

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Bretford Manufacturing  
Attn: Dale Guenther/Environmental Coordinator  
11000 Seymour Avenue  
Franklin Park, Illinois 60131

<u>Application No.:</u> 95120185	<u>I.D. No.:</u> 031096AKZ
<u>Applicant's Designation:</u>	<u>Date Received:</u> April 15, 2004
<u>Subject:</u> Manufacturer of Office Furniture	
<u>Date Issued:</u>	<u>Expiration Date:</u>
<u>Source Location:</u> 11000 Seymour Avenue, Franklin Park, Cook County, 60131	
<u>Responsible Official:</u>	

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of

Three Paint Spray Booths  
Four Powder Coating Lines  
Three UV Booths  
One Glue Spray Booth  
Fugitive VOM from Cleaning  
Parts Washer/Dryer Oven  
Printing Line  
Dry Erase  
Two Gas-Fired Boilers (7.27 and 6.84 mmBtu/Hour)

This Permit is subject to standard conditions attached hereto and the following special condition(s):

- 1a. This federally enforceable state operating permit is issued:
  - i. To limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year of 100 tons/year for volatile organic material (VOM), 10 tons/year for a single hazardous air pollutant (HAP) and 25 tons/year for of any combination of such HAPs). As a result, the source is excluded from requirements to obtain a Clean Air Act Permit Program (CAAPP) permit. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
  - ii. This permit is issued based upon the source not being subject to the requirements of the National Emission Standards for Hazardous Air Pollutants (NESHAP) for Wood Furniture Manufacturing Operations, 40 CFR 63 Subpart JJ. This is consequence of the federally enforceable production and operating limitations, which restrict a potential to emit to less than 10 tons/year for any individual Hazardous Air Pollutant (HAP), and 25 tons/year of any combination of such HAPs.

- iii. To establish federally enforceable Emission Reduction Market System (ERMS) provisions, including baseline emissions, allotment for each seasonal allotment period, identification of any units deemed to be insignificant activities for the purposes of the ERMS, emissions calculation methodologies, and provisions addressing all other applicable requirements of 35 Ill. Adm. Code Part 205, which are described in Attachment B.
  - iv. This permit is issued based upon the plant not being subject to the control requirements of 35 Ill. Adm. Code Part 218 Subpart PP (Miscellaneous Fabricated Product Manufacturing Processes) and 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units). This is consequence of the federally enforceable production and operating limitations, which restrict the potential to emit from affected emission units to less than 25 tons per year.
- b. Prior to issuance, a draft of this permit has undergone a public notice and comment period.
  - c. This permit supersedes the current permit(s) issued for this location.
- 2a. No person shall cause or allow the emission of smoke or other particulate matter, with an opacity greater than 30 percent, into the atmosphere from any emission unit other than those emission units subject to the requirements of 35 Ill. Adm. Code 212.122, pursuant to 35 Ill. Adm. Code 212.123(a), except as allowed by 35 Ill. Adm. Code 212.123(b) and 212.124.
  - b. No person shall cause or allow any visible emissions of fugitive particulate matter from any process, including any material handling or storage activity beyond the property line of the emission source unless the wind speed is greater than 40.2 kilometers per hour (25 miles per hour), pursuant to 35 Ill. Adm. Code 212.301 and 212.314.
  - c. Pursuant to 35 Ill. Adm. Code 212.309(a), the emission units described in 35 Ill. Adm. Code 212.304 through 212.308 shall be operated under the provisions of an operating program, consistent with the requirements set forth in 35 Ill. Adm. Code 212.310 and 212.312, and prepared by the owner or operator and submitted to the Illinois EPA for its review. Such operating program shall be designed to significantly reduce fugitive particulate matter emissions.
- i. All normal traffic pattern access areas surrounding storage piles specified in 35 Ill. Adm. Code 212.304 and all normal traffic pattern roads and parking facilities which are located on mining or manufacturing property shall be paved or treated with water, oils or chemical dust suppressants. All paved areas shall be cleaned on a regular basis. All areas treated with water, oils or chemical dust suppressants shall have the treatment applied on a regular basis, as needed, in accordance with the operating program required by 35 Ill. Adm. Code 212.309, 212.310 and 212.312.

- ii. All unloading and transporting operations of materials collected by pollution control equipment shall be enclosed or shall utilize spraying, pelletizing, screw conveying or other equivalent methods.
- d. Pursuant to 35 Ill. Adm. Code 212.310, as a minimum the operating program shall include the following:
- i. The name and address of the source;
  - ii. The name and address of the owner or operator responsible for execution of the operating program;
  - iii. A map or diagram of the source showing approximate locations of storage piles, conveyor loading operations, normal traffic pattern access areas surrounding storage piles and all normal traffic patterns within the source;
  - iv. Location of unloading and transporting operations with pollution control equipment;
  - v. A detailed description of the best management practices utilized to achieve compliance with this Subpart, including an engineering specification of particulate collection equipment, application systems for water, oil, chemicals and dust suppressants utilized and equivalent methods utilized;
  - vi. Estimated frequency of application of dust suppressants by location of materials; and
  - vii. Such other information as may be necessary to facilitate the Illinois EPA's review of the operating program,
- e. Pursuant to 35 Ill. Adm. Code 212.321(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 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 Ill. Adm. Code 212.321.
- 3a. Pursuant to 35 Ill. Adm. Code 218.182(a), no person shall operate a cold cleaning degreaser unless:
- i. Waste solvent is stored in covered containers only and not disposed of in such a manner that more than 20% of the waste solvent (by weight) is allowed to evaporate into the atmosphere;
  - ii. The cover of the degreaser is closed when parts are not being handled; and

iii. Parts are drained until dripping ceases.

