address the approach to be used to reduce emissions, a timetable for implementing the plan, and a schedule for submitting notification of progress [40 CFR 63.803(1)(5)].

- vi. If, after November 1998, an affected source uses a VHAP of potential concern listed in Table 6 of 40 CFR 63 Subpart JJ for which a baseline level has not been previously established, then the baseline level shall be established as the de minimis level provided in that same table for that chemical. The affected source shall track the annual usage of each VHAP of potential concern identified in this paragraph that is present in amounts subject to MSDS reporting as required by OSHA. If usage of the VHAP of potential concern exceeds the de minimis level listed in Table 6 of 40 CFR 63 Subpart JJ for that chemical, then the affected source shall provide an explanation to the Illinois EPA that documents the reason for the exceedance of the de minimis level. If the explanation is not one of those listed in Conditions 7.1.5(i)(iv)(A) through (i)(iv)(D) (see also 40 CFR 63.803(1)(4)(i) through (1)(4)(iv)), the affected source shall follow the procedures in Condition 7.1.5(e)(i)(v) (see also 40 CFR 63.803(1)(5)) [40 CFR 63.803(1)(6)].
- j. The Permittee shall follow good operating practices for the spray booth filters, including periodic

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inspection, routine maintenance and prompt repair of defects.

- k. The curing and drying ovens associated with the affected coating lines shall only be operated with natural gas as the fuel.

7.1.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected coating lines are subject to the following:

a. Emissions and operation of the Monorail 1 and Monorail 2 coating lines shall not exceed the following limits:

i. The VOM content of the coatings on Monorail 1 and Monorail 2 as applied on the lines shall not exceed the following:

<u>Coating</u>	<u>VOM Content (lb/gal)</u>
Stain	6.6 <sup>a</sup>
Sealer	5.0 <sup>a</sup>
Specialty Top Coat	5.0 <sup>a</sup>
Pigmented Coatings	5.0 <sup>a</sup>
Water-Based Topcoat	2.3 <sup>b</sup>

<sup>a</sup> Excluding water and exempt compounds

<sup>b</sup> Includes water

ii. The usage of specialty topcoat shall not exceed 5,000 gallons per year. For this purpose, specialty topcoat will only be used when the water-based topcoat is not technically feasible. Topcoat includes coatings when used as the final coating(s) on a substrate, even if a coating may also be used as a sealer.

iii. The stain and sealer shall be applied with high volume low pressure (HVLP) spray equipment. Air pressure shall not exceed 10 psig.

iv. The requirements of 35 IAC 218.624-Covers, 35 IAC 218.628-Leaks, and 35 IAC 218.630-Clean Up, as in effect on December 31, 1991, shall be followed to minimize VOM emissions from storage, handling, and processing of coating in the paint kitchen (i.e., the coating storage and preparation area).

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- A. Pursuant to 35 IAC 218.624, as in effect on December 31, 1991, no person shall operate an open-top mill, tank, vat or vessel with a volume of more than 45 l (12 gal) for the production of paint or ink unless:
- I. The mill, tank, vat or vessel is equipped with a cover which completely covers the mill, tank, vat, or vessel opening except for an opening no larger than necessary to allow for safe clearance for a mixer shaft. Such cover shall extend at least 1.27 cm (0.5 in) beyond the outer rim of the opening or be attached to the rim [35 IAC 218.624(a), as in effect on December 31, 1991].
  - II. The cover remain closed except when production, sampling, maintenance or inspection procedures require access [35 IAC 218.624(b), as in effect on December 31, 1991].
  - III. The cover is maintained in good condition such that, when in place, it maintains contact with the rim of the opening for at least 90 percent of the circumference of the rim [35 IAC 218.624(c), as in effect on December 31, 1991].
- B. Pursuant to 35 IAC 218.628, as in effect on December 31, 1991, the owner of operator of a paint or ink manufacturing plant shall, for the purpose of detecting leaks, conduct an equipment monitoring program as set forth below:
- I. Each pump shall be checked by visual inspection each calendar week for indications of leaks, that is, liquids dripping from the pump seal. If there are indications of liquids

dripping from the pump seal, the pump shall be repaired as soon as practicable, but no later than 15 days after the leak is detected [35 IAC 218.628(a), as in effect on December 31, 1991].

- II. Any pump, valve, pressure relief valve, sampling connection, open-ended valve and flange or connector containing a fluid which is at least 10 percent VOM by weight which appears to be leaking on the basis of sight, smell or sound shall be repaired as soon as practicable, but no later than 15 calendar days after the leak is detected [35 IAC 218.628(b), as in effect on December 31, 1991].
- III. A weather proof, readily visible tag, in bright colors such as red or yellow, bearing an identification number and the date on which the leak was detected shall be attached to leaking equipment. The tag may be removed upon repair, that is, when the equipment is adjusted or otherwise altered to allow operation without leaking [35 IAC 218.628(c), as in effect on December 31, 1991].
- IV. When a leak is detected, the owner or operator shall record the date of detection and repair and the record shall be retained at the plant for at least two years from the date of each detection or each repair attempt. The record shall be made available to any person upon verbal or written request during business hours [35 IAC 218.628(d), as in effect on December 31, 1991].

C. Clean Up

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- I. No person shall clean paint or ink manufacturing equipment with organic solvent unless the equipment being cleaned is completely covered or enclosed except for an opening no larger than necessary to allow safe clearance for proper operation of the cleaning equipment, considering the method and materials being used [35 IAC 218.630(a), as in effect on December 31, 1991].
  - II. No person shall store volatile organic wash solvent in other than closed containers, unless closed containers are demonstrated to be a safety hazard, or dispose of organic wash solvent in a manner such that more than 20 percent by weight is allowed to evaporate into the atmosphere [35 IAC 218.630(b), as in effect on December 31, 1991].
  
- v. Closed containers shall be used for the storage and disposal of cloth or paper used for VOM solvent cleanup.
  
- vi. Fresh or spent VOM solvent shall be stored in closed containers.
  
- vii. Equipment for collecting VOM solvent and VOM containing cleaning compounds and minimizing evaporation of VOM to the atmosphere shall be used for the cleanup of mixing, storage and spray equipment.
  
- viii. Containers for VOM coating and thinner shall not be left open to the atmosphere when not in use.
  
- ix. Conditions 7.1.6(a)(i) through (a)(viii) represent the application of the Best Available Control Technology (BACT) as required by Section 165 of the CAA.

- x. Emissions of particulate matter shall not exceed the following:

<u>Emission Unit</u>	<u>PM Emissions Ton/yr</u>
Monorail #1	0.30
Monorail #2	0.30

- xi. The emission rate of volatile organic material (VOM) from Monorail #1, Monorail #2, Trim Booths, and Millroom Booth, combined, including associated paint kitchen and cleanup (not including stain booths 1E, 1W, 2E, and 2W), shall not exceed 37.3 tons/month and 292 tons/year.
- xii. The above limitations were established in Permit 91020002, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD).  
 These limits ensure that the construction and/or modification addressed in the aforementioned permit does not cause or contribute to air pollution in violation of the National Ambient Air Quality Standard (NAAQS) for ozone pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].
- b.
  - i. Total combined emissions of VOM from stain booths B3, B4, B11, and B12 shall not exceed 4 tons/month and 32 tons/year.
  - ii. The above limitations were established in Permit 97090044, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD).  
 These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].

7.1.7 Testing Requirements

- a. The USEPA Method 311 of Appendix A of 40 CFR Part 63 shall be used in conjunction with formulation data to determine the VHAP content of the liquid coating. Formulation data shall be used to identify VHAP present in the coating. The USEPA Method 311 shall then be used to quantify those VHAP identified through formulation data. The USEPA Method 311 shall not be used to quantify HAP such as styrene and formaldehyde that are emitted during the cure. The USEPA Method 24 (40 CFR part 60, Appendix A) shall be used to determine the solids content by weight and the density of coatings. If it is demonstrated to the satisfaction of the Illinois EPA or USEPA that a coating does not release VOC or HAP byproducts during the cure, for example, all VOC and HAP present in the coating is solvent, then batch formulation information shall be accepted. The owner or operator of an affected source may request approval from the Illinois EPA or USEPA to use an alternative method for determining the VHAP content of the coating. In the event of any inconsistency between the USEPA Method 24 or Method 311 test data and a facility's formulation data, that is, if the USEPA Method 24/311 value is higher, the USEPA Method 24/311 test shall govern unless after consultation, a regulated source could demonstrate to the satisfaction of the enforcement agency that the formulation data were correct. Sampling procedures shall follow the guidelines presented in "Standard Procedures for Collection of Coating and Ink Samples for VOC Content Analysis by Reference Method 24 and Reference Method 24A," EPA-340/1-91-010. (Docket No. A-93-10, Item No. IV-A-1) [40 CFR 63.805(a)].
- b. The VOM content of coatings shall be determined by Method 24, 40 CFR Part 60, Appendix A, except for glues and adhesive coatings, two component reactive coatings forming volatile reaction products, coatings requiring energy other than heat to initiate curing, and coatings requiring high temperature catalysis for curing, providing the person proposing testing of the material submits to the Illinois EPA proof that the Method 24 results would not be representative and proof that a proposed alternative test method gives representative, accurate test results. For printing inks, the volatile organic material content shall be

determined by Method 24A, 40 CFR Part 60, Appendix A.

