217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

Jessup Manufacturing Company
Attn: David Reese
1701 Rockland Road
Lake Bluff, Illinois 60044

Application No.: 73010370
Applicant's Designation:
Subject: Coating Lines
Date Issued: June 1, 2009
Location: 1701 Rockland Road, Lake Bluff, Lake County

I.D. No.: 097809AAG
Date Received: June 21, 2004

Expiration Date: June 1, 2014

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of one (1) Faustel coating line, one (1) spreader coating line, and one (1) ST-COATER coating line controlled by a Regenerative Thermal Oxidizer (RTO) and coating stirring (55 gallon drum) 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. 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), and 10 tons/year for a single Hazardous Air Pollutant (HAP) and 25 tons/year for combination of such 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 requirements of 35 Ill. Adm. Code Part 205, Emissions Reduction Market System. The maximum emissions of this source, as limited by the conditions of this permit, are described in Attachment A.

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 212.123(a), 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 35 Ill. Adm. Code 212.122.

b. Pursuant to 35 Ill. Adm. Code 212.123(b), the emission of smoke or other particulate matter from any such emission unit may have an opacity greater than 30 percent but not greater than 60 percent 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 m (1000 ft) radius from the center point of any other such emission unit owned or operated by such person, and provided further that such opaque emissions permitted from each such emission unit shall be limited to 3 times in any 24 hour period.

c. 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 35 Ill. Adm. Code 212.321(c).

3. Pursuant to 35 Ill. Adm. Code 214.301, no person shall cause or allow the emission of sulfur dioxide into the atmosphere from any process emission source to excess 2000 ppm.

4a. Pursuant to 35 Ill. Adm. Code 218.204(c), except as provided in 35 Ill. Adm. Code 218.205, 218.207, 218.208, 218.212, 218.215 and 218.216, 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 Paper 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 35 Ill. Adm. Code 218 Subpart F 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
Paper Coating	0.28	(2.3)

Note: The paper coating limitation shall not apply to any owner or operator of any paper coating line on which flexographic or rotogravure printing is performed if the paper coating line complies with the emissions limitations in 35 Ill. Adm. Code 218.401. In addition, screen printing on paper is not regulated as paper coating, but is regulated under 35 Ill. Adm. Code 218 Subpart TT.

b. Pursuant to 35 Ill. Adm. Code 218.207(a), any owner or operator of a coating line subject to 35 Ill. Adm. Code 218.204 may comply with 35 Ill. Adm. Code 218.207, rather than with 35 Ill. Adm. Code 218.204, if a capture system and control device are operated at all times the coating line is in operation and the owner or operator demonstrates compliance with 35 Ill. Adm. Code 218.207(c), (d), (e), (f), (g), (h), (i), (j), or (k) (depending upon the source category) through the applicable coating analysis and capture system and control device efficiency test methods and procedures specified in 35 Ill. Adm. Code 218.105 and the recordkeeping and reporting requirements specified in 35 Ill. Adm. Code 218.211(e); and the control device is equipped with the applicable

monitoring equipment specified in 35 Ill. Adm. Code 218.105(d) and the monitoring equipment is installed, calibrated, operated and maintained according to vendor specifications at all times the control device is in use. A capture system and control device, which does not demonstrate compliance with 35 Ill. Adm. Code 218.207(c), (d), (e), (f), (g), (h), (i), (j), or (k) may be used as an alternative to compliance with 35 Ill. Adm. Code 218.204 only if the alternative is approved by the Illinois EPA and approved by the USEPA as a SIP revision.

c. i Pursuant to 35 Ill. Adm. Code 218.207(b)(1), the coating line is equipped with a capture system and control device that provides 81 percent reduction in the overall emissions of VOM from the coating line and the control device has a 90 percent efficiency, or

ii. Pursuant to 35 Ill. Adm. Code 218.207(b)(2), the system used to control VOM from the coating line is demonstrated to have an overall efficiency sufficient to limit VOM emissions to no more than what is allowed under 35 Ill. Adm. Code 218.204.

d. Pursuant to 35 Ill. Adm. Code 218.207(c), no owner or operator of a coating line subject to only one of the emission limitations from among 35 Ill. Adm. Code 218.204(a)(1), (a)(4), (c), (d), (e), (f), or (i) of and equipped with a capture system and control device shall operate the subject coating line unless the requirements in 35 Ill. Adm. Code 218.207(b)(1) or (b)(2) are met.

e. 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, or 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.

5. This permit is issued based on the source not being subject to the NESHAP for Paper And Other Web Coating, 40 CFR 63 Subpart JJJJ. This is a result of the federally enforceable production and operating limitations, which restrict the 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.

6. 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).

