

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT

PERMITTEE

Cap and Seal Company
Attn: David A. Blocker, Plant Manager
1591 Fleetwood Drive
Elgin, Illinois 60123

<u>Application No.:</u> 96120049	<u>I.D. No.:</u> 089438ABE
<u>Applicant's Designation:</u>	<u>Date Received:</u> February 13, 2002
<u>Subject:</u> Lining and Manufacturing of Metal Plugs and Caps	
<u>Date Issued:</u>	<u>Expiration Date:</u>
<u>Location:</u> 1591 Fleetwood Drive, Elgin, Kane County	

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of 5 coating machines with ovens, 15 punch press machines and natural gas fired combustion equipment, pursuant to the above-referenced application. 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. This federally enforceable state operating permit (FESOP) is issued to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 100 tons/year for volatile organic material (VOM), 10 tons/year for a single hazardous air pollutant (HAP) and 25 tons/year for totaled HAPs). As a result, the source is excluded from the 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. To limit the potential emissions of VOM from the source to less than 25 tons/year. As a result, the source is excluded from the requirement of 35 Ill. Adm. Code Part 205, Emission Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.
 - iii. This permit is issued based upon the plant not being subject to the requirements of 35 Ill. Adm. Code Part TT (Other Emission Units). This is consequence of the federally enforceable production and operating limitations, which restrict a potential to emit 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 all operating permits issued for this location.

- 2a. Pursuant to 35 Ill. Adm. Code 218.204(b) (6), 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. The emission limitations are as follows:

<u>Can Coating</u>	<u>kg/l</u>	<u>lb/gal</u>
End sealing compound coat	0.44	(3.7)

- b. Pursuant to 35 Ill. Adm. Code 218.205(c), no owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204(b) and complying by means of 35 Ill. Adm. Code 218.205 shall operate the subject coating line unless the owner or operator has demonstrated compliance with 35 Ill. Adm. Code 218.205(c) (for can coating) 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(d). No owner or operator of a can coating line subject to the limitations of 35 Ill. Adm. Code 218.204(b) shall operate the subject coating line using a coating with a VOM content in excess of the limitations specified in 35 Ill. Adm. Code 218.204(b) unless all of the following requirements are met:

- i. An alternative daily emission limitation shall be determined for the can coating operation, i.e. for all of the can coating lines at the source, according to 35 Ill. Adm. Code 218.205(c) (2). Actual daily emissions shall never exceed the alternative daily emission limitation and shall be calculated by use of the following equation.

$$E_d = \sum_{i=1}^n V_i C_i$$

Where:

- E_d = Actual VOM emissions for the day in units of kg/day (lbs/day);
- i = Subscript denoting a specific coating applied;
- n = Total number of coatings applied in the can coating operation, i.e. all can coating lines at the source;
- V_i = Volume of each coating applied for the day in units of l/day (gallons/day) of coating (minus water and any

compounds which are specifically exempted from the definition of VOM);

C_i = The VOM content of each coating as applied in units of kg VOM/l (lbs VOM/gallon) of coating (minus water and any compounds which are specifically exempted from the definition of VOM).

- ii. The alternative daily emission limitation (A_d) for the daily weighted average shall be determined for the can coating operation, i.e. for all of the can coating lines at the source, on a daily basis, as follows:

$$A_d = \sum_{i=1}^n V_i L_i \left(\frac{D_i - C_i}{D_i - L_i} \right)$$

Where:

A_d = The VOM emissions allowed for the day in units of kg/day (lbs/day);

i = Subscript denoting a specific coating applied;

n = Total number of surface coatings applied in the can coating operation;

C_i = The VOM content of each surface coating as applied in units of kg VOM/l (lbs VOM/gal) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);

D_i = The density of VOM in each coating applied. For the purposes of calculating A_d , the density is 0.882 kg VOM/l (7.36 lbs VOM/gallon VOM);

V_i = Volume of each surface coating applied for the day in units of l (gallon) of coating (minus water and any compounds which are specifically exempted from the definition of VOM);

L_i = The VOM emission limitation for each surface coating applied as specified in 35 IAC 218.204(b) in units of kg VOM/l (lbs VOM/gallon) of coating (minus water and any compounds which are specifically exempted from the definition of VOM).

- 3a. 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, 218.304 and the following exception:

If no odor nuisance exists the limitation of 35 Ill. Adm. Code 218 Subpart G shall apply only to photochemically reactive material.

