



- 3a. 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.
- 4a. This permit is issued based upon the coating operations not being subject to the emission limitations of 35 Ill. Adm. Code Part 218, Subpart F: Coating Operations, because the source does not meet the applicability of 35 Ill. Adm. Code 218.208(b). In particular, the source has:
- i. Maximum theoretical emissions of VOM from emission units not regulated by 35 Ill. Adm. Code 218 Subpart F that are less than 90.7 Mg (100 tons) per year; and
  - ii. A potential to emit for VOM from emission units not regulated by 35 Ill. Adm. Code 218 Subpart F that is less than 22.7 Mg (25 tons) per year.
- b. 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 source, except as provided in 35 Ill. Adm. Code 218.302, 218.303, 218.304 and the following exception: If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart K: Use of Organic Material, shall apply only to photochemically reactive material.
- c. In the event that the operation of this source 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 nuisance.

5a. Emissions and operation of the eight coating booths with filters shall not exceed the following limits:

i. Material Usage:

<u>Material</u>	Material Usage	
	<u>(Gallons/Month)</u>	<u>(Gallons/Year)</u>
Stain	80	800
Thinner	160	1,600
Sealer	10	100
Lacquer #1	280	2,800
Lacquer #2	190	1,900
Adhesive #1	210	2,100
Adhesive #2	230	2,300
Clean Up Solvent	7.70 lbs/month	76.99 lbs/year

ii. Material Properties:

<u>Material</u>	Solids Content	VOM Content	Single HAP Content	Combined HAP Content
	<u>(% by Wt)</u>	<u>(% by Wt)</u>	<u>(% by Wt)</u>	<u>(% by Wt)</u>
Stain	1.40	92.00	80.00	80.00
Thinner	31.26	68.74	34.68	34.68
Sealer	49.00	49.00	32.00	32.00
Lacquer #1	23.40	54.80	10.00	15.10
Lacquer #2	26.00	65.45	7.20	14.50
Adhesive #1	10.90	89.10	89.10	89.10
Adhesive #2	64.90	1.04	0.37	0.67
Clean Up Solvent	--	68.74	34.68	34.68

iii. Emissions of PM, VOM, and HAP:

<u>Material</u>	PM		VOM		Single HAP		Combined HAPs	
	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>	<u>(T/Mo)</u>	<u>(T/Yr)</u>
Stains	--	--	0.26	2.57	0.22	2.23 <sup>1</sup>	0.22	2.23
Thinner	0.001	0.01	0.38	3.71	0.19	1.87 <sup>3</sup>	0.19	1.87
Sealer	--	--	0.02	0.20	0.02	0.14 <sup>4</sup>	0.02	0.14
Lacquer #1	0.02	0.14	0.59	5.84	0.11	1.07 <sup>6</sup> 0.53 <sup>5</sup>	0.17	1.61
Lacquer #2	0.02	0.14	0.48	4.77	0.06	0.52 <sup>3</sup>	0.11	1.05
Adhesive #1	0.001	0.01	0.78	7.71	0.80	7.71 <sup>2</sup>	0.78	7.71
Adhesive #2	0.009	0.09	0.02	0.13	0.005	0.05 <sup>7</sup>	0.009	0.09
Clean Up Solvent	--	--	0.003	0.03	0.001	0.01	0.001	0.01
Totals		0.39		24.96				14.71

1	Methanol Total:	2.28 tons/year
2	Glycol Ether Total	7.71 tons/year
3	Toluene Total:	2.40 tons/year
4	o-Xylene Total:	0.13 tons/year
5	Ethylbenzene Total:	0.62 tons/year
6	Xylene Total:	1.50 tons/year
7	Formaldehyde Total:	0.06 tons/year