Any alternate test method must be approved by the Illinois EPA which shall consider data comparing the performance of the proposed alternative to the performance of the approved test method(s). If the Illinois EPA determines that such data demonstrates that the proposed alternative will achieve results equivalent to the approved test method(s), the Illinois EPA shall approve the proposed alternative [35 IAC 215.208(a)].

- c. Transfer efficiency shall be determined by a method, procedure or standard approved by the USEPA, under the applicable new source performance standard or until such time as USEPA has approved and published such a method, procedure or standard, by any appropriate method, procedure or standard approved by the Illinois EPA [35 IAC 215.208(b)].
- d. Upon reasonable request by the Illinois EPA, pursuant to Section 39.5(7)(b) of the Act, the VOM content of specific coatings and cleaning solvents used on the affected coating line shall be determined as follows:
  - i. The VOM content of representative coatings "as applied" on the affected coating line shall be determined according to USEPA Reference Methods 24 and 24A of 40 CFR 60 Appendix A and the procedures of 35 IAC 215.105.
  - ii. This testing may be performed by the supplier of a material provided that the supplier provides appropriate documentation for such testing to the Permittee and the Permittee's records pursuant to Condition 7.1.9(m)(ii) directly reflect the application of such material and separately account for any additions of solvent.

7.1.8 Monitoring Requirements

None

7.1.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for each affected coating line to demonstrate compliance with Conditions 5.5.1, 7.1.3, 7.1.5, and 7.1.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Cleaning and washoff solvent accounting system.  
Pursuant to 40 CFR 63.803(d), each owner or operator of an affected source shall develop an organic HAP solvent accounting form to record:
  - i. The quantity and type of organic HAP solvent used each month for washoff and cleaning, as defined in 40 CFR 63.801 [40 CFR 63.803(d)(1)];
  - ii. The number of pieces washed off, and the reason for the washoff [40 CFR 63.803(d)(2)]; and
  - iii. The quantity of spent organic HAP solvent generated from each washoff and cleaning operation each month, and whether it is recycled onsite or disposed offsite [40 CFR 63.803(d)(3)].
- b. The owner or operator of an affected source subject to this subpart shall fulfill all recordkeeping requirements of 40 CFR 63.10, according to the applicability criteria in 40 CFR 63.800(d) [40 CFR 63.806(a)].
- c. Pursuant to 40 CFR 63.806(b), the owner or operator of an affected source subject to the emission limits in Condition 7.1.3(c) (see also 40 CFR 63.802) shall maintain records of the following:
  - i. A certified product data sheet for each finishing material, thinner, contact adhesive, and strippable spray booth coating subject to

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I.D. No.: 139404AAH  
Application No.: 95120059  
May 15, 2001

- the emission limits in Condition 7.1.3(c) (see also 40 CFR 63.802) [40 CFR 63.806(b)(1)]; and
- ii. The VHAP content, in kg VHAP/kg solids (lb VHAP/lb solids), as applied, of each finishing material and contact adhesive subject to the emission limits in Condition 7.1.3(c) (see also 40 CFR 63.802) [40 CFR 63.806(b)(2)]; and
  - iii. The VOC content, in kg VOC/kg solids (lb VOC/lb solids), as applied, of each strippable booth coating subject to the emission limits in Condition 7.1.3(c)(ii) (see also 40 CFR 63.802(a)(3)) or 40 CFR 63.802(b)(3) [40 CFR 63.806(b)(3)].
- d. The owner or operator of an affected source following the compliance method in Condition 7.1.12(a)(i) (see also 40 CFR 63.804(a)(1)) or 40 CFR 63.804(d)(1) shall maintain copies of the averaging calculation for each month following the compliance date, as well as the data on the quantity of coatings and thinners used that is necessary to support the calculation of E in Equation 1 [40 CFR 63.806(c)].
- e. Pursuant to 40 CFR 63.806(d), the owner or operator of an affected source following the compliance procedures of 40 CFR 63.804(f)(3)(ii) and Condition 7.1.12(b)(iii)(B) (see also 40 CFR 63.804(g)(3)(ii)) shall maintain the records required by Condition 7.1.9(b) (see also 40 CFR 63.806(c)) as well as records of the following:
- i. Solvent and coating additions to the continuous coater reservoir [40 CFR 63.806(d)(1)];
  - ii. Viscosity measurements [40 CFR 63.806(d)(2)]; and
  - iii. Data demonstrating that viscosity is an appropriate parameter for demonstrating compliance [40 CFR 63.806(d)(3)].
- f. Pursuant to 40 CFR 63.806(e), the owner or operator of an affected source subject to the work practice

standards in Conditions 7.1.5(a) through 7.1.5(i), and 7.1.9(a) (see also 40 CFR 63.803) shall maintain onsite the work practice implementation plan and all records associated with fulfilling the requirements of that plan, including, but not limited to:

- i. Records collected in accordance with the inspection and maintenance plan required by Condition 7.1.5(a) (see also 40 CFR 63.803(c)) [40 CFR 63.806(e)(2)];
  - ii. Records associated with the cleaning solvent accounting system required by Condition 7.1.9(a) (see also 40 CFR 63.803(d)) [40 CFR 63.806(e)(3)];
  - iii. Records associated with the limitation on the use of conventional air spray guns showing total finishing material usage and the percentage of finishing materials applied with conventional air spray guns for each semiannual period as required by Condition 7.1.5(e)(v) (see also 40 CFR 63.803(h)(5)) [40 CFR 63.806(e)(4)].
  - iv. Records associated with the formulation assessment plan required by Condition 7.1.5(i) (see also 40 CFR 63.803(l)) [40 CFR 63.806(e)(5)]; and
  - v. Copies of documentation such as logs developed to demonstrate that the other provisions of the work practice implementation plan are followed [40 CFR 63.806(e)(6)].
- g. The owner or operator of an affected source subject to the emission limits in Condition 7.1.3(c) (see also 40 CFR 63.802) and following the compliance provisions of 40 CFR 63.804(f)(1), (2), (3), (5), (7) and (8) and Conditions 7.1.12(b)(i), (ii), and (iii), 7.1.10(b) and (c) (see also 40 CFR 63.804(g)(1), (2), (3), (7), and (8)), and 40 CFR 63.804(g)(5) shall maintain records of the compliance certifications submitted in accordance with Condition 7.1.10(d) (see also 40 CFR 63.807(c)) for each semiannual period following the compliance date [40 CFR 63.806(h)].

- h. The owner or operator of an affected source shall maintain records of all other information submitted with the compliance status report required by 40 CFR 63.9(h) and 63.807(b) and the semiannual reports required by Condition 7.1.10(d) (see also 40 CFR 63.807(c)) [40 CFR 63.806(i)].
- i. The owner or operator of an affected source shall maintain all records in accordance with the requirements of 40 CFR 63.10(b)(1) [40 CFR 63.806(j)].
- j. Records of the testing of VOM content of coatings and cleaning solvents pursuant to Condition 7.1.7, which include the following [Section 39.5(7)(e) of the Act]:
  - i. Identification of material tested;
  - ii. Results of analysis;
  - iii. Documentation of analysis methodology; and
  - iv. Person performing analysis.
- l. The owner or operator of the coating plant shall maintain records of the density of the volatile organic material in each coating, the quantity and volatile organic material and solids content of each coating applied and the line to which coating is applied, in such a manner so as to demonstrate continuing compliance with the combined allowable emissions [35 IAC 215.207(d)].
- m. Pursuant to 39.5(7)(e) of the Act, the Permittee shall collect and record all of the following information each day for the affected coating lines and maintain the information at the source for a period of five years:
  - i. The name and identification number of each coating as applied on each coating line; and
  - ii. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.

- n. Records addressing use of good operating practices for the spray booth filters:
  - i. Records for periodic inspection of the spray booth filters with date, individual performing the inspection, and nature of inspection; and
  - ii. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.
- o. Coating usage of the affected coating lines, gal/mo and gal/yr;
- p. VOM content of coatings, % by Wt;
- q. Density of coatings, lb/gal;
- r. Cleanup solvent usage, gal/mo and gal/yr;
- s. Density of solvent, lb/gal; and
- t. Natural gas usage for the drying and curing ovens associated with the affected coating lines, Mft<sup>3</sup>/mo and Mft<sup>3</sup>/yr
- u. The operating schedule of the affected coating lines;
- v. The aggregate monthly and annual PM and VOM emissions from the affected coating lines based on the coating and solvent usage, the VOM content of such materials, the operating schedule and the typical hourly emission rate, with supporting calculations; and
- w. The aggregate monthly and annual NO<sub>x</sub>, PM, SO<sub>2</sub>, and VOM emissions from the combustion of natural gas for the drying and curing ovens associated with the affected coating lines shall be maintained, based on fuel consumption and the applicable emission factors, with supporting calculations.

