

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT
RENEWAL - NSPS SOURCE

PERMITTEE

Weyerhaeuser Company
Attn: Mr. James A. Spinozzi
4160 Campus Drive
Aurora, Illinois 60504

Application No.: 93100112
Applicant's Designation: E1-10, 16
Subject: Paper Box Manufacturing
Date Issued:
Location: 4160 Campus Drive, Aurora

I.D. No.: 089005AII
Date Received: October 17, 2001
Expiration Date:

This permit is hereby granted to the above-designated Permittee to OPERATE emission unit(s) and/or air pollution control equipment consisting of one 16.74 mmBtu/hr natural gas-fired boiler, 5 natural gas-fired heaters (9.84 mmBtu/hr total), 3 gluers, 5 flexographic printers, 1 corrugator and trimmer with filter, 1 pneumatic starch transfer operation, 1 pneumatic starch unloading operation with vent filter, and plant-wide cleanup operations 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. Emissions and operation of the boiler and heaters shall not exceed the following limits:

Natural Gas Usage	
<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>
23	230

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

These limits are based on maximum firing rate (26.58 mmBtu/hr total), maximum operating hours (8,760 hr/yr), and standard AP-42 emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

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

<u>Adhesive Usage</u>		<u>VOM Content</u>	<u>VOM Emissions</u>	
(Ton/Mo)	(Ton/Yr)	(Wt. %)	(Ton/Mo)	(Ton/Yr)
5	60	6	0.3	3.6

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

- c. Emissions and operation of the printers shall not exceed the following limits:

<u>Ink Usage</u>		<u>VOM Content</u>	<u>VOM Emissions</u>	
(Ton/Mo)	(Ton/Yr)	(Wt. %)	(Ton/Mo)	(Ton/Yr)
12	141.5	6	0.72	8.5

These limits are based on maximum ink usage and VOM content. Compliance with the ink VOM content limitation shall be based on the monthly weighted average for ink usage and VOM content. Compliance with annual limits shall be determined from a running total of 12 months of data.

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

<u>Corrugated Paper Production</u>		<u>Emission Factor</u>	<u>VOM Emissions</u>	
(mmsf/Mo)	(mmsf/Yr)	(Lb/mmsf)	(Ton/Mo)	(Ton/Yr)
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</u>	<u>Processing</u>	<u>PM Emissions</u>	
	<u>Hours</u>	<u>Rate</u>	<u>(Lb/Hr)</u>	<u>(Ton/Yr)</u>
	(Hours/Year)	(Ton/Hour)		
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:

Isopropyl Alcohol Usage		VOM Emissions	
(Ton/Mo)	(Ton/Yr)	(Ton/Mo)	(Ton/Yr)
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.

3. The Permittee shall maintain monthly records of the following items:
- a. Natural gas usage (mmscf/mo, mmscf/yr);
 - b. Adhesive usage and VOM content (ton/mo, ton/yr, % weight);
 - c. Ink usage and VOM content (ton/mo, ton/yr, % weight);
 - d. Corrugated paper production (mmsf/mo, mmsf/yr); and
 - e. Isopropyl alcohol usage (ton/mo, ton/yr).
- 4a. This 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.
5. This permit is issued based on the presses, corrugator, and gluers not being subject to the control requirements of 35 Ill. Adm. Code 218 Subparts H, TT, and PP, respectively.
6. 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. All records and logs required by this permit shall be retained at a readily accessible location at the source for at least three 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.

8. If there is an exceedance of 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. 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 violation and efforts to reduce emissions and future occurrences.
9. Two (2) copies of required reports and notifications concerning equipment operation or repairs, performance testing or a continuous monitoring system 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

10. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year:
 - a. VOM emissions (ton/mo, ton/yr).

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

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

DES:JDK:jar

cc: Illinois EPA, FOS Region 1
Illinois EPA, Compliance Section
Lotus Notes

Attachment A - Emission Summary

This attachment provides a summary of the maximum emissions from the 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.