- b. These limits are based the maximum usage of each material, the maximum material properties (solids, VOM, and HAP content) of each material, a transfer efficiency of 45%, and the average material density of each material (stain: 6.98 lbs/gallon, thinner: 6.75 lbs/gallon, sealer: 8.34 lbs/gallon, lacquer: 7.61 lbs/gallon, adhesive: 8.24 lbs/gallon).
- c. These limits ensure that the source is not subject to the limitations of 35 Ill. Adm. Code Part 218.204(1), (2), (3) and (4), Wood Furniture Coating.
- d. The emissions of Hazardous Air Pollutants (HAP) as listed in Section 112(b) of the Clean Air Act shall be less than 10 tons/year of any single HAP and 25 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 of Section 112(g) of the Clean Air Act.
- e. 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).
- 6. 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.
- 7a. 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 218.211(b)(4), any owner or operator of a coating line which is exempted from the limitations of 35 Ill. Adm. Code 218.204 because of 35 Ill. Adm. Code 218.208(b) shall collect and record all of the following information 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; and
  - ii. The weight of VOM per volume and the volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied on each coating line on a monthly basis.
- c. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
  - i. Name and amount of each VOM/HAP-containing material used (tons/month, tons/year);
  - ii. The usage of each coating and cleaning solvent on each coating booth (gallons/month and gallons/year);
  - iii. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) (weight %);
  - iv. VOM/HAP content of each material (weight %);
  - v. Cleaning solvents VOM contents (weight %); and
  - vi. Monthly and annual emissions of VOM, PM and HAP (tons/month and tons/year) with supporting calculations.
- d. 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 the Illinois EPA or USEPA request for records during the course of a source inspection.

8. 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 Section in Springfield, Illinois within 30 days after the exceedance or 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.
9. Pursuant to 35 Ill. Adm. Code 218.211(b)(6), any owner or operator of a source exempt from the limitations of 35 Ill. Adm. Code 218.204(1) because of 35 Ill. Adm. Code 218.208(b) shall notify the Illinois EPA if the source's VOM emissions exceed the limitations of 35 Ill. Adm. Code 218.208(b) by sending a copy of calculations showing such an exceedance within 30 days after the change occurs.
10. Two (2) copies of required reports and notifications shall be sent to:

Illinois Environmental Protection Agency  
Division of Air Pollution Control  
Compliance 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, please call Jocelyn Stakely at 217/782-2113.

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

ECB:JRS:cjc

cc: Illinois EPA, FOS Region 1  
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the source operating in compliance with the requirements of this federally enforceable permit. In preparing this summary, the Illinois EPA used the annual operating scenario which results in maximum emissions from such a plant. The resulting maximum emissions well below the levels, e.g., 100 tons/year of PM, 100 tons/year of VOM, 10 tons/year of single HAP and 25 tons/year of total HAPs 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 handled and control measures are more effective than required in this permit.

<u>Equipment</u>	<u>VOM</u> (T/Yr)	<u>HAPs</u>		<u>NO<sub>x</sub></u> (T/Yr)	<u>CO</u> (T/Yr)	<u>PM</u> (T/Yr)
		<u>Combined</u> (T/Yr)	<u>Single</u> (T/Yr)			
<u>Material</u>						
One Booth - Stains	2.57	2.23	2.23 <sup>1</sup>	----	----	----
One Booth - Thinner	3.71	1.87	1.87 <sup>3</sup>	----	----	0.01
Two Booths - Sealer	0.20	0.14	0.14 <sup>4</sup>	----	----	----
One Booth - Lacquer #1			1.07 <sup>6</sup>			
	5.84	1.61	0.53 <sup>5</sup>	----	----	0.14
One Booth - Lacquer #2	4.77	1.05	0.52 <sup>3</sup>	----	----	0.14
One Booth - Adhesive #1	7.71	7.71	7.71 <sup>2</sup>	----	----	0.01
One Booth - Adhesive #2	0.13	0.09	0.05 <sup>7</sup>	----	----	0.09
Clean Up Solvent	<u>0.03</u>	<u>0.01</u>	<u>0.01</u>	----	----	----
Totals	<u>24.96</u>	<u>&lt; 25</u>	<u>&lt; 10</u>	----	----	<u>0.39</u>

- 1 Methanol Total: 2.28 tons/year
- 2 Glycol Ether Total 7.71 tons/year
- 3 Toluene Total: 2.40 tons/year
- 4 o-Xylene Total: 0.13 tons/year
- 5 Ethylbenzene Total: 0.62 tons/year
- 6 Xylene Total: 1.50 tons/year
- 7 Formaldehyde Total: 0.06 tons/year

JRS:cjc