#### 7.1.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of an affected coating line with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

- a. The owner or operator of an affected source subject to 40 CFR 63 Subpart JJ shall fulfill all reporting requirements of 40 CFR 63.7 through 40 CFR 63.10 (40 CFR 63 Subpart A, General Provisions) according to the applicability criteria in 40 CFR 63.800(d) [40 CFR 63.807(a)].
- b. Pursuant to 40 CFR 63.804(g)(7), owners or operators of an affected source subject to the provisions of Condition 7.1.3(c)(ii) (see also 40 CFR 63.802(a)(3)) or 40 CFR 63.804(b)(3) shall submit a compliance certification with the semiannual report required by Condition 7.1.10(d) (see also 40 CFR 63.807(c)).
  - i. The compliance certification shall state that compliant strippable spray booth coatings have been used each day in the semiannual reporting period, or should otherwise identify each day noncompliant materials were used. Each day a noncompliant strippable booth coating is used is a single violation of the standard [40 CFR 63.804(g)(7)(i)].
  - ii. The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source [40 CFR 63.804(g)(7)(ii)].
- c. Pursuant to 40 CFR 63.804(g)(8), owners or operators of an affected source subject to the work practice standards in Conditions 5.4, 7.1.5(a) through 7.1.5(i), and 7.1.9(a) (see also 40 CFR 63.803) shall submit a compliance certification with the semiannual report required by Condition 7.1.10(d) (see also 40 CFR 63.807(c)).
  - i. The compliance certification shall state that the work practice implementation plan is being followed, or should otherwise identify the

provisions of the plan that have not been implemented and each day the provisions were not implemented. During any period of time that an owner or operator is required to implement the provisions of the plan, each failure to implement an obligation under the plan during any particular day is a violation [40 CFR 63.804(g)(8)(i)].

- ii. The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source [40 CFR 63.804(g)(8)(ii)].
- d. Pursuant to 40 CFR 63.807(c), the owner or operator of an affected source demonstrating compliance in accordance with Conditions 7.1.12(b)(i), (ii), and (iii), 7.1.10(b) and (c) (see also 40 CFR 63.804(g)(1), (2), (3), (7), and (8)), and 40 CFR 63.804(g)(5) shall submit a report covering the previous 6 months of wood furniture manufacturing operations:
- i. The first report shall be submitted 30 calendar days after the end of the first 6-month period following the compliance date [40 CFR 63.807(c)(1)].
  - ii. Subsequent reports shall be submitted 30 calendar days after the end of each 6-month period following the first report [40 CFR 63.807(c)(2)].
  - iii. The semiannual reports shall include the information required by Conditions 7.1.12(b)(i), (ii), and (iii), 7.1.10(b) and (c) (see also 40 CFR 63.804(g)(1), (2), (3), (7), and (8)), and 40 CFR 63.804(g)(5), a statement of whether the affected source was in compliance or noncompliance, and, if the affected source was in noncompliance, the measures taken to bring the affected source into compliance [40 CFR 63.807(c)(3)].
  - iv. The frequency of the reports required by Condition 7.1.10(d) (see also 40 CFR

63.807(c)) shall not be reduced from semiannually regardless of the history of the owner's or operator's compliance status [40 CFR 63.807(c)(4)].

- e. The owner or operator of an affected source required to provide a written notification under Condition 7.1.5(i)(iv) (see also 40 CFR 63.803(1)(4)) shall include in the notification one or more statements that explains the reasons for the usage increase. The notification shall be submitted no later than 30 calendar days after the end of the annual period in which the usage increase occurred [40 CFR 63.807(e)].
- f. Pursuant to Section 39.5(7)(f) of the Act, the Permittee shall notify the Illinois EPA of any record showing violation of Condition 7.1.3(f) (see also 35 IAC 215.204) within 30 days following the occurrence of the violation.
- g. Emissions of PM or VOM in excess of the limits in Condition 7.1.6 based on the current month's records plus the preceding 11 months within 30 days of such an occurrence.
- h. Continued operation of an affected coating line with a defect in a spray booth filter that may result in emissions of particulate matter in excess of limits in Conditions 7.1.3(b) or (d) within 30 days of such an occurrence.

7.1.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.1.12 Compliance Procedures

Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.1.9 and the emission factors and formulas listed below:

- a. Pursuant to 40 CFR 63.804(a), the owner or operator of an existing affected source subject to Condition 7.1.3(c)(i) (see also 40 CFR 63.802(a)(1)) shall comply with those provisions using any of the methods presented in Conditions 7.1.12(a)(i) through

7.1.12(a)(iii) (see also 40 CFR 63.804(a)(1) through (a)(4)).

- i. Pursuant to 40 CFR 63.804(a)(1), calculate the average VHAP content for all finishing materials used at the facility using Equation 1, and maintain a value of E no greater than 1.0;

$$E = (M_{c1}C_{c1} + M_{c2}C_{c2} + \dots + M_{cn}C_{cn} + S_1W_1 + S_2W_2 + \dots S_nW_n) / (M_{c1} + M_{c2} + \dots + M_{cn})$$

(Equation 1)

Where:

E = The emission limit achieved by an emission point or a set of emission points, in kg VHAP/kg solids (lb VHAP/lb solids).

M = The mass of solids in finishing material used monthly, kg solids/month (lb solids/month).

C<sub>c</sub> = The VHAP content of a finishing material (c), in kilograms of volatile hazardous air pollutants per kilogram of coating solids (kg VHAP/kg solids), as supplied. Also given in pounds of volatile hazardous air pollutants per pound of coating solids (lb VHAP/lb solids).

S = The VHAP content of a solvent, expressed as a weight fraction, added to finishing materials.

W = The amount of solvent, in kilograms (pounds), added to finishing materials during the monthly averaging period.

- ii. Pursuant to 40 CFR 63.804(a)(2), use compliant finishing materials according to the following criteria:

A. Demonstrate that each stain, sealer, and topcoat has a VHAP content of no more than

- 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner [40 CFR 63.804(a)(2)(i)];
- B. Demonstrate that each washcoat, basecoat, and enamel that is purchased pre-made, that is, it is not formulated onsite by thinning another finishing material, has a VHAP content of no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids), as applied, and each thinner contains no more than 10.0 percent VHAP by weight by maintaining certified product data sheets for each coating and thinner [40 CFR 63.804(a)(2)(ii)]; and
- C. Demonstrate that each washcoat, basecoat, and enamel that is formulated at the affected source is formulated using a finishing material containing no more than 1.0 kg VHAP/kg solids (1.0 lb VHAP/lb solids) and a thinner containing no more than 3.0 percent VHAP by weight [40 CFR 63.804(a)(2)(iii)].
- iii. Use any combination of an averaging approach, as described in Condition 7.1.12(a)(i) (see also 40 CFR 63.804(a)(1)), compliant finishing materials, as described in Condition 7.1.12(a)(ii) (see also 40 CFR 63.804(a)(2)), and a control system, as described in 40 CFR 63.804(a)(3) [40 CFR 63.804(a)(4)].
- b. Continuous compliance demonstrations.
- i. Pursuant to 40 CFR 63.804(g)(1), owners or operators of an affected source subject to the provisions of Condition 7.1.3(c)(i) (see also 40 CFR 63.802(a)(1)) or 40 CFR 63.802(b)(1) that comply through the procedures established in Condition 7.1.12(a)(i) (see also 40 CFR 63.804(a)(1)) or 40 CFR 63.804(d)(1) shall demonstrate continuous compliance by

submitting the results of the averaging calculation (Equation 1) for each month within that semiannual period and submitting a compliance certification with the semiannual report required by Condition 7.1.10(d) (see also 40 CFR 63.807(c)).

- A. The compliance certification shall state that the value of (E), as calculated by Equation 1, is no greater than 1.0 for existing sources or 0.8 for new sources. An affected source is in violation of the standard if E is greater than 1.0 for existing sources or 0.8 for new sources for any month. A violation of the monthly average is a separate violation of the standard for each day of operation during the month, unless the affected source can demonstrate through records that the violation of the monthly average can be attributed to a particular day or days during the period [40 CFR 63.804(g)(1)(i)].
  - B. The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source [40 CFR 63.804(g)(1)(ii)].
- ii. Pursuant to 40 CFR 63.804(g)(2), owners or operators of an affected source subject to the provisions of Condition 7.1.3(c)(i) (see also 40 CFR 63.802(a)(1)) or 40 CFR 63.802(b)(1) that comply through the procedures established in Condition 7.1.12(a)(ii) (see also 40 CFR 63.804(a)(2)) or 40 CFR 63.804(d)(2) shall demonstrate continuous compliance by using compliant coatings and thinners, maintaining records that demonstrate the coatings and thinners are compliant, and submitting a compliance certification with the semiannual report required by Condition 7.1.10(d) (see also 40 CFR 63.807(c)).
- A. The compliance certification shall state that compliant stains, washcoats, sealers,

topcoats, basecoats, enamels, and thinners, as applicable, have been used each day in the semiannual reporting period or should otherwise identify the periods of noncompliance and the reasons for noncompliance. An affected source is in violation of the standard whenever a noncompliant coating, as demonstrated by records or by a sample of the coating, is used [40 CFR 63.804(g)(2)(i)].