b. Pursuant to 35 Ill. Adm. Code 218.182(b), no person shall operate a cold cleaning degreaser unless:

i. The degreaser is equipped with a cover which is closed whenever parts are not being handled in the cleaner. The cover shall be designed to be easily operated with one hand or with the mechanical assistance of springs, counter-weights or a powered system if:

A. The solvent vapor pressure is greater than 2 kPa (15 mmHg or 0.3 psi) measured at 38°C (100°F);

B. The solvent is agitated; or

C. The solvent is heated above ambient room temperature.

ii. The degreaser is equipped with a device for draining cleaned parts. The drainage device shall be constructed so that parts are enclosed under the cover while draining unless:

A. The solvent vapor pressure is less than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38°C (100°F); or

B. An internal drainage device cannot be fitted into the cleaning system, in which case the drainage device may be external.

iii. The degreaser is equipped with one of the following control devices if the vapor pressure of the solvent is greater than 4.3 kPa (32 mmHg or 0.6 psi) measured at 38°C (100°F) or if the solvent is heated above 50°C (120°F) or its boiling point:

A. A freeboard height of 7/10 of the inside width of the tank or 91 cm (36 in), whichever is less; or

B. Any other equipment or system of equivalent emission control as approved by the Illinois EPA and further processed consistent with 35 Ill. Adm. Code 218.108. Such a system may include a water cover, refrigerated chiller or carbon adsorber.

iv. A permanent conspicuous label summarizing the operating procedure is affixed to the degreaser; and

v. If a solvent spray is used, the degreaser is equipped with a solid fluid stream spray, rather than a fine, atomized or shower spray.

- c. Pursuant to 35 Ill. Adm. Code 218.182(c)(2)(B), no person shall operate a cold cleaning degreaser with a solvent vapor pressure which exceeds 1.0 mmHg (0.019 psi) measured at 20°C (68°F).
- d. Pursuant to 35 Ill Adm. Code 218.184(a), no person shall operate a conveyORIZED degreaser unless:
  - i. Exhaust ventilation exceeding 20 cubic meters per minute per square meter (65 cubic feet per minute per square foot) of area of loading and unloading opening is not used, unless necessary to meet the requirements of the Occupational Safety and Health Act (29 U.S.C. Section 651 et seq.);
  - ii. Solvent carryout emissions are minimized by:
    - A. Racking parts for best drainage; and
    - B. Maintaining the vertical conveyor speed at less than 3.3 m/min (11 ft/min);
  - iii. Waste solvent is stored in covered containers only and not disposed of in such a manner that more than 20% of the waste solvent (by weight) is allowed to evaporate into the atmosphere;
  - iv. Solvent leaks are repaired immediately;
  - v. Water is not visually detectable in solvent exiting from the water separator; and
  - vi. Downtime covers are placed over entrances and exits of conveyORIZED degreasers immediately after the conveyors and exhausts are shut down and not removed until just before start-up.
- e. Pursuant to 35 Ill Adm. Code 218.184(b), no person shall operate a conveyORIZED degreaser unless:
  - i. The degreaser is equipped with a drying tunnel, rotating (tumbling) basket or other equipment sufficient to prevent cleaned parts from carrying out solvent liquid or vapor;
  - ii. The degreaser is equipped with the following switches:
    - A. One which shuts off the sump heat source if the amount of condenser coolant is not sufficient to maintain the designed vapor level;
    - B. One which shuts off the spray pump or the conveyor if the vapor level drops more than 10 cm (4 in) below the bottom condenser coil; and

- C. One which shuts off the sump heat source when the vapor level exceeds the design level.
- iii. The degreaser is equipped with openings for entrances and exits that silhouette workloads so that the average clearance between the parts and the edge of the degreaser opening is less than 10 cm (4 in) or less than 10 percent of the width of the opening;
- iv. The degreaser is equipped with downtime covers for closing off entrances and exits when the degreaser is shut down; and
- v. The degreaser is equipped with one of the following control devices, if the air/vapor interface is larger than 2.0 square meters (21.6 square feet):
  - A. A carbon adsorption system with ventilation greater than or equal to 15 cubic meters per minute per square meter (50 cubic feet per minute per square foot) of air/vapor area when downtime covers are open, and exhausting less than 25 ppm of solvent by volume averaged over a complete adsorption cycle; or
  - B. Any other equipment or system of equivalent emission control as approved by the Illinois EPA, and further processed consistent with 35 Ill. Adm. Code 218.108. Such equipment or system may include a refrigerated chiller.
- 4a. Pursuant to 35 Ill. Adm. Code 218.204, no owner or operator of a coating line shall apply at any time any coating in which the VOM content exceeds the following emission limitations for the specified coating. The following emission limitations are expressed in units of VOM per volume of coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied at each coating applicator, except where noted. Compounds which are specifically exempted from the definition of VOM should be treated as water for the purpose of calculating the "less water" part of the coating composition. Compliance with the Subpart must be demonstrated through the applicable coating analysis test methods and procedures specified in 35 Ill. Adm. Code 218.105(a) and the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.211(c) except where noted. The emission limitations are as follows:

		kg/l	lb/gal
i.	Fabric Coating	0.28	(2.3)
ii.	Vinyl Coating	0.28	(2.3)
iii.	Metal Furniture Coating:		
		kg/l	lb/gal
A.	Air dried	0.34	(2.8)

