

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT
REVISED - NSPS SOURCE

PERMITTEE

Weyerhaeuser Company
Attn: Rick Wendorff, Aurora/Chicago General Manager
4160 Campus Drive
Aurora, Illinois 60504

<u>Application No.:</u> 93100112	<u>I.D. No.:</u> 043407AAN
<u>Applicant's Designation:</u> E1-10, 16	<u>Date Received:</u> March 29, 2006
<u>Subject:</u> Paper Box Manufacturing	
<u>Date Issued:</u> June 27, 2006	<u>Expiration Date:</u> May 6, 2007
<u>Location:</u> 4160 Campus Drive, Aurora	

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) 16.74 mmBtu/hour Natural Gas-Fired Boiler
Five (5) Natural Gas-Fired Heaters (9.84 mmBtu/hour Total)
Three (3) Gluers
Four (4) Flexographic Printers
One (1) Corrugator and Trimmer with Filter
One (1) Pneumatic Starch Transfer Operation
One (1) Pneumatic Starch Unloading Operation with Vent Filter
Plant-Wide Cleanup Operations
One (1) Flexographic Printing/Gluing/Cutting Press

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 to limit the emissions of air pollutants from the source to less than major source thresholds (i.e., 25 tons per year of volatile organic materials (VOM)). As a result the source is excluded from the requirement 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.
- 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. This permit is issued based upon the flexographic printing and coating operations not being subject to the VOM control requirements of 35 Ill. Adm. Code 218.401: Flexographic and Rotogravure Printing. This determination is based on the maximum theoretical emission and potential to emit of VOM being limited to less than the thresholds for applicability of 25 tons per year as specified in Section 218.402.

b. The flexographic printing and gluing processes are subject to limitations of 35 IAC 218.204(c) for paper coating, which provides that:

i. The Permittee shall not apply at any time any coating in which the VOM content exceeds the following emission limitations. The following emission limitation is 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:

<u>kg/l</u>	<u>lb/gal</u>
0.28	2.3

ii. 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 composites.

3a. The boiler is subject to a New Source Performance Standard (NSPS) for small Industrial, Commercial, and Industrial Steam Generating Units, 40 CFR 60, Subparts A and Dc. The Illinois EPA is administering NSPS in Illinois on behalf of the United States EPA under a delegation agreement.

b. At all times, the Permittee shall maintain and operate the boiler, including associated air pollution control equipment, in a manner consistent with good air pollution control practice for minimizing emissions, as required by the NSPS, 40 CFR 60.11(d).

c. The Permittee shall fulfill applicable notification and recordkeeping requirements of the NSPS, 40 CFR 60.7 and 60.48c.

4. This permit is issued based on the corrugator not being subject to the control requirements of 35 Ill. Adm. Code 218 Subpart PP.

5a. Emissions and operation of the boiler and heaters shall not exceed the following limits:

Natural Gas Usage	
<u>(mmscf/Month)</u>	<u>(mmscf/Year)</u>
23	230

<u>Pollutant</u>	Emission Factor		Emissions	
	<u>(Lb/mmscf)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Mo)</u>
Nitrogen Oxides (NO _x)	100	1.2	11.5	11.5
Carbon Monoxide (CO)	84	1.0	9.7	9.7
Particulate Matter (PM)	7.6	0.1	0.9	0.9
Volatile Organic Compound (VOC)	5.5	0.1	0.7	0.7

These limits are based on maximum firing rate (26.58 mmBtu/hour total), maximum operating hours (8,760 hours/year), and standard AP-42 emission

factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

- b. Operation and emissions of the coating and printing process (combined) shall not exceed the following limits:

<u>Materials</u>	<u>VOM Emissions</u>	
	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
Adhesive	0.3	3.6
Ink	0.72	<u>8.5</u>
Total		12.1

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

- c. The VOM emissions from the printing/gluing operations shall be determined from the following equation on a monthly basis:

$$E = \Sigma (I_i \times C_i) / 2,000,$$

where:

- E - VOM emissions (tons/month);
- I_i - Ink, glue and other VOM-containing materials usage (gallons/month);
- C_i - VOM content of the ink, glue and other VOM-containing materials (lbs/gallon);

- d. Emissions and operation of the corrugator shall not exceed the following limits:

<u>Corrugated Paper Production</u>	<u>(mmsf/Mo)</u>	<u>(mmsf/Yr)</u>	<u>Emission Factor</u>	<u>VOM Emissions</u>	
				<u>(Lbs/mmsf)</u>	<u>(Tons/Mo)</u>
250	2,500	7.56	1.0	9.45	

These limits are based on maximum production. Compliance with annual limits shall be determined from a running total of 12 months of data.