B. The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source [40 CFR 63.804(g)(2)(ii)].

iii. Pursuant to 40 CFR 63.804(g)(3), owners or operators of an affected source subject to the provisions of Condition 7.1.3(c)(i) (see also 40 CFR 63.802(a)(1)) or 40 CFR 63.802(b)(1) that are complying through the procedures established in Condition 7.1.12(a)(ii) (see also 40 CFR 63.804(a)(2)) or 40 CFR 63.804(d)(2) and are applying coatings using continuous coaters shall demonstrate continuous compliance by following the procedures in Condition 5.9.3(d)(iii)(A) or (B) (see also 40 CFR 63.804(g)(3)(i) or (ii)).

A. Pursuant to 40 CFR 63.804(g)(3)(i), using compliant coatings, as determined by the VHAP content of the coating in the reservoir and the VHAP content as calculated from records, using compliant thinners, and submitting a compliance certification with the semiannual report required by Condition 7.1.10(d) (see also 40 CFR 63.807(c)).

I. The compliance certification shall state that compliant coatings have been used each day in the semiannual reporting period, or should otherwise identify the days of noncompliance and the reasons for noncompliance. An affected source is

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in violation of the standard whenever a noncompliant coating, as determined by records or by a sample of the coating, is used. Use of a noncompliant coating is a separate violation for each day the noncompliant coating is used [40 CFR 63.804(g)(3)(i)(A)].

II. The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source [40 CFR 63.804(g)(3)(i)(B)].

B. Pursuant to 40 CFR 63.804(g)(3)(ii), using compliant coatings, as determined by the VHAP content of the coating in the reservoir, using compliant thinners, maintaining a viscosity of the coating in the reservoir that is no less than the viscosity of the initial coating by monitoring the viscosity with a viscosity meter or by testing the viscosity of the initial coating and retesting the coating in the reservoir each time solvent is added, maintaining records of solvent additions, and submitting a compliance certification with the semiannual report required by Condition 7.1.10(d) (see also 40 CFR 63.807(c)).

I. The compliance certification shall state that compliant coatings, as determined by the VHAP content of the coating in the reservoir, have been used each day in the semiannual reporting period. Additionally, the certification shall state that the viscosity of the coating in the reservoir has not been less than the viscosity of the initial coating, that is, the coating that is initially mixed and placed in the reservoir, for any day in the

semiannual reporting period [40 CFR  
63.804(g)(3)(ii)(A)].

II. The compliance certification shall be signed by a responsible official of the company that owns or operates the affected source [40 CFR 63.804(g)(3)(ii)(B)].

III. An affected source is in violation of the standard when a sample of the as-applied coating exceeds the applicable limit established in Condition 7.1.12(a)(ii) (see also 40 CFR 63.804(a)(2)) or 40 CFR 63.804(d)(2), as determined using USEPA Method 311, or the viscosity of the coating in the reservoir is less than the viscosity of the initial coating [40 CFR 63.804(g)(3)(ii)(C)].

- c. Emission of organic material released during clean-up operations and disposal shall be included with other emissions of organic material from the related emission source or air pollution control equipment in determining total emissions [35 IAC 215.101].
- d. Compliance with Conditions 7.1.3(b) and (d) is assumed by proper operation of the spray booth filters, as addressed by Conditions 7.1.5(j) and 7.1.9(n).
- e. To determine compliance with Conditions 5.5.1 and 7.1.6, PM and VOM emissions from the affected coating lines shall be calculated based on the following:

i. Volatile Organic Material Emissions:

$$\text{VOM (lb)} = [(\text{Coating Usage, gal}) \times (\text{Coating Density, lb/gal}) \times (\text{VOM Content of Coating, \% by Wt.})] + [(\text{Cleaning Solvent Usage, gal}) \times (\text{Solvent Density, lb/gal})]$$

ii. Particulate Matter Emissions:

$$\text{PM (lb)} = (\text{Wt of Coating Used, lb}) \times (\text{Wt \% Solids}) \times [1 - (\text{Transfer Efficiency}^* (\%)/100)] \times [1 - (\text{Spray Booth Filter Efficiency}^* (\%)/100)]$$

\* As specified by manufacturer or vendor of the spray booths and filters

- f. To determine compliance with Condition 5.5.1, emissions from the combustion of natural gas in the drying and curing ovens associated with the affected coating lines shall be calculated based on the following emission factors:

<u>Pollutant</u>	<u>Emission Factor</u> <u>(lb/Mft<sup>3</sup>)</u>
NO <sub>x</sub>	100
PM	7.6
SO <sub>2</sub>	0.6
VOM	5.5

These are the emission factors for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Fifth Edition, Supplement D, March, 1998.

$$\text{Drying/Curing Oven Emissions (lb)} = (\text{Natural Gas Consumed, Mft}^3) \times (\text{The Appropriate Emission Factor, lb/Mft}^3)$$

7.2 Unit 02: Natural Gas Fired Boiler

7.2.1 Description

Boilers are utilized at this source to provide steam. This boiler is fired by natural gas. This boiler was formerly operated for the burning of wood wastes and used a Venturi wet scrubber and a filtration to reduce particulate matter emissions.

7.2.2 List of Emission Units and Pollution Control Equipment

Emission Unit	Description	Emission Control Equipment
Kewanee Boiler	Kewanee Type C Natural Gas-Fired Boiler (Kewanee Boiler, 11.65 mmBtu/hr)	None

7.2.3 Applicability Provisions and Applicable Regulations

- a. The Kewanee Boiler is an "affected boiler" for the purpose of these unit-specific conditions.
- b. The affected boiler is subject to the emission limits identified in Condition 5.2.2.
- c. No person shall cause or allow the emission of carbon monoxide (CO) into the atmosphere from any fuel combustion emission unit with actual heat input greater than 2.9 MW (10 mmBtu/hr) to exceed 200 ppm, corrected to 50 percent excess air [35 IAC 216.121].

7.2.4 Non-Applicability of Regulations of Concern

- a. The affected boiler is not subject to the NSPS for Small Industrial-Commercial-Institutional Steam Generating Units, 40 CFR 60 Subparts A and Dc, because construction, modification, or reconstruction of the affected boiler commenced prior to June 9, 1989.
- b. The affected boiler is not subject to 35 IAC 217.121, Emissions of Nitrogen Oxides from New Fuel Combustion Emission Sources, because the actual heat input of the affected boiler is less than 73.2 MW (250 mmBtu/hr).

- c. Pursuant to 35 IAC 215.303, fuel combustion emission units are not subject to 35 IAC 215.301, Use Of Organic Material.
- d. This permit is issued based on the affected boiler not being subject to 40 CFR Part 64, Compliance Assurance Monitoring (CAM) for Major Stationary Sources, because the affected boiler does not use an add-on control device to achieve compliance with an emission limitation or standard.

7.2.5 Operational and Production Limits and Work Practices

Natural gas shall be the only fuel burned in the affected boiler.

7.2.6 Emission Limitations

In addition to Condition 5.2.2 and the source wide emission limitations in Condition 5.5, the affected boiler is subject to the following:

- a. Emissions of particulate matter shall not exceed the following:

<u>Emission Unit</u>	<u>PM Emissions</u> <u>Ton/yr</u>
Kewanee Boiler	1.10

- b. Emissions of nitrogen oxides and carbon monoxide from the Kewanee Boiler shall not exceed 2.7 and 1.3 tons/year, respectively.
- c. The above limitations were established in Permit 91020002, pursuant to 40 CFR 52.21, Prevention of Significant Deterioration (PSD). These limits ensure that the construction and/or modification addressed in the aforementioned permit does not constitute a new major source or major modification pursuant to Title I of the CAA, specifically the federal rules for Prevention of Significant Deterioration (PSD), 40 CFR 52.21 [T1].
- d. Compliance with annual limits shall be determined on a monthly basis from the sum of the data for the current

month plus the preceding 11 months (running 12 month total).

7.2.7 Testing Requirements

None

7.2.8 Monitoring Requirements

None

7.2.9 Recordkeeping Requirements

In addition to the records required by Condition 5.6, the Permittee shall maintain records of the following items for the affected boiler to demonstrate compliance with Conditions 5.5.1, 7.2.3, and 7.2.6, pursuant to Section 39.5(7)(b) of the Act:

- a. Natural gas fuel usage for the affected boiler, Mft<sup>3</sup>/mo and Mft<sup>3</sup>/yr; and
- b. Monthly and annual aggregate CO, NO<sub>x</sub>, PM, SO<sub>2</sub>, and VOM emissions from the affected boiler shall be maintained, based on fuel consumption and the applicable emission factors, with supporting calculations.