B.	Baked	0.28	(2.3)
iii. Miscellaneous Metal Parts and Products Coating:			
A.	Clear coating	kg/l 0.52	lb/gal (4.3)
B.	Extreme performance coating:		
I.	Air dried	0.42	(3.5)
II.	Baked	kg/l 0.40	lb/gal (3.3)
C.	All other coatings:		
I.	Air Dried	0.40	(3.3)
II.	Baked	0.34	(2.8)
D.	Metallic Coating:		
I.	Air Dried	0.42	(3.5)
II.	Baked	0.36	(3.0)
iv. Wood furniture sealers and topcoats must comply with the following limitations:			
		kg VOM/kg solids	lb VOM/lb solids
A.	Topcoat	0.8	(0.8)
B.	Sealers and topcoats with the following limits:		
I.	Sealer other than acid-cured alkyd amino vinyl sealer	1.9	(1.9)
II.	Topcoat other than acid-cured alkyd amino conversion varnish topcoat	1.8	(1.8)
III.	Acid-cured alkyd amino vinyl sealer	2.3	(2.3)
IV.	Acid-cured alkyd amino conversion varnish topcoat	2.0	(2.0)

v. Other wood furniture coating limitations:

	kg/l	lb/gal
A. Opaque stain	0.56	(4.7)
B. Non-topcoat pigmented coat	0.60	(5.0)
C. Repair coat	0.67	(5.6)
D. Semi-transparent stain	0.79	(6.6)
E. Wash coat	0.73	(6.1)

vi. Other wood furniture coating requirements:

- A. No source subject to the limitations of 35 Ill. Adm. Code 218.204(1)(2) or (3) and utilizing one or more wood furniture coating spray booths shall use strippable spray booth coatings containing more than 0.8 kg VOM/kg solids (0.8 lb VOM/lb solids), as applied.
- B. Any source subject to the limitations of 35 Ill. Adm. Code 218.204(1)(2) or (3) shall comply with the requirements of 35 Ill. Adm. Code 218.217.

- b. Pursuant to 35 Ill. Adm. Code 218.209, no owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 is required to meet the limitations of 35 Ill. Adm. Code 218 Subpart G (35 Ill. Adm. Code 218.301 or 218.302), after the date by which the coating line is required to meet 35 Ill. Adm. Code 218.204.
- c. Spray booth cleaning. Pursuant to 35 Ill. Adm. Code 218.217(a), each owner or operator of a source subject to the limitations of 35 Ill. Adm. Code 218.204(1) shall not use compounds containing more than 8.0 percent, by weight, of VOM for cleaning spray booth components other than conveyors, continuous coaters and their enclosures, and metal filters, unless the spray booth is being refurbished. If the spray booth is being refurbished, that is, the spray booth coating or other material used to cover the booth is being replaced, the affected source shall use no more than 1.0 gallon of organic solvent to prepare the booth prior to applying the booth coating.
- d. Cleaning and storage requirements. Pursuant to 35 Ill. Adm. Code 218.217(b), each owner or operator of a source subject to the limitations of 35 Ill. Adm. Code 218.204(1) shall:
  - i. Keep, store, and dispose of all coating, cleaning, and washoff materials in closed containers;
  - ii. Pump or drain all organic solvent used for line cleaning into closed containers;

- iii. Collect all organic solvent used to clean spray guns in closed containers; and
- iv. Control emissions from washoff operations by using closed tanks.
- e. Application equipment requirements. Pursuant to 35 Ill. Adm. Code 218.217(c), no owner or operator of a source subject to the limitations of 35 Ill. Adm. Code 218.204(1) shall use conventional air spray guns to apply coating materials to wood furniture except under the circumstances specified in 35 Ill. Adm. Code 218.217(c)(1) through (4):
  - i. To apply coating materials that have a VOM content no greater than 1.0 kg VOM/kg solids (1.0 lb VOM/lb solids), as applied;
  - ii. For Repair coating under the following circumstances:
    - A. The coating materials are applied after the completion of the coating operation; or
    - B. The coating materials are applied after the stain and before any other type of coating material is applied, and the coating materials are applied from a container that has a volume of no more than 2.0 gallons;
    - C. If spray gun is aimed and triggered automatically, rather than manually; or
    - D. If emissions from the finishing application station are directed to control a device pursuant to 35 Ill. Adm. Code 218.216.
- 5a. Pursuant to 35 Ill. Adm. Code 218.301, no person shall cause or allow the discharge of more than 3.6 kg/hour (8 lbs/hour) of organic material into the atmosphere from any emission unit, except as provided in 35 Ill. Adm. Code 218.302, 218.303, or 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall only apply to photochemically reactive material.
- b. In the event that the operation of this emission unit results in an odor nuisance, the Permittee shall take appropriate and necessary actions to minimize odors, including but not limited to, changes in raw material or installation of controls, in order to eliminate the odor nuisance.
- 6a. i. The annual emissions from all paint spray booths, the powder coating lines, the UV Booths, woodworking operations, gluing operations all cleanup operations associated with these processes, the parts washer/drying oven, and the OM-Printing line, shall not exceed the following limitations:

<u>Emission Unit</u>	<u>PM Emissions</u>		<u>VOM Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Three (3) Paint Spray Booths	0.05	0.50	3.90	39.00
Four (4) Powder Coating Lines	1.10	11.00	0.89	8.90
Three (3) UV Booths	0.10	1.00	1.60	16.00
Woodworking Operations	0.40	4.00	0.10	1.00
One Glue Spray Booth	0.07	0.79	1.60	16.00
Assembly - VOM from Cleaning	----	----	0.10	1.00
OM - Print Line/Dry Erase	----	----	0.30	3.00
Totals:		17.29		84.90

The above limits are based on the maximum material usage, the maximum solids content of the materials used, and the maximum VOM content of each material.