- e. Emissions and operation of equipment shall not exceed the following limits:

<u>Item of Equipment</u>	<u>Operating Hours</u>	<u>Processing Rate</u>	<u>PM Emissions</u>	
			<u>(Hours/Year)</u>	<u>(Tons/Year)</u>
Starch Transfer	1,092	4.0	5.35	3.0
Starch Unloading	200	----	0.55	0.1
Corrugator & Trimmer	8,736	17.0	2.50	11.0

These limits are based on the maximum operating hours and processing rates. Compliance with annual limits shall be determined from a running total of 12 months of data.

- f. Emissions and operation of plant-wide cleanup operations shall not exceed the following limits:

<u>Isopropyl Alcohol Usage</u>		<u>VOM Emissions</u>	
<u>(Tons/Month)</u>	<u>(Tons/Year)</u>	<u>(Tons/Month)</u>	<u>(Tons/Year)</u>
0.1	0.5	0.1	0.5

These limits are based on maximum isopropyl alcohol usage and 100% VOM content. Compliance with annual limits shall be determined from a running total of 12 months of data.

- 6. The Permittee shall maintain monthly records of the following items:
 - a. Natural gas usage (mmscf/month, mmscf/year);
 - b. Amount of usage of inks, glues, isopropyl alcohol and other VOM or HAP-containing materials used (tons/month, tons/year);
 - c. VOM and HAP content of materials in item (b) (weight %);
 - d. Corrugated paper production (mmsf/month, mmsf/year); and
 - e. Monthly and annual NO_x, CO, PM, VOM, and HAP emissions with supporting calculations (tons/month, tons/year).
- 7a. Pursuant to 35 Ill. Adm. Code 218.211(c) (2), on and after the initial start-up date, 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; and
 - ii. The weight of VOM per volume of each coating (minus water and any compounds which are specifically exempted from the definition of VOM) as applied each day on each coating line.
- b. Pursuant to 35 Ill. Adm. Code 218.404(b) (2), the owner or operator of a printing line which is exempted from the limitations of 35 Ill. Adm. Code 218.401 because of the criteria in 35 Ill. Adm. Code 218.402 shall collect and record all of the following information each year for each printing line and maintain the information at the source for a period of three years:

- i. The name and identification number of each coating and ink as applied on each printing line.
 - ii. The VOM content and the volume of each coating and ink as applied each year on each printing line.
8. 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.
7. 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.
8. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least five 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.

9. 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.
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

Please note that this permit has been revised to incorporate the operation of a Martin 924 flexographic printing/gluing/cutting press from Construction Permit 06010088 and the removal of the existing United two-color flexographic printer/die cutter that it replaced.

If you have any questions on this, please call Bruce Beazly at 217/782-2113.

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

DES:BDB:psj

cc: Region 1

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from paper box manufacturing 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 well below the levels, e.g., 25 tons per year of VOM, 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 Units</u>	<u>Emissions</u>				<u>HAPs</u>	
	<u>NO_x</u>	<u>CO</u>	<u>PM</u>	<u>VOM</u>	<u>Single</u>	<u>Total</u>
Natural Gas Usage	11.5	9.7	0.9	0.70		
Adhesive Usage				3.60		
Ink Usage				8.50		
Corrugated Paper Production				9.45		
Starch Transfer			3.0			
Starch Unloading			0.1			
Corrugator and Trimmer			11.0			
Plant-Wide Cleanup Operations				0.50		
Total	<u>11.5</u>	<u>9.7</u>	<u>15.0</u>	<u>22.75</u>	<u>< 10</u>	<u>< 25</u>

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