7.2.10 Reporting Requirements

The Permittee shall promptly notify the Illinois EPA, Compliance Section, of deviations of the affected boiler with the permit requirements as follows, pursuant to Section 39.5(7)(f)(ii) of the Act. Reports shall describe the probable cause of such deviations, and any corrective actions or preventive measures taken:

Emissions of CO, NO<sub>x</sub>, PM, SO<sub>2</sub>, and/or VOM in excess of the limits specified in Condition 7.2.6.

7.2.11 Operational Flexibility/Anticipated Operating Scenarios

N/A

7.2.12 Compliance Procedures

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Compliance with the emission limits shall be based on the recordkeeping requirements in Condition 7.2.9 and the emission factors and formulas listed below:

- a. Compliance with Condition 7.2.3(c) is assumed by the work-practices inherent in operation of a natural gas-fired boiler.
- b. Compliance with the emission limits of Conditions 5.5.1 and 7.2.6, emissions from the affected boiler shall be calculated based on the following emission factors:

<u>Pollutant</u>	Natural Gas Emission Factor <u>(lb/Mft<sup>3</sup>)</u>
CO	84
NO <sub>x</sub>	100
PM	7.6
SO <sub>2</sub>	0.6
VOM	5.5

These are the emission factors for uncontrolled natural gas combustion in small boilers (< 100 mmBtu/hr), Tables 1.4-1 and 1.4-2, AP-42, Volume I, Fifth Edition, Supplement D, March, 1998.

$$\text{Natural Gas Combustion Emissions (lb)} = (\text{Natural Gas Consumed, Mft}^3) \times (\text{The Appropriate Emission Factor, lb/Mft}^3)$$

## 8.0 GENERAL PERMIT CONDITIONS

### 8.1 Permit Shield

Pursuant to Section 39.5(7)(j) of the Act, the Permittee has requested and has been granted a permit shield. This permit shield provides that compliance with the conditions of this permit shall be deemed compliance with applicable requirements which were applicable as of the date the proposed permit for this source was issued, provided that either the applicable requirements are specifically identified within this permit, or the Illinois EPA, in acting on this permit application, has determined that other requirements specifically identified are not applicable to this source and this determination (or a concise summary thereof) is included in this permit.

This permit shield does not extend to applicable requirements which are promulgated after \_\_\_\_\_ **{insert public notice start date}** (the date of issuance of the draft permit) unless this permit has been modified to reflect such new requirements.

### 8.2 Applicability of Title IV Requirements (Acid Deposition Control)

This source is not an affected source under Title IV of the CAA and is not subject to requirements pursuant to Title IV of the CAA.

### 8.3 Emissions Trading Programs

No permit revision shall be required for increases in emissions allowed under any USEPA approved economic incentives, marketable permits, emissions trading, and other similar programs or processes for changes that are provided for elsewhere in this permit and that are authorized by the applicable requirement [Section 39.5(7)(o)(vii) of the Act].

As of the date of issuance of this permit, there are no such economic incentive, marketable permit or emission trading programs applicable to this source that have been approved by USEPA.

### 8.4 Operational Flexibility/Anticipated Operating Scenarios

#### 8.4.1 Changes Specifically Addressed by Permit

Physical or operational changes specifically addressed by the Conditions of this permit that have been identified as

not requiring Illinois EPA notification may be implemented without prior notice to the Illinois EPA.

#### 8.4.2 Changes Requiring Prior Notification

The Permittee is authorized to make physical or operational changes that contravene express permit terms without applying for or obtaining an amendment to this permit, provided that [Section 39.5(12)(a)(i) of the Act]:

- a. The changes do not violate applicable requirements;
- b. The changes do not contravene federally enforceable permit terms or conditions that are monitoring (including test methods), recordkeeping, reporting, or compliance certification requirements;
- c. The changes do not constitute a modification under Title I of the CAA;
- d. Emissions will not exceed the emissions allowed under this permit following implementation of the physical or operational change; and
- e. The Permittee provides written notice to the Illinois EPA, Division of Air Pollution Control, Permit Section, at least 7 days before commencement of the change. This notice shall:
  - i. Describe the physical or operational change;
  - ii. Identify the schedule for implementing the physical or operational change;
  - iii. Provide a statement of whether or not any New Source Performance Standard (NSPS) is applicable to the physical or operational change and the reason why the NSPS does or does not apply;
  - iv. Provide emission calculations which demonstrate that the physical or operational change will not result in a modification; and

- v. Provide a certification that the physical or operational change will not result in emissions greater than authorized under the Conditions of this permit.

#### 8.5 Testing Procedures

Tests conducted to measure composition of materials, efficiency of pollution control devices, emissions from process or control equipment, or other parameters shall be conducted using standard test methods. Documentation of the test date, conditions, methodologies, calculations, and test results shall be retained pursuant to the recordkeeping procedures of this permit. Reports of any tests conducted as required by this permit or as the result of a request by the Illinois EPA shall be submitted as specified in Condition 8.6.

#### 8.6 Reporting Requirements

##### 8.6.1 Monitoring Reports

If monitoring is required by any applicable requirements or conditions of this permit, a report summarizing the required monitoring results, as specified in the conditions of this permit, shall be submitted to the Air Compliance Section of the Illinois EPA every six months as follows [Section 39.5(7)(f) of the Act]:

<u>Monitoring Period</u>	<u>Report Due Date</u>
January - June	September 1
July - December	March 1

All instances of deviations from permit requirements must be clearly identified in such reports. All such reports shall be certified in accordance with Condition 9.9.

##### 8.6.2 Test Notifications

Unless otherwise specified elsewhere in this permit, a written test plan for any test required by this permit shall be submitted to the Illinois EPA for review at least 60 days prior to the testing pursuant to Section 39.5(7)(a) of the Act. The notification shall include at a minimum:

- a. The name and identification of the affected unit(s);

- b. The person(s) who will be performing sampling and analysis and their experience with similar tests;
- c. The specific conditions under which testing will be performed, including a discussion of why these conditions will be representative of maximum emissions and the means by which the operating parameters for the source and any control equipment will be determined;
- d. The specific determination of emissions and operation which are intended to be made, including sampling and monitoring locations;
- e. The test method(s) which will be used, with the specific analysis method, if the method can be used with different analysis methods;
- f. Any minor changes in standard methodology proposed to accommodate the specific circumstances of testing, with justification; and
- g. Any proposed use of an alternative test method, with detailed justification.

#### 8.6.3 Test Reports

Unless otherwise specified elsewhere in this permit, the results of any test required by this permit shall be submitted to the Illinois EPA within 60 days of completion of the testing. The test report shall include at a minimum [Section 39.5(7)(e)(i) of the Act]:

- a. The name and identification of the affected unit(s);
- b. The date and time of the sampling or measurements;
- c. The date any analyses were performed;
- d. The name of the company that performed the tests and/or analyses;
- e. The test and analytical methodologies used;

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- f. The results of the tests including raw data, and/or analyses including sample calculations;
- g. The operating conditions at the time of the sampling or measurements; and
- h. The name of any relevant observers present including the testing company's representatives, any Illinois EPA or USEPA representatives, and the representatives of the source.

#### 8.6.4 Reporting Addresses

- a. The following addresses should be utilized for the submittal of reports, notifications, and renewals:
  - i. Illinois EPA - Air Compliance Section  
  
Illinois Environmental Protection Agency  
Bureau of Air  
Compliance Section (MC 40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

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ii. Illinois EPA - Air Regional Field Office

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
2009 Mall Street  
Collinsville, Illinois 62234

iii. Illinois EPA - Air Permit Section

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Permit Section (MC 11)  
P.O. Box 19506  
Springfield, Illinois 62794-9506

iv. USEPA Region 5 - Air Branch

USEPA (AR - 17J)  
Air & Radiation Division  
77 West Jackson Boulevard  
Chicago, Illinois 60604

- b. Unless otherwise specified in the particular provision of this permit, reports shall be sent to the Illinois EPA - Air Compliance Section with a copy sent to the Illinois EPA - Air Regional Field Office.

8.7 Obligation to Comply with Title I Requirements

Any term, condition, or requirement identified in this permit by T1, T1R, or T1N is established or revised pursuant to 35 IAC Part 203 or 40 CFR 52.21 ("Title I provisions") and incorporated into this permit pursuant to both Section 39.5 and Title I provisions. Notwithstanding the expiration date on the first page of this permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

## 9.0 STANDARD PERMIT CONDITIONS

### 9.1 Effect of Permit

9.1.1 The issuance of this permit does not release the Permittee from compliance with State and Federal regulations which are part of the Illinois State Implementation Plan, as well as with other applicable statutes and regulations of the United States or the State of Illinois or applicable ordinances, except as specifically stated in this permit and as allowed by law and rule [Section 39.5(7)(j)(iv) of the Act].