- ii. Emissions of Hazardous Air Pollutants (HAP) from this source shall not exceed 9.0 tons/year of any single HAP and 24.0 tons/year of any combination of such HAPs. As a result of this condition, this permit is issued based on the emissions of all HAPs from this source not triggering the requirements to obtain a Clean Air Act Permit Program (CAAPP) Permit and the NESHAP for Wood Furniture Manufacturing Operations, 40 CFR 63 Subpart JJ.
- b. In addition to the limits in Condition 6(a), the VOM emissions from the 3 UV booths and the four powder coating lines, including all cleanup emissions associated with these processes, shall not exceed the following limitations:

<u>VOM Usage and Emissions</u>	
<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
2.49	24.0

These limits are based on the maximum material usage and the maximum VOM content of each material.

- c. In addition to the limits in Condition 6(a), the VOM emissions from wood furniture spray booth No. 12, and UV coating line No. 10, and glue spray booth No. 11 shall not exceed the following limits:

<u>VOM Usage and Emissions</u>	
<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
2.49	24.0

These limits are based on the maximum material usage and the maximum VOM content of each material. Compliance with annual limits shall be determined from a running total of 12 months of data.

- d. The emissions of VOM and HAPs shall be calculated using the following equations:

$$\text{Coating VOM or HAP Emissions} = V \times D \times U$$

Where:

V = Percent VOM or HAP in the coating (weight %)

D = Overall coating density (lbs/gallon)

U = Overall coating usage (gallons/month and gallons/year)

$$\text{Cleaning Solvent VOM or HAP Emissions} = V_1 \times D_1 \times U_1$$

Where:

V<sub>1</sub> = Percent VOM or HAP in the cleaning solvent (weight %)

D<sub>1</sub> = Overall cleaning solvent density (lbs/gallon)

U<sub>1</sub> = Overall cleaning solvent usage (gallons/month and gallons/year)

VOM Waste = lb waste x percent VOM or HAP in the waste (weight %)

$$\text{Total VOM or HAP Emissions} = \text{Coating Emissions} + \text{Cleaning Solvent Emissions} - \text{VOM Waste}$$

- e. The above limitations in Conditions 6(b) through 6(d) were established in Permits 86080010, 95120185, 98120058, 00050024, and 00080044, pursuant to 35 Ill. Adm. Code Part 203. These limits ensure that the construction and/or modification addressed in the aforementioned permits do not constitute a new major source or major modification pursuant to Title I of the Clean Air Act, specifically 35 Ill. Adm. Code Part 203.
- 7a. Emissions of VOM from the Woodworking Operations, the One Glue Spray Booths, and OM - Print Line/Dry Erase line shall not exceed 2.4 tons/month and 24.0 tons/year.
- b. The above limits ensure that the affected the Woodworking Operations, the One Glue Spray Booths, and OM - Print Line/Dry Erase line are not subject to the control requirements of 35 Ill. Adm. Code Part 218 Subpart PP (Miscellaneous Fabricated Product Manufacturing Processes) and 35 Ill. Adm. Code Part 218 Subpart TT (Other Emission Units).
- 8. Operation and emissions of the natural gas-fired combusting equipment shall not exceed the following limits:  
  
Natural Gas Usage: 12.50 mmscf/month, 100 mmscf/year

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Emissions</u>	
	<u>(Lbs/mmscf)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Nitrogen Oxides (NO <sub>x</sub> )	100	0.63	5.00
Carbon Monoxide (CO)	84	0.53	4.20
Particulate Matter (PM)	7.6	0.05	0.38
Volatile Organic Materials (VOM)	5.5	0.04	0.28
Sulfur Dioxide (SO <sub>2</sub> )	0.6	0.01	0.03

These limits are based on the maximum equipment operations and standard emission factors given by AP-42.

9. Compliance with the annual limits of this permit 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).
- 10a. Pursuant to 35 Ill. Adm. Code 212.107, 212.109, and 212.110, testing for particulate matter emissions shall be performed as follows:
- i. For both fugitive and nonfugitive particulate matter emissions, a determination as to the presence or absence of visible emissions from emission units shall be conducted in accordance with Method 22, 40 CFR part 60, Appendix A, incorporated by reference in 35 Ill. Adm. Code 212.113, except that the length of the observing period shall be at the discretion of the observer, but not less than one minute. This Condition shall not apply to 35 Ill. Adm. Code 212.301, pursuant to 35 Ill. Adm. Code 212.107.
  - ii. Except as otherwise provided in 35 Ill. Adm. Code Part 212, and except for the methods of data reduction when applied to 35 Ill. Adm. Code 212.122 and 212.123, measurements of opacity shall be conducted in accordance with Method 9, 40 CFR Part 60, Appendix A, and the procedures in 40 CFR 60.675(c) and (d), if applicable, incorporated by reference in 35 Ill. Adm. Code 212.113, except that for roadways and parking areas the number of readings required for each vehicle pass will be three taken at 5-second intervals. The first reading shall be at the point of maximum opacity and second and third readings shall be made at the same point, the observer standing at right angles to the plume at least 15 feet away from the plume and observing 4 feet above the surface of the roadway or parking area. After four vehicles have passed, the 12 readings will be averaged, pursuant to 35 Ill. Adm. Code 212.109.
  - iii. Measurement of particulate matter emissions from stationary emission units subject to 35 Ill. Adm. Code Part 212 shall be conducted in accordance with 40 CFR part 60, Appendix A, Methods 5, 5A, 5D, or 5E, pursuant to 35 Ill. Adm. Code 212.110(a).
  - iv. The volumetric flow rate and gas velocity shall be determined in accordance with 40 CFR part 60, Appendix A, Methods 1, 1A, 2, 2A, 2C, 2D, 3, and 4, pursuant to 35 Ill. Adm. Code 212.110(b).