7a. The regenerative thermal oxidizer shall be in operation at all times when the associated coating lines are in operation and emitting air contaminants.

b. The regenerative thermal oxidizer combustion chamber shall be preheated to the temperature at which compliance was demonstrated during the most recent performance test or to at least the manufacturer’s recommended temperature of 1,400°F in the absence of a compliance test. This temperature shall be maintained during operation of the associated coating lines.

c. The Permittee shall, in accordance with the manufacturer(s) and/or vendor(s) recommendations, perform periodic maintenance on the regenerative thermal oxidizer such that the regenerative thermal oxidizer be kept in proper working condition and not cause a violation of the Illinois Environmental Protection Act or regulations promulgated therein.

d. The regenerative thermal oxidizer shall only be operated with natural gas as the fuel. The use of any other fuel in the regenerative thermal oxidizer requires that the Permittee first obtain a construction permit from the Illinois EPA and then perform stack testing to verify compliance with all applicable requirements.

8a. The source-wide total combined emissions and material usage (including VOM and HAP emissions associated with clean-up operations) from the all coating lines (consisting of Faustel, Spreader, ST-COATER and their associated flash-off areas, drying areas, capture and controls) shall not exceed the following limits:

i. Usage of materials containing VOM and VOM emissions:

VOM Usage		VOM Emissions	
(Tons/Month)	(Tons/Year)	(Tons/Month)	(Tons/Year)
47.5	570	1.9	22.8

ii. Usage of materials containing a combination of HAPs and emissions of combined HAPs:

Combined HAP Usage		Combined HAP Emissions	
(Tons/Month)	(Tons/Year)	(Tons/Month)	(Tons/Year)
47.5	562	1.9	22.5

iii. Usage of materials containing any single HAP and emissions of any single HAP:

Single HAP[1] Usage		Single HAP[1] Emissions	
(Tons/Month)	(Tons/Year)	(Tons/Month)	(Tons/Year)
20.5	225	0.82	9.0

[1] Single HAP means any individual HAP listed in Section 112(b) of the Clean Air Act as amended in 1990 (e.g., toluene, hexane, vinyl acetate, formaldehyde, etc.).

These limits are based on maximum monthly usage rates and 4% of the VOM and HAPs used being emitted (96% overall control) for the controlled coaters. The emissions of VOM shall be determined from the following equation:

$$\sum (P_i \times d_i \times C_i) \times (1 - C_{ef}) + \sum (S_j \times d_j \times C_j)$$

Where:

P_i = Paint Usage (gallons);

d_i = Density of paint (lbs/gallon);

C_i = VOM Content of the Paint (% by weight);

C_{ef} = Overall Control Efficiency;

S_j = Clean-Up Solvent Usage (gallons);

d_j = Density of clean-up solvent (lbs/gallon); and

C_j = VOM Content of the Solvent (% by weight).

b. Emissions and operation of the RTO shall not exceed the following limits:

Material	(mmBtu/Hr)	(Hours/Yr)	Pollutant	Emission Factor (Lb/mmscf)	Emissions (Lb/Hr)	Emissions (Ton/Yr)
Natural Gas	6.0	8,760	CO	84.0	0.50	2.21
			NO_x	100.0	0.60	2.63
			PM	7.6	0.05	0.20
			SO_2	0.6	0.01	0.02
			VOM	5.5	0.03	0.14

These limits are based on the maximum firing rate and standard emission factors (Tables 1.4-1 and 1.4-2, AP-42, Fifth Edition, Volume I, Supplement D, July 1998).

c. This permit is issued based on negligible emissions of volatile organic material from coating stirring. For this purpose, emissions from this emission unit shall not exceed nominal emission rates of 0.1 pounds/hour and 0.44 tons/year.

d. 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 35 Ill. Adm. Code 201.282, every emission source or air pollution control equipment shall be subject to the following testing requirements for the purpose of determining the nature and quantities of specified air contaminant emissions and for the purpose of determining ground level and ambient air concentrations of such air contaminants:

i. Testing by Owner or Operator. The Illinois EPA may require the owner or operator of the emission source or air pollution control equipment to conduct such tests in accordance with procedures adopted by the Illinois EPA, at such reasonable times as may be specified by the Illinois EPA and at the expense of the owner or operator of the emission source or air pollution control equipment. The Illinois EPA may adopt procedures detailing methods of testing and formats for reporting results of testing. Such procedures and revisions thereto, shall not become effective until filed with the Secretary of State, as required by the APA Act. All such tests shall be made by or under the direction of a person qualified by training and/or experience in the field of air

pollution testing. The Illinois EPA shall have the right to observe all aspects of such tests.

ii. Testing by the Illinois EPA. The Illinois EPA shall have the right to conduct such tests at any time at its own expense. Upon request of the Illinois EPA, the owner or operator of the emission source or air pollution control equipment shall provide, without charge to the Illinois EPA, necessary holes in stacks or ducts and other safe and proper testing facilities, including scaffolding, but excluding instruments and sensing devices, as may be necessary.

b. Testing required by Conditions 10 and 11 shall be performed upon a written request from the Illinois EPA by a qualified independent testing service.