9.1.2 In particular, this permit does not alter or affect the following:

- a. The provisions of Section 303 (emergency powers) of the CAA, including USEPA's authority under that Section;
- b. The liability of an owner or operator of a source for any violation of applicable requirements prior to or at the time of permit issuance;
- c. The applicable requirements of the acid rain program consistent with Section 408(a) of the CAA; and
- d. The ability of USEPA to obtain information from a source pursuant to Section 114 (inspections, monitoring, and entry) of the CAA.

9.1.3 Notwithstanding the conditions of this permit specifying compliance practices for applicable requirements, any person (including the Permittee) may also use other credible evidence to establish compliance or noncompliance with applicable requirements.

### 9.2 General Obligations of Permittee

#### 9.2.1 Duty to Comply

The Permittee must comply with all terms and conditions of this permit. Any permit noncompliance constitutes a violation of the CAA and the Act, and is grounds for any or all of the following: enforcement action, permit termination, revocation and reissuance, modification, or

denial of a permit renewal application [Section 39.5(7)(o)(i) of the Act].

The Permittee shall meet applicable requirements that become effective during the permit term in a timely manner unless an alternate schedule for compliance with the applicable requirement is established.

9.2.2 Duty to Maintain Equipment

The Permittee shall maintain all equipment covered under this permit in such a manner that the performance or operation of such equipment shall not cause a violation of applicable requirements.

9.2.3 Duty to Cease Operation

No person shall cause, threaten or allow the continued operation of any emission unit during malfunction or breakdown of the emission unit or related air pollution control equipment if such operation would cause a violation of an applicable emission standard, regulatory requirement, ambient air quality standard or permit limitation unless such malfunction or breakdown is allowed by a permit condition [Section 39.5(6)(c) of the Act].

9.2.4 Disposal Operations

The source shall be operated in such a manner that the disposal of air contaminants collected by the equipment operations, or activities shall not cause a violation of the Act or regulations promulgated thereunder.

9.2.5 Duty to Pay Fees

The Permittee must pay fees to the Illinois EPA consistent with the fee schedule approved pursuant to Section 39.5(18) of the Act, and submit any information relevant thereto [Section 39.5(7)(o)(vi) of the Act]. The check should be payable to "Treasurer, State of Illinois" and sent to: Fiscal Services Section, Illinois Environmental Protection Agency, P.O. Box 19276, Springfield, Illinois 62794-9276.

9.3 Obligation to Allow Illinois EPA Surveillance

Upon presentation of proper credentials and other documents, the Permittee shall allow the Illinois EPA, or an authorized representative to perform the following [Section 39.5(7)(a) and (p)(ii) of the Act and 415 ILCS 5/4]:

- a. Enter upon the Permittee's premises where an actual or potential emission unit is located; where any regulated equipment, operation, or activity is located or where records must be kept under the conditions of this permit;
- b. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;
- c. Inspect during hours of operation any sources, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or required under this permit;
- d. Sample or monitor any substances or parameters at any location:
  - i. At reasonable times, for the purposes of assuring permit compliance; or
  - ii. As otherwise authorized by the CAA, or the Act.
- e. Obtain and remove samples of any discharge or emission of pollutants authorized by this permit; and
- f. Enter and utilize any photographic, recording, testing, monitoring, or other equipment for the purposes of preserving, testing, monitoring, or recording any activity, discharge or emission at the source authorized by this permit.

#### 9.4 Obligation to Comply With Other Requirements

The issuance of this permit does not release the Permittee from applicable State and Federal laws and regulations, and applicable local ordinances addressing subjects other than air pollution control.

#### 9.5 Liability

##### 9.5.1 Title

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This permit shall not be considered as in any manner affecting the title of the premises upon which the permitted source is located.

9.5.2 Liability of Permittee

This permit does not release the Permittee from any liability for damage to person or property caused by or resulting from the construction, maintenance, or operation of the sources.

9.5.3 Structural Stability

This permit does not take into consideration or attest to the structural stability of any unit or part of the source.

9.5.4 Illinois EPA Liability

This permit in no manner implies or suggests that the Illinois EPA (or its officers, agents or employees) assumes any liability, directly or indirectly, for any loss due to damage, installation, maintenance, or operation of the source.

9.5.5 Property Rights

This permit does not convey any property rights of any sort, or any exclusive privilege [Section 39.5(7)(o)(iv) of the Act].

9.6 Recordkeeping

9.6.1 Control Equipment Maintenance Records

A maintenance record shall be kept on the premises for each item of air pollution control equipment. As a minimum, this record shall show the dates of performance and nature of preventative maintenance activities.

9.6.2 Records of Changes in Operation

A record shall be kept describing changes made at the source that result in emissions of a regulated air pollutant subject to an applicable requirement, but not otherwise regulated under this permit, and the emissions resulting from those changes [Section 39.5(12)(b)(iv) of the Act].

9.6.3 Retention of Records

- a. Records of all monitoring data and support information shall be retained for a period of at least 5 years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit [Section 39.5(7)(e)(ii) of the Act].
- b. Other records required by this permit shall be retained for a period of at least 5 years from the

date of entry unless a longer period is specified by a particular permit provision.

9.7 Annual Emissions Report

The Permittee shall submit an annual emissions report to the Illinois EPA, Compliance Section no later than May 1 of the following year, as required by 35 IAC Part 254.

9.8 Requirements for Compliance Certification

Pursuant to Section 39.5(7)(p)(v) of the Act, the Permittee shall submit annual compliance certifications. The compliance certifications shall be submitted no later than May 1 or more frequently as specified in the applicable requirements or by permit condition. The compliance certifications shall be submitted to the Air Compliance Section, Air Regional Field Office, and USEPA Region 5 - Air Branch. The addresses for the submittal of the compliance certifications are provided in Condition 8.6.4 of this permit.

- a. The certification shall include the identification of each term or condition of this permit that is the basis of the certification; the compliance status; whether compliance was continuous or intermittent; the method(s) used for determining the compliance status of the source, both currently and over the reporting period consistent with the conditions of this permit.
- b. All compliance certifications shall be submitted to USEPA Region 5 in Chicago as well as to the Illinois EPA.
- c. All compliance reports required to be submitted shall include a certification in accordance with Condition 9.9.

9.9 Certification

Any document (including reports) required to be submitted by this permit shall contain a certification by a responsible official of the Permittee that meets the requirements of Section 39.5(5) of the Act [Section 39.5(7)(p)(i) of the Act]. An example Certification by a Responsible Official is included as an attachment to this permit.

9.10 Defense to Enforcement Actions

9.10.1 Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for the Permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit [Section 39.5(7)(o)(ii) of the Act].

9.10.2 Emergency Provision

- a. An emergency shall be an affirmative defense to an action brought for noncompliance with the technology-based emission limitations under this permit if the following conditions are met through properly signed, contemporaneous operating logs, or other relevant evidence:
  - i. An emergency occurred as provided in Section 39.5(7)(k) of the Act and the Permittee can identify the cause(s) of the emergency. Normally, an act of God such as lightning or flood is considered an emergency;
  - ii. The permitted source was at the time being properly operated;
  - iii. The Permittee submitted notice of the emergency to the Illinois EPA within two working days of the time when emission limitations were exceeded due to the emergency. This notice must contain a detailed description of the emergency, any steps taken to mitigate emissions, and corrective actions taken; and
  - iv. During the period of the emergency the Permittee took all reasonable steps to minimize levels of emissions that exceeded the emission limitations, standards, or regulations in this permit.
- b. This provision is in addition to any emergency or upset provision contained in any applicable requirement. This provision does not relieve a Permittee of any reporting obligations under existing federal or state laws or regulations.

9.11 Permanent Shutdown

This permit only covers emission units and control equipment while physically present at the indicated source location(s). Unless this permit specifically provides for equipment relocation, this permit is void for the operation or activity of any item of equipment on the date it is removed from the permitted location(s) or permanently shut down. This permit expires if all equipment is removed from the permitted location(s), notwithstanding the expiration date specified on this permit.

9.12 Reopening and Reissuing Permit for Cause

9.12.1 Permit Actions

This permit may be modified, reopened, and reissued, for cause pursuant to Section 39.5(15) of the Act. The filing of a request by the Permittee for a permit modification, revocation, and reissuance, or of a notification of planned changes or anticipated noncompliance does not stay any permit condition [Section 39.5(7)(o)(iii) of the Act].

9.12.2 Reopening and Revision

This permit must be reopened and revised if any of the following occur [Section 39.5(15)(a) of the Act]:

- a. Additional requirements become applicable to the equipment covered by this permit and three or more years remain before expiration of this permit;
- b. Additional requirements become applicable to an affected source for acid deposition under the acid rain program;
- c. The Illinois EPA or USEPA determines that this permit contains a material mistake or inaccurate statement when establishing the emission standards or limitations, or other terms or conditions of this permit; and
- d. The Illinois EPA or USEPA determines that this permit must be revised to ensure compliance with the applicable requirements of the Act.