- v. Upon a written notification by the Illinois EPA, the owner or operator of a particulate matter emission unit subject to 35 Ill. Adm. Code Part 212 shall conduct the applicable testing for particulate matter emissions, opacity, or visible emissions at such person's own expense, to demonstrate compliance. Such test results shall be submitted to the Illinois EPA within thirty (30) days after conducting the test unless an alternative time for submittal is agreed to by the Illinois EPA, pursuant to 35 Ill. Adm. Code 212.110(c).
  - b. Testing required by Condition 11(a) shall be performed by a qualified independent testing service.
11. Pursuant to 35 Ill. Adm. Code 218.211(a), the VOM content of each coating and the efficiency of each capture system and control device shall be determined by the applicable test methods and procedures specified in 35 Ill. Adm. Code 218.105 to establish the records required under 35 Ill. Adm. Code 218.211.
- 12a. Pursuant to 40 CFR 63.10(b)(3), if an owner or operator determines that his or her stationary source that emits (or has the potential to emit, without considering controls) one or more hazardous air pollutants regulated by any standard established pursuant to section 112(d) or (f) of the Clean Air Act, and that stationary source is in the source category regulated by the relevant standard, but that source is not subject to the relevant standard (or other requirement established under 40 CFR Part 63) because of limitations on the source's potential to emit or an exclusion, the owner or operator must keep a record of the applicability determination on site at the source for a period of 5 years after the determination, or until the source changes its operations to become an affected source, whichever comes first. The record of the applicability determination must be signed by the person making the determination and include an analysis (or other information) that demonstrates why the owner or operator believes the source is unaffected (e.g., because the source is an area source). The analysis (or other information) must be sufficiently detailed to allow the USEPA and/or Illinois EPA to make a finding about the source's applicability status with regard to the relevant standard or other requirement. If relevant, the analysis must be performed in accordance with requirements established in relevant subparts of 40 CFR Part 63 for this purpose for particular categories of stationary sources. If relevant, the analysis should be performed in accordance with USEPA guidance materials published to assist sources in making applicability determinations under Section 112 of the Clean Air Act, if any. The requirements to determine applicability of a standard under 40 CFR 63.1(b)(3) and to record the results of that determination under 40 CFR 63.10(b)(3) shall not by themselves create an obligation for the owner or operator to obtain a Title V permit.
- b. Pursuant to 35 Ill. Adm. Code 212.110(e), the owner or operator of an emission unit subject to 35 Ill. Adm. Code Part 212 shall retain

records of all tests which are performed. These records shall be retained for at least three (3) years after the date a test is performed.

- c. Pursuant to 35 Ill. Adm. Code 218.182(d)(2), all persons subject to the requirements of 35 Ill. Adm. Code 218.182(c)(2)(B) must maintain records which include for each purchase:
  - i. The name and address of the solvent supplier;
  - ii. The date of purchase;
  - iii. The type of solvent; and
  - iv. The vapor pressure of the solvent measured in mmHg at 20°C (68°F).
- d. Pursuant to 35 Ill. Adm. Code 218.211(c)(2), any owner or operator of a coating line subject to the 35 Ill. Adm. Code 218.204 and complying by means of 35 Ill. Adm. Code 218.204 shall collect and record all of the following information each day for each coating line and maintain the information at the source for a period of three years:
  - i. The name and identification number of each coating as applied on each coating line;
  - 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;
  - iii. For coating lines subject to the limitations of 35 Ill. Adm. Code 218.204(1)(2)(A) or (B), the weight of VOM per weight of solids in each coating as applied each day on each coating line and certified product data sheets for each coating; and
  - iv. For wood furniture coating spray booths subject to the limitations of 35 Ill. Adm. Code 218.204(1)(4)(A), the weight of VOM per weight of solids in each strippable spray booth coating as applied each day on each spray booth and certified product data sheets for each coating.
- e. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
  - i. For each coating and cleaning solvent used on an affected paint spray booth:
    - A. The name and identification number of each coating and cleaning solvent as applied on the affected paint spray booth;