10. Pursuant to 35 Ill. Adm. Code 212.110(c), 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.

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 35 Ill. Adm. Code 218.105(d)(2)(A)(i), an owner or operator that uses an afterburner or carbon adsorber to comply with any Section of 35 Ill. Adm. Code Part 218 shall use Illinois EPA and USEPA approved continuous monitoring equipment which is installed, calibrated, maintained, and operated according to vendor specifications at all times the control device is in use except as provided in 35 Ill. Adm. Code 218.105(d)(3). The continuous monitoring equipment must monitor for each afterburner which does not have a catalyst bed, the combustion chamber temperature of each afterburner.

b. Pursuant to 35 Ill. Adm. Code 218.105(d)(2)(B), an owner or operator must install, calibrate, operate and maintain, in accordance with manufacturer’s specifications, a continuous recorder on the temperature monitoring device, such as a strip chart, recorder or computer, having an accuracy of ± 1 percent of the temperature measured in degrees Celsius or ± 0.5°C, whichever is greater.

13. 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.

14. 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.

15a. Pursuant to 35 Ill. Adm. Code 218.211(c)(2), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.204 other than 35 Ill. Adm. Code 218.204(a)(2) or (a)(3) and complying by means of 35 Ill. Adm. Code 218.204 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.

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 each day on each coating line.

b. Pursuant to 35 Ill. Adm. Code 218.211(e)(2), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.207 and complying by means of 35 Ill. Adm. Code 218.207(c), (d), (e), (f), (g) or (h) 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 weight of VOM per volume of coating solids as applied each day on each coating line, if complying pursuant to 35 Ill. Adm. Code 218.207(b)(2).

ii. Control device monitoring data.

iii. A log of operating time for the capture system, control device, monitoring equipment and the associated coating line.

iv. A maintenance log for the capture system, control device and monitoring equipment detailing all routine and non-routine maintenance performed including dates and duration of any outages.

16a. The Permittee shall maintain records of the following items so as to demonstrate compliance with the conditions of this permit:

i. Records addressing use of good operating practices for the regenerative thermal oxidizer:

A. Records for periodic inspection of the regenerative thermal oxidizer with date, individual performing the inspection, and nature of inspection; and

B. Records for prompt repair of defects, with identification and description of defect, effect on emissions, date identified, date repaired, and nature of repair.

ii. A list giving the name and identification number of each coating as applied, solvent, clean-up solvent, and any other material used containing VOM;

iii. VOM content in weight percent for each coating, clean-up solvent and other materials used containing VOM;

iv. A list of HAPs present and the weight percent content of each HAP for each coating, clean-up solvent and other materials used containing VOM;

v. Density in pounds per gallon of each material used containing VOM;

vi. Actual usage rate of each material containing VOM used (tons/month and tons/year);

vii. Actual usage rate of each material containing HAP used (lbs/day, tons/month and tons/year); and

viii. Monthly and annual emissions of CO, NO_x, PM, SO_2, VOM, and HAPs from the source 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.

17. 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.

18a. 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 of 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.

b. Pursuant to 35 Ill. Adm. Code 218.211(e)(3), any owner or operator of a coating line subject to the limitations of 35 Ill. Adm. Code 218.207 and complying by means of 35 Ill. Adm. Code 218.207(c), (d), (e), (f), (g) or (h) shall notify the Illinois EPA in the following instances:

i. Any record showing violation of 35 Ill. Adm. Code 218.207 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 35 Ill. Adm. Code 218 Subpart F from 35 Ill. Adm. Code 218.207 to 35 Ill. Adm. Code 218.204 or 35 Ill. Adm. Code 218.205, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.207(c)(1) or (d)(1), respectively. Upon changing the method of compliance with 35 Ill. Adm. Code 218 Subpart F from 35 Ill. Adm. Code 218.207 to 35 Ill. Adm. Code 218.204 or 35 Ill. Adm. Code 218.205, the owner or operator shall comply with all requirements of 35 Ill. Adm. Code 218.207(c) or (d), respectively.

19a. 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 exceedance or deviation and efforts to reduce emissions and future occurrences.

b. 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 permit, please call David Hulskotter at 217/782-2113.

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

Date Signed: _____

ECB:DWH:psj

cc: Illinois EPA, FOS Region 1
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the coating plant 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 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 any combination of such 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.

	E M I S S I O N S (Tons/Year)						
Emission Unit	CO	NO_x	PM	SO_2	VOM	Single HAP	Total HAPs
RTO	2.21	2.63	0.20	0.02	0.14		
Coating Lines					22.80		
Coating Stirring					0.44		
Totals	2.21	2.63	0.20	0.02	23.38	9.00	22.50

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