#### 9.12.3 Inaccurate Application

The Illinois EPA has issued this permit based upon the information submitted by the Permittee in the permit application. Any misinformation, false statement or misrepresentation in the application shall be grounds for revocation under Section 39.5(15)(b) of the Act.

#### 9.12.4 Duty to Provide Information

The Permittee shall furnish to the Illinois EPA, within a reasonable time specified by the Illinois EPA any information that the Illinois EPA may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit, or to determine compliance with this permit. Upon request, the Permittee shall also furnish to the Illinois EPA copies of records required to be kept by this permit, or for information claimed to be confidential, the Permittee may furnish such records directly to USEPA along with a claim of confidentiality [Section 39.5(7)(o)(v) of the Act].

#### 9.13 Severability Clause

The provisions of this permit are severable, and should any one or more be determined to be illegal or unenforceable, the validity of the other provisions shall not be affected. The rights and obligations of the Permittee shall be construed and enforced as if this permit did not contain the particular provisions held to be invalid and the applicable requirements underlying these provisions shall remain in force [Section 39.5(7)(i) of the Act].

#### 9.14 Permit Expiration and Renewal

The right to operate terminates on the expiration date unless the Permittee has submitted a timely and complete renewal application.

For a renewal to be timely it must be submitted no later than 9 and no sooner than 12 months prior to expiration. The equipment may continue to operate during the renewal period until final action is taken by the Illinois EPA, in accordance with the original permit conditions [Section 39.5(5)(l), (n), and (o) of the Act].

10.0 ATTACHMENT

10.1 Attachment 1 Emissions of Particulate Matter from New Process Emission Units

10.1.1 Process Emission Units for Which Construction or Modification Commenced On or After April 14, 1972

- a. No person shall cause or allow the emission of particulate matter into the atmosphere in any one hour period from any new process emission unit, either alone or in combination with the emission of particulate matter from all other similar process emission units for which construction or modification commenced on or after April 14, 1972, at a source or premises, exceeds the allowable emission rates specified in subsection (c) of 35 IAC 212.321 [35 IAC 212.321(a)].
- b. Interpolated and extrapolated values of the data in subsection (c) of 35 IAC 212.321 shall be determined by using the equation [35 IAC 212.321(b)]:

$$E = A(P)^B$$

Where:

P = Process weight rate; and  
 E = Allowable emission rate; and,

- i. Up to process weight rates of 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	1.214	2.54
B	0.534	0.534

- ii. For process weight rate greater than or equal to 408 Mg/hr (450 T/hr):

	Metric	English
P	Mg/hr	T/hr
E	kg/hr	lb/hr
A	11.42	24.8

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B 0.16 0.16

c. Limits for Process Emission Units For Which  
Construction or Modification Commenced On or After  
April 14, 1972 [35 IAC 212.321(c)]:

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Metric		English	
P	E	P	E
Mg/hr	kg/hr	T/hr	lb/hr
0.05	0.25	0.05	0.55
0.1	0.29	0.10	0.77
0.2	0.42	0.2	1.10
0.3	0.64	0.30	1.35
0.4	0.74	0.40	1.58
0.5	0.84	0.50	1.75
0.7	1.00	0.75	2.40
0.9	1.15	1.00	2.60
1.8	1.66	2.00	3.70
2.7	2.1	3.00	4.60
3.6	2.4	4.00	5.35
4.5	2.7	5.00	6.00
9.0	3.9	10.00	8.70
13.0	4.8	15.00	10.80
18.0	5.7	20.00	12.50
23.0	6.5	25.00	14.00
27.0	7.1	30.00	15.60
32.0	7.7	35.00	17.00
36.0	8.2	40.00	18.20
41.0	8.8	45.00	19.20
45.0	9.3	50.00	20.50
90.0	13.4	100.00	29.50
140.0	17.0	150.00	37.00
180.0	19.4	200.00	43.00
230.0	22.0	250.00	48.50
270.0	24.0	300.00	53.00
320.0	26.0	350.00	58.00
360.0	28.0	400.00	62.00
408.0	30.1	450.00	66.00
454.0	30.4	500.00	67.00

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10.2 Attachment 2 - Example Certification by a Responsible Official

I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

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

Name: \_\_\_\_\_

Official Title: \_\_\_\_\_

Telephone No.: \_\_\_\_\_

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

10.3 Attachment 3 - Guidance on Revising This Permit

The Permittee must submit an application to the Illinois EPA using the appropriate revision classification in accordance with Sections 39.5(13) and (14) of the Act and 35 IAC 270.302. Specifically, there are currently three classifications for revisions to a CAAPP permit. These are:

1. Administrative Permit Amendment;
2. Minor Permit Modification; and
3. Significant Permit Modification.

The Permittee must determine, request, and submit the necessary information to allow the Illinois EPA to use the appropriate procedure to revise the CAAPP permit. A brief explanation of each of these classifications follows.

1. Administrative Permit Amendment
  - Corrects typographical errors;
  - Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source;
  - Requires more frequent monitoring or reporting by the Permittee;
  - Allows for a change in ownership or operational control of the source where no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new Permittees has been submitted to the Illinois EPA;
  - Incorporates into the CAAPP permit a construction permit, provided the conditions of the construction permit meet the requirements for the issuance of CAAPP permits; or
  - Incorporates into the CAAPP permit revised limitations or other requirements resulting from the application

of an approved economic incentives rule, marketable permits rule, or generic emissions trading rule.

2. Minor Permit Modification

- Do not violate any applicable requirement;
- Do not involve significant changes to existing monitoring, reporting, or recordkeeping requirements in the permit;
- Do not require a case-by-case determination of an emission limitation or other standard, or a source-specific determination of ambient impacts, or a visibility or increment analysis;
- Do not seek to establish or change a permit term or condition for which there is no corresponding underlying requirement and which avoids an applicable requirement to which the source would otherwise be subject. Such terms and conditions include:
- A federally enforceable emissions cap assumed to avoid classification as a modification under any provision of Title I of the CAA; and
- An alternative emissions limit approved pursuant to regulations promulgated under Section 112(i)(5) of the CAA.
- Are not modifications under any provision of Title I of the CAA; and
- Are not required to be processed as a significant permit modification.

An application for a minor permit modification shall include the following:

- A description of the change, the emissions resulting from the change, and any new applicable requirements that will apply if the change occurs;
- The source's suggested draft permit/conditions;

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- Certification by a responsible official that the proposed modification meets the criteria for use of minor permit modification procedures and a request that such procedures be used; and
- Information as contained on form 271-CAAPP for the Illinois EPA to use to notify USEPA and affected States.

3. Significant Permit Modification

- Applications that do not qualify as either minor permit modifications or as administrative permit amendments;
- Applications requesting a significant change in existing monitoring permit terms or conditions;
- Applications requesting a relaxation of reporting or recordkeeping requirements; and
- Cases in which, in the judgment of the Illinois EPA, action on an application for modification would require decisions to be made on technically complex issues.

An application for a significant permit modification shall include the following:

- A detailed description of the proposed change(s), including all physical changes to equipment, changes in the method of operation, changes in emissions of each pollutant, and any new applicable requirements which will apply as a result of the proposed change. Note that the Permittee need only submit revised forms for equipment and operations that will be modified.

The Illinois EPA requires the information on the following appropriate forms to be submitted in accordance with the proper classification:

- Form 273-CAAPP, REQUEST FOR ADMINISTRATIVE PERMIT AMENDMENT FOR CAAPP PERMIT; or
- Form 271-CAAPP, MINOR PERMIT MODIFICATION FOR CAAPP PERMIT; or
- Form 200-CAAPP, APPLICATION FOR CAAPP PERMIT (for significant modification).

Application forms can be obtained from the Illinois EPA website at <http://www.epa.state.il.us/air/forms>.

Note that the request to revise the permit must be certified for truth, accuracy, and completeness by a responsible official.

Note that failure to submit the required information may require the Illinois EPA to deny the application. The Illinois EPA

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reserves the right to require that additional information be submitted as needed to evaluate or take final action on applications pursuant to Section 39.5(5)(g) of the Act and 35 IAC 270.305.



Illinois Environmental Protection Agency  
Division Of Air Pollution Control -- Permit Section  
P.O. Box 19506  
Springfield, Illinois 62794-9506

<b>Application For Construction Permit (For CAAPP Sources Only)</b>	<b>For Illinois EPA use only</b>
	ID number:
	Permit number:
Date received:	

This form is to be used by CAAPP sources to supply information necessary to obtain a construction permit. Please attach other necessary information and completed CAAPP forms regarding this construction/modification project.