- B. The usage of each coating and cleaning solvent on each affected paint spray booth, in units of gallons/month and gallons/year.
  - C. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM), or as applied on the affected paint spray booths, VOM content in terms of lb VOM per/lb of coating solids when applicable.
  - D. The weight of HAPs per volume of each coating and cleaning solvent applied on the affected paint spray booths.
  - E. Cleaning solvents VOM contents.
- ii. Natural gas usage (million scf/month) and million scf/year);
  - iii. Monthly and annual emissions of CO, NO<sub>x</sub>, PM, SO<sub>2</sub>, VOM, each individual HAP and total HAPs from the source, with supporting calculations (ton/month and tons/year).
13. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five (5) years from the date of entry and shall be made available for inspection and copying by the Illinois EPA or USEPA upon request. Any records retained in an electronic format (e.g., computer) shall be capable of being retrieved and printed on paper during normal source office hours so as to be able to respond to an Illinois EPA or USEPA request for records during the course of a source inspection.
- 14a. If there is an exceedance of or a deviation from the requirements of this permit as determined by the records required by this permit, the Permittee shall submit a report to the Illinois EPA's Compliance and Enforcement Section in Springfield, Illinois within 30 days after the exceedance/deviation. The report shall include the emissions released in accordance with the recordkeeping requirements, a copy of the relevant records, and a description of the exceedances or deviation and efforts to reduce emissions and future occurrences.
- b. Pursuant to 35 Ill. Adm. Code 212.110(d), a person planning to conduct testing for particulate matter emissions to demonstrate compliance shall give written notice to the Illinois EPA of that intent. Such notification shall be given at least thirty (30) days prior to the initiation of the test unless a shorter period is agreed to by the Illinois EPA. Such notification shall state the specific test methods from 35 Ill. Adm. Code 212.110 that will be used.
  - c. Pursuant to 35 Ill. Adm. Code 218.211(c)(3), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 and complying by means of 35 Ill. Adm. Code 218.204 shall notify the Illinois EPA in the following instances:

- i. Any record showing violation of 35 Ill. Adm. Code 218.204 shall be reported by sending a copy of such record to the Illinois EPA within 30 days following the occurrence of the violation.
  - ii. At least 30 calendar days before changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d)(1) or (e)(1), respectively. Upon changing the method of compliance from 35 Ill. Adm. Code 218.204 to 35 Ill. Adm. Code 218.205 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(d) or (e), respectively.
15. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance and Enforcement Section (#40)  
P.O. Box 19276  
Springfield, Illinois 62794-9276

and one (1) copy shall be sent to the Illinois EPA's regional office at the following address unless otherwise indicated:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
9511 West Harrison  
Des Plaines, Illinois 60016

If you have any questions on this permit, please call David Hulskotter at 217/782-2113

Edwin C. Bakowski, P.E.  
Acting Manager, Permit Section  
Division of Air Pollution Control

ECB:DWH:psj

cc: IEPA, FOS Region 1  
Lotus Notes

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from printing plant operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Agency used the annual operating scenario, which results in maximum emissions from such a plant. The resulting maximum emissions are below the levels (e.g., 100 tons per year of VOM, 10 tons per year for a single HAP, and 25 tons per year for totaled HAP) at which this source would be considered a major source for purposes of the Clean Air Act Permit Program. Actual emissions from this source will be less than predicted in this summary to the extent that less material is used and control measures are more effective than required in this permit.

<u>Emission Units</u>	<u>VOM</u>	E M I S S I O N S (Tons/Year)				<u>Total HAPs</u>
		<u>NO<sub>x</sub></u>	<u>CO</u>	<u>PM</u>	<u>Single HAP</u>	
Three (3) Paint Spray Booths	39.00	----	----	0.50	----	----
Four (4) Powder Coating Lines	8.90	----	----	11.00	----	----
Three (3) UV Booths	16.00	----	----	0.50	----	----
Wood Working Operations	1.00	----	----	4.00	----	----
One Glue Spray Booth	16.00	----	----	0.44	----	----
Assembly - VOM from Cleaning	1.00	----	----	--	----	----
Printing Line and Dry Erase	3.00	----	----	--	----	----
Natural Gas-Fired Combusting Equipment	<u>0.28</u>	<u>5.00</u>	<u>4.20</u>	<u>0.38</u>	----	----
Total	85.18	5.00	4.20	17.26	9.00	24.0

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Attachment B - Emissions Reduction Market System (ERMS)

1. Description of ERMS

The ERMS is a "cap and trade" market system for major stationary sources located in the Chicago ozone nonattainment area. It is designed to reduce VOM emissions from stationary sources to contribute to reasonable further progress toward attainment, as required by Section 182(c) of the Clean Air Act.

The ERMS addresses VOM emissions during a seasonal allotment period from May 1 through September 30. Participating sources must hold "allotment trading units" (ATUs) for their actual seasonal VOM emissions. Each year participating sources are issued ATUs based on allotments set in the sources' permits. These allotments are established from historical VOM emissions or "baseline emissions" lowered to provide the emissions reductions from stationary sources required for reasonable further progress.

By December 31 of each year, the end of the reconciliation period following the seasonal allotment period, each source shall have sufficient ATUs in its transaction account to cover its actual VOM emissions during the preceding season. A transaction account's balance as of December 31 will include any valid ATU transfer agreements entered into as of December 31 of the given year, provided such agreements are promptly submitted to the Illinois EPA for entry into the transaction account database. The Illinois EPA will then retire ATUs in sources' transaction accounts in amounts equivalent to their seasonal emissions. When a source does not appear to have sufficient ATUs in its transaction account, the Illinois EPA will issue a notice to the source to begin the process for Emissions Excursion Compensation.