- b. 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.
- 4a. Operation and VOM emissions from the coating department shall not exceed the following limits:

Coating Usage		VOM Emissions	
<u>(Gallons/Month)</u>	<u>(Gallons/Year)</u>	<u>(Pounds/Month)</u>	<u>(Tons/Year)</u>
2,340	18,715	3,000	9.75

These limits are based on maximum coating usage and a material balance.

- b. Operation and VOM emissions from the punch press department shall not exceed the following limits:

Vanishing Oil		VOM Emissions	
<u>(Gallons/Month)</u>	<u>(Tons/Year)</u>	<u>(Pounds/Month)</u>	<u>(Tons/Year)</u>
300	8.4	2,010	8.4

These limits are based on maximum vanishing oil usage operation and a material balance.

- 5. The punch press department is not subject to the control requirements of 35 Ill. Adm. Code 218.986 of Subpart TT due as a result of the limitation on the source's emissions of VOM being below 25 tons per year, as established in this permit.
- 6. Operation and emissions of the natural gas fired combustion equipment shall not exceed the following limits:

Natural Gas Usage: 10 mmscf/month, 60 mmscf/year

<u>Pollutant</u>	Emission Factor <u>(Lbs/mmscf)</u>	Emissions	
		<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Nitrogen Oxides (NO _x)	100	1.00	3.00
Carbon Monoxide (CO)	84	0.80	2.52
Volatile Organic Material (VOM)	5.5	0.06	0.20
Particulate Matter (PM)	7.6	0.08	0.23
Sulfur Dioxide (SO ₂)	0.6	0.06	0.02

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

7. The emissions of Hazardous Air Pollutants (HAPs) as listed in Section 112(b) of the Clean Air Act shall not equal or exceed 10 tons per year of any single HAP or 25 tons per year of any combination of such HAPs, or such lesser quantity as USEPA may establish in rule which would require the Permittee to obtain a CAAPP permit from the Illinois EPA. As a result of this condition, this permit is issued based on the emissions of any HAP from this source not triggering the requirement to obtain a CAAPP permit from the Illinois EPA.
8. 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).
- 9a. 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(d)(2), the owner or operator of a subject coating line 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 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.
- iii. The daily-weighted average VOM content of all coatings as applied on each coating line as defined in 35 Ill. Adm. Code 218.104.
- c. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:
 - i. Coating usage (gallons/month and gallons/year);
 - ii. Vanishing oil usage (gallons/month and gallons/year);
 - iii. Natural gas usage (mmscf/month and mmscf/year); and
 - iv. Monthly and annual VOM and HAP emissions, with supporting calculations (tons/month and tons/year).
- b. 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.
- 10a. If there is an exceedance of or 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/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 exceedance or deviation and efforts to reduce emissions and future occurrences.
- b. Pursuant to 35 Ill. Adm. Code 218.211(d)(3), the owner or operator of a subject coating line shall notify the Illinois EPA in the following instances:
 - i. Any record showing violation of 35 Ill. Adm. Code 218.205 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 with this 35 Ill. Adm. Code 218 Subpart F from 35 Ill. Adm. Code 218.205 to 35 Ill. Adm. Code 218.204 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(c)(1) or (e)(1), respectively. Upon changing the method of compliance with 35 Ill. Adm. Code 218 Subpart F from 35 Ill. Adm. Code 218.205 to 35

Ill. Adm. Code 218.204 or 35 Ill. Adm. Code 218.207, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.211(c) or (e), respectively.

11. 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 David Hulskotter at 217/782-2113.

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

DES:DWH:psj

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from this 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 are well 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 handled, and control measures are more effective than required in this permit.

<u>Emission Unit</u>	E M I S S I O N S (Tons/Year)						
	<u>VOM</u>	<u>NO_x</u>	<u>CO</u>	<u>PM</u>	<u>SO₂</u>	<u>Single HAP</u>	<u>Total HAPs</u>
Coating Department	9.75						
Punch Press Department	8.40						
Natural Gas Fired Combustion Equipment	0.20	3.00	2.52	0.23	0.02		
Plant-Wide						< 10	< 25
Totals	<u>18.35</u>	<u>3.00</u>	<u>2.52</u>	<u>0.23</u>	<u>0.02</u>	<u>< 10</u>	<u>< 25</u>

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