<b>Source Information</b>			
1. Source name:			
2. Source street address:			
3. City:		4. Zip code:	
5. Is the source located within city limits? <input type="checkbox"/> Yes <input type="checkbox"/> No			
6. Township name:	7. County:	8. ID number:	

<b>Owner Information</b>			
9. Name:			
10. Address:			
11. City:	12. State:	13. Zip code:	

<b>Operator Information (if different from owner)</b>			
14. Name			
15. Address:			
16. City:	17. State:	18. Zip code:	

<b>Applicant Information</b>			
19. Who is the applicant? <input type="checkbox"/> Owner <input type="checkbox"/> Operator		20. All correspondence to: (check one) <input type="checkbox"/> Owner <input type="checkbox"/> Operator <input type="checkbox"/> Source	
21. Attention name and/or title for written correspondence:			
22. Technical contact person for application:		23. Contact person's telephone number:	

This Agency is authorized to require and you must disclose this information under 415 ILCS 5/39. Failure to do so could result in the application being denied and penalties under 415 ILCS 5 et seq. It is not necessary to use this form in providing this information. This form has been approved by the forms management center.

<b>Summary Of Application Contents</b>	
24. Does the application address whether the proposed project would constitute a new major source or major modification under each of the following programs: a) Non-attainment New Source Review – 35 IAC Part 203; b) Prevention of Significant Deterioration (PSD) – 40 CFR 52.21; c) Hazardous Air Pollutants: Regulations Governing Constructed or Reconstructed Major Sources – 40 CFR Part 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
25. Does the application identify and address all applicable emissions standards, including those found in the following: a) Board Emission Standards – 35 IAC Chapter I, Subtitle B; b) Federal New Source Performance Standards – 40 CFR Part 60; c) Federal Standards for Hazardous Air Pollutants – 40 CFR Parts 61 and 63?	<input type="checkbox"/> Yes <input type="checkbox"/> No
26. Does the application include a process flow diagram(s) showing all emission units and control equipment, and their relationship, for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
27. Does the application include a complete process description for the emission units and control equipment for which a permit is being sought?	<input type="checkbox"/> Yes <input type="checkbox"/> No
28. Does the application include the information as contained in completed CAAPP forms for all appropriate emission units and air pollution control equipment, listing all applicable requirements and proposed exemptions from otherwise applicable requirements, and identifying and describing any outstanding legal actions by either the USEPA or the Illinois EPA? Note: The use of "APC" application forms is not appropriate for applications for CAAPP sources. CAAPP forms should be used to supply information.	<input type="checkbox"/> Yes <input type="checkbox"/> No
29. If the application contains TRADE SECRET information, has such information been properly marked and claimed, and have two separate copies of the application suitable for public inspection and notice been submitted, in accordance with applicable rules and regulations?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> Not Applicable, No TRADE SECRET information in this application

Note 1: Answering "No" to any of the above may result in the application being deemed incomplete.

<b>Signature Block</b>	
This certification must be signed by a responsible official. Applications without a signed certification will be returned as incomplete.	
30. I certify under penalty of law that, based on information and belief formed after reasonable inquiry, the statements and information contained in this application are true, accurate and complete. Authorized signature:	
BY:	<div style="display: flex; justify-content: space-between; margin-bottom: 10px;"> <div style="width: 45%; border-bottom: 1px solid black; text-align: center;">AUTHORIZED SIGNATURE</div> <div style="width: 45%; border-bottom: 1px solid black; text-align: center;">TITLE OF SIGNATORY</div> </div> <div style="display: flex; justify-content: space-between;"> <div style="width: 45%; border-bottom: 1px solid black; text-align: center;">TYPED OR PRINTED NAME OF SIGNATORY</div> <div style="width: 45%; border-bottom: 1px solid black; text-align: center;">/ / DATE</div> </div>

Note 2: An operating permit for the construction/modification permitted in a construction permit must be obtained by applying for the appropriate revision to the source's CAAPP permit, if necessary.

I. INTRODUCTION

This source has applied for a Clean Air Act Permit Program (CAAPP) operating permit for its existing operation. The CAAPP is the program established in Illinois for the operating permits for significant stationary sources required by the federal Clean Air Act, as amended in 1990. The conditions in a CAAPP permit are enforceable by both the Illinois Environmental Protection Agency (Illinois EPA) and the USEPA.

MasterBrand Cabinets, Inc. (formerly, Schrock Cabinet Company) is located at 217 South Oak Street in Arthur, Illinois. The source manufactures, assembles, applies coating to, and finishes wooden cabinets and their components. The main areas of the source include the finishing department, mill room, assembly area, paint kitchen and boiler rooms.

II. EMISSION UNITS

Significant emission units at this source are as follows:

Emission Unit	Description	Date Constructed	Emission Control Equipment
B1	George Koch Son Stain Spray Booth B1 (Monorail #1 (West))	June, 1987	Filter F1
B2	George Koch Son Stain Spray Booth B2 (Monorail #1 (West))	June, 1987	Filter F2
B3	JBI Inc. Stain Spray Booth B3 (Monorail #1 (West))	October, 1997	Filter F3
B4	JBI Inc. Stain Spray Booth B4 (Monorail #1 (West))	October, 1997	Filter F4
B5	Young & Bertke Sealer Spray Booth B5 (Monorail #1 (West))	December, 1993	Filter F5
B6	Young & Bertke Sealer Spray Booth B6 (Monorail #1 (West))	December, 1993	Filter F6
B7	Young & Bertke Topcoat Spray Booth B7 (Monorail #1 (West))	July, 1994	Filter F7
B8	Young & Bertke Topcoat Spray Booth B8 (Monorail #1 (West))	July, 1994	Filter F8
B9	Stain Spray Booth B9 (Monorail #2 (East))	January, 1990	Filter F9
B10	Stain Spray Booth B10 (Monorail #2 (East))	January, 1990	Filter F10
B11	JBI Inc. Stain Spray Booth B11 (Monorail #2 (East))	October, 1997	Filter F11
B12	JBI Inc. Stain Spray Booth B12 (Monorail #2 (East))	October, 1997	Filter F12
B13	Young & Bertke Sealer Spray Booth B13 (Monorail #2 (East))	July, 1992	Filter F13
B14	Young & Bertke Sealer Spray	July, 1992	Filter F14

	Booth B14 (Monorail #2 (East))		
B15	Young & Bertke Topcoat Spray Booth B15 (Monorail #2 (East))	July, 1992	Filter F15
B16	Young & Bertke Topcoat Spray Booth B16 (Monorail #2 (East))	July, 1992	Filter F16
B25	Trim Spray Booth B25	1977	Filter F25
B26	Trim Spray Booth B26	1977	Filter F26

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Emission Unit	Description	Date Constructed	Emission Control Equipment
B27	Trim Spray Booth B27 (Mini Monorail)	January, 1990	Filter F27
B30	Preseal Spray Booth B30 (Monorail #1 (West))	October, 1997	Filter F30
B31	Preseal Spray Booth B31 (Monorail #2 (East))	October, 1997	Filter F31
Kewanee Boiler	Kewanee Type C Natural Gas-Fired Boiler (Kewanee Boiler, 11.65 mmBtu/hr)	September, 1977	None
Fugitive PM Emissions	Paved/Unpaved Traffic Areas, Parking Lots, and Roadways	--	None

### III. EMISSIONS

This source is required to have a CAAPP permit since it is a major source of emissions.

For purposes of fees, the source is allowed the following emissions:

#### Permitted Emissions of Regulated Pollutants

Pollutant	Tons/Year
Nitrogen Oxides (NO <sub>x</sub> )	9.0
Particulate Matter (PM)	40.5
Sulfur Dioxide (SO <sub>2</sub> )	0.1
Volatile Organic Material (VOM)	363.4
HAP, not included in VOM or PM	-----
TOTAL	413.0

### IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards. The Board's emission standards represent the basic requirements for sources in Illinois.

All emission sources in Illinois must comply with the federal New Source Performance Standards (NSPS). The Illinois EPA is administering NSPS in

Illinois on behalf of the United States EPA under a delegation agreement.

All emission sources in Illinois must comply with the federal National Emission Standards for Hazardous Air Pollutants (NESHAP). The Illinois EPA is administering NESHAP in Illinois on behalf of the United States EPA under a delegation agreement.

V. PROPOSED PERMIT

CAAPP

A CAAPP permit contains all conditions that apply to a source and a listing of the applicable state and federal air pollution control regulations that are the origin of the conditions. The permit also contains emission limits and appropriate compliance procedures. The appropriate compliance procedures may include inspections, work practices, monitoring, record keeping, and reporting to show compliance with these requirements. The Permittee must carry out these procedures on an on-going basis.

Title I

A combined Title I/CAAPP permit contains terms and conditions established by the Illinois EPA pursuant to authority found in Title I provisions, e.g., 40 CFR 52.21 - federal Prevention of Significant Deterioration (PSD) and 35 IAC Part 203 - Major Stationary Sources Construction and Modification. Notwithstanding the expiration date on the first page of the permit, the Title I conditions remain in effect pursuant to Title I provisions until the Illinois EPA deletes or revises them in accordance with Title I procedures.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's preliminary determination that this source's permit application meets the standards for issuance of a CAAPP permit. The Illinois EPA is therefore proposing to issue a CAAPP permit, subject to the conditions proposed in the draft permit.

Comments are requested on this proposed action by the Illinois EPA and the proposed conditions on the draft permit. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.

RWB:jar