In addition to receiving ATUs pursuant to their allotments, participating sources may also obtain ATUs from the market, including ATUs bought from other participating sources and general participants in the ERMS that hold ATUs (35 Ill. Adm. Code 205.630) and ATUs issued by the Illinois EPA as a consequence of VOM emissions reductions from an Emissions Reduction Generator or an Intersector Transaction (35 Ill. Adm. Code 205.500 and 35 Ill. Adm. Code 205.510). During the reconciliation period, sources may also buy ATUs from a secondary reserve of ATUs managed by the Illinois EPA, the "Alternative Compliance Market Account" (ACMA) (35 Ill. Adm. Code 205.710). Sources may also transfer or sell the ATUs that they hold to other sources or participants (35 Ill. Adm. Code 205.630).

2. Applicability

This source is considered a "participating source" for purposes of the ERMS, 35 Ill. Adm. Code Part 205.

3. Obligation to Hold Allotment Trading Units (ATUs)

- a. Pursuant to 35 Ill. Adm. Code 205.150(c)(1) and 35 Ill. Adm. Code 205.720, and as further addressed by Condition 8 of this Attachment, as of December 31 of each year, this source shall hold ATUs in its account in an amount not less than the ATU equivalent of its VOM emissions during the preceding seasonal allotment period (May 1 - September 30), not including VOM emissions from the following, or the source shall be subject to "emissions excursion compensation," as described in Condition 5 of this Attachment.
  - i. VOM emissions from emission units that the Illinois EPA determines would qualify as insignificant activities under 35 Ill. Adm. Code 201.Subpart F if the source were a CAAPP source and for which a statement to this effect is contained in the FESOP for a participating or new participating source are exempt from the requirements of , in accordance with 35 Ill. Adm. Code 205.220(b);
  - ii. Excess VOM emissions associated with startup, malfunction, or breakdown of an emission unit for sources permitted to operate during startup, malfunction or breakdown pursuant to 35 Ill. Adm. Code 201.262, in accordance with 35 Ill. Adm. Code 205.225;
  - iii. Excess VOM emissions to the extent allowed by a Variance, Consent Order, or Compliance Schedule, in accordance with 35 Ill. Adm. Code 205.320(e)(3);
  - iv. Excess VOM emissions that are a consequence of an emergency as approved by the Illinois EPA, pursuant to 35 Ill. Adm. Code 205.750; and
  - v. VOM emissions from certain new and modified emission units as addressed by Condition 8(b) of this Attachment, if applicable, in accordance with 35 Ill. Adm. Code 205.320(f).
- b. Notwithstanding the above condition, in accordance with 35 Ill. Adm. Code 205.150(c)(2), if a source commences operation of a major modification, pursuant to 35 Ill. Adm. Code Part 203, the source shall hold ATUs in an amount not less than 1.3 times its seasonal VOM emissions attributable to such major modification during the seasonal allotment period, determined in accordance with the construction permit for such major modification or applicable provisions of this permit.

4. Market Transactions

- a. The source shall apply to the Illinois EPA for and obtain authorization for a Transaction Account prior to conducting any market transactions, as specified at 35 Ill. Adm. Code 205.610(a).

- b. The Permittee shall promptly submit to the Illinois EPA any revisions to the information submitted for its Transaction Account, pursuant to 35 Ill. Adm. Code 205.610(b).
- c. The source shall have at least one account officer designated for its Transaction Account, pursuant to 35 Ill. Adm. Code 205.620(a).
- d. Any transfer of ATUs to or from the source from another source or general participant must be authorized by a qualified Account Officer designated by the source and approved by the Illinois EPA, in accordance with 35 Ill. Adm. Code 205.620, and the transfer must be submitted to the Illinois EPA for entry into the Transaction Account database.

5. Emissions Excursion Compensation

Pursuant to 35 Ill. Adm. Code 205.720, if the source fails to hold ATUs in accordance with Condition 3 of this Attachment, it shall provide emissions excursion compensation in accordance with the following:

- a. Upon receipt of an Excursion Compensation Notice issued by the Illinois EPA, the source shall purchase ATUs from the ACMA in the amount specified by the notice, as follows:
  - i. The purchase of ATUs shall be in an amount equivalent to 1.2 times the emissions excursion; or
  - ii. If the source had an emissions excursion for the seasonal allotment period immediately before the period for the present emissions excursion, the source shall purchase ATUs in an amount equivalent to 1.5 times the emissions excursion.
- b. If requested in accordance with paragraph (c) below or in the event that the ACMA balance is not adequate to cover the total emissions excursion amount, the Illinois EPA will deduct ATUs equivalent to the specified amount or any remaining portion thereof from the ATUs to be issued to the source for the next seasonal allotment period.
- c. Pursuant to 35 Ill. Adm. Code 205.720(c), within 15 days after receipt of an Excursion Compensation Notice, the owner or operator may request that ATUs equivalent to the amount specified be deducted from the source's next seasonal allotment by the Illinois EPA, rather than purchased from the ACMA.

6. Quantification of Seasonal VOM Emissions

- a. The methods and procedures specified in of this permit for determining VOM emissions and compliance with VOM emission limitations shall be used for determining seasonal VOM emissions

for purposes of the ERMS, with the following exceptions [35 Ill. Adm. Code 205.315(b)]:

No exceptions

- b. The Permittee shall report emergency conditions at the source to the Illinois EPA, in accordance with 35 Ill. Adm. Code 205.750, if the Permittee intends to deduct VOM emissions in excess of the technology-based emission rates normally achieved that are attributable to the emergency from the source's seasonal VOM emissions for purposes of the ERMS. These reports shall include the information specified by 35 Ill. Adm. Code 205.750(a), and shall be submitted in accordance with the following:
    - i. An initial emergency conditions report within two days after the time when such excess emissions occurred due to the emergency; and
    - ii. A final emergency conditions report, if needed to supplement the initial report, within 10 days after the conclusion of the emergency.
7. Annual Account Reporting
- a. For each year in which the source is operational, the Permittee shall submit, as a component of its Annual Emissions Report, seasonal VOM emissions information to the Illinois EPA for the seasonal allotment period. This report shall include the following information [35 Ill. Adm. Code 205.300]:
    - i. Actual seasonal emissions of VOM from the source;
    - ii. A description of the methods and practices used to determine VOM emissions, as required by this permit, including any supporting documentation and calculations;
    - iii. A detailed description of any monitoring methods that differ from the methods specified in this permit, as provided in 35 Ill. Adm. Code 205.337;
    - iv. If a source has experienced an emergency, as provided in 35 Ill. Adm. Code 205.750, the report shall reference the associated emergency conditions report that has been approved by the Illinois EPA;
    - v. If a source's baseline emissions have been adjusted due to a Variance, Consent Order, or CAAPP permit Compliance Schedule, as provided for in 35 Ill. Adm. Code 205.320(e)(3), the report shall provide documentation quantifying the excess VOM emissions during the season that were allowed by the Variance, Consent Order, or Compliance Schedule, in accordance with 35 Ill. Adm. Code 205.320(e)(3); and

- vi. If a source is operating a new or modified emission unit for which three years of operational data is not yet available, as specified in 35 Ill. Adm. Code 205.320(f), the report shall specify seasonal VOM emissions attributable to the new emission unit or the modification of the emission unit.
  - b. This report shall be submitted by November 30 of each year, for the preceding seasonal allotment period.
8. Allotment of ATUs to the Source
- a.
    - i. The allotment of ATUs to this source is !VARIABLE! ATUs per seasonal allotment period.
    - ii. This allotment of ATUs reflects the Illinois EPA's determination that the source's baseline emissions were 43.0926 tons per season.
      - A. This determination includes use of the 1993 and 1997 seasons as substitutes for the 1994, 1995, and 1996 seasons due to non-representative conditions in these seasons as allowed by 35 Ill. Adm. Code 205.320(a).
      - B. This determination also includes adjustment to actual emissions to account for voluntary over-compliance at the source, e.g., using coatings with VOM contents lower than what is required by 35 Ill. Adm. Code Part 218 Subpart F, pursuant to 35 Ill. Adm. Code 205.320(d).
    - iii. The source's allotment reflects 88% of the baseline emissions (12% reduction), except for the VOM emissions from specific emission units excluded from such reduction, pursuant to 35 Ill. Adm. Code 205.405, including units complying with MACT or using BAT, as identified in Condition 10 of this Attachment of this permit.
    - iv. ATUs will be issued to the source's Transaction Account by the Illinois EPA annually. These ATUs will be valid for the seasonal allotment period following issuance and, if not retired in this season, the next seasonal allotment period.
    - v. Condition 3(a) of this Attachment becomes effective beginning in the seasonal allotment period following the initial issuance of ATUs by the Illinois EPA into the Transaction Account for the source.
  - b. Contingent Allotments for New or Modified Emission Units  
None

- c. Notwithstanding the above, part or all of the above ATUs will not be issued to the source in circumstances as set forth in 35 Ill. Adm. Code Part 205, including:
  - i. Transfer of ATUs by the source to another participant or the ACMA, in accordance with 35 Ill. Adm. Code 205.630;
  - ii. Deduction of ATUs as a consequence of emissions excursion compensation, in accordance with 35 Ill. Adm. Code 205.720; and
  - iii. Transfer of ATUs to the ACMA, as a consequence of shutdown of the source, in accordance with 35 Ill. Adm. Code 205.410.

9. Recordkeeping for ERMS

The Permittee shall maintain copies of the following documents as its Compliance Master File for purposes of the ERMS [35 Ill. Adm. Code 205.700(a)]:

- a. Seasonal component of the Annual Emissions Report;
- b. Information on actual VOM emissions, as recorded and as required by Condition 6(e) of this permit and Condition 6(a) of this Attachment; and
- c. Any transfer agreements for the purchase or sale of ATUs and other documentation associated with the transfer of ATUs.

10. Exclusions from Further Reductions

- a. VOM emissions from the following emission units shall be excluded from the VOM emissions reductions requirements specified in 35 Ill. Adm. Code 205.400(c) and (e) as long as such emission units continue to satisfy the following [35 Ill. Adm. Code 205.405(a)]:
  - i. Emission units that comply with any NESHAP or MACT standard promulgated pursuant to the Clean Air Act;
  - ii. Direct combustion emission units designed and used for comfort heating purposes, fuel combustion emission units, and internal combustion engines; and
  - iii. An emission unit for which a LAER demonstration has been approved by the Illinois EPA on or after November 15, 1990.

The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because they meet the criteria as indicated above [35 Ill. Adm. Code 205.405(a) and (c)]:

Fuel Combustion Emission Units

- b. VOM emissions from emission units using BAT for controlling VOM emissions shall not be subject to the VOM emissions reductions requirement specified in 35 Ill. Adm. Code 205.400(c) or (e) as long as such emission unit continues to use such BAT [35 Ill. Adm. Code 205.405(b)].

The source has demonstrated in its ERMS application and the Illinois EPA has determined that the following emission units qualify for exclusion from further reductions because these emission units use BAT for controlling VOM emissions as indicated above [35 Ill. Adm. Code 205.405(b) and (c)]:

None

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