- 1a. Emissions and operation of the boiler and heaters shall not exceed the following limits:

<u>Pollutant</u>	<u>Natural Gas Usage</u>		<u>Emissions</u>	
	<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
	23	230		
	<u>Emission Factor</u>			
	<u>(Lb/mmscf)</u>			
Nitrogen Oxides (NO _x)	100		1.2	11.5
Carbon Monoxide (CO)	84		1.0	9.7
Particulate Matter (PM)	7.6		0.1	0.9
Volatile Organic Compound (VOC)	5.5		0.1	0.7

These limits are based on maximum firing rate (26.58 mmBtu/hr total), maximum operating hours (8,760 hr/yr), and standard AP-42 emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

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

<u>Adhesive Usage</u>		<u>VOM Content</u>	<u>VOM Emissions</u>	
<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>(Wt. %)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
5	60	6	0.3	3.6

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

- c. Emissions and operation of the printers shall not exceed the following limits:

<u>Ink Usage</u>		<u>VOM Content</u>	<u>VOM Emissions</u>	
<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>(Wt. %)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</u>
12	141.5	6	0.72	8.5

These limits are based on maximum ink usage and VOM content. Compliance with the ink VOM content limitation shall be based on the monthly weighted average for ink usage and VOM content. Compliance with annual limits shall be determined from a running total of 12 months of data.

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

<u>Corrugated Paper Production</u>		<u>Emission Factor</u>	<u>VOM Emissions</u>	
<u>(mmsf/Mo)</u>	<u>(mmsf/Yr)</u>	<u>(Lb/mmsf)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</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</u>	<u>Processing</u>	<u>PM Emissions</u>	
	<u>Hours</u>	<u>Rate</u>	<u>(Lb/Hr)</u>	<u>(Ton/Yr)</u>
	<u>(Hours/Year)</u>	<u>(Ton/Hour)</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>(Ton/Mo)</u>	<u>(Ton/Yr)</u>	<u>(Ton/Mo)</u>	<u>(Ton/Yr)</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.

PROJECT SUMMARY

I. INTRODUCTION

Weyerhaeuser Company has submitted an application to renew their Federally Enforceable State Operating Permit (FESOP) which contains limitations on material usage and air emissions for their cardboard box manufacturing plant located at 4160 Campus Drive in Aurora. These limits prevent the site from being classified as a major source of air emissions, hence, making it unnecessary to obtain a federal permit under the Clean Air Act Permit Program (CAAPP). The FESOP limitations, which are enforceable both by the State of Illinois and the USEPA, are accompanied by recordkeeping and reporting requirements to ensure the site is operated as a non-major source.

II. SOURCE DESCRIPTION

Weyerhaeuser Company manufactures shipping container boxes made from paper strengthened with starch and corrugated to form cardboard. The cardboard is cut to size, folded, and glued. Labels are printed on the boxes with printing machines. A natural gas-fired boiler produces steam for the plant processes and small natural gas-fired units are used for space heating.

III. EMISSIONS

Emissions of volatile organic material (VOM) result primarily from operation of the corrugator, gluers, and printers. Small amounts of VOM are also generated by the boiler and space heaters. Emissions of nitrogen oxide (NO_x) and carbon monoxide (CO) are generated by the boiler and heaters as products of natural gas combustion. Small amounts of particulate matter (PM) are emitted as a result of handling the starch material and from cutting the paper and cardboard. The FESOP limits the potential annual emissions of VOM from this facility to levels below major source thresholds, classifying it as a non-major source.

IV. APPLICABLE EMISSION STANDARDS

All emission sources in Illinois must comply with the Illinois Pollution Control Board's emission standards for air pollution. The Board's emission standards represent the basic requirements for sources in Illinois. This plant readily complies with the Board standards for VOM as well as for NO_x, CO, and PM.

V. PROPOSED PERMIT

The conditions of the FESOP constitute limitations ensuring this plant will be operated as a non-major source. These conditions limit the amount of materials, including glue and ink, which may be used. These limitations are consistent with the historical operation and capacity of the plant. The permit conditions also establish appropriate compliance procedures, including recordkeeping and reporting requirements. The Weyerhaeuser Company must carry out these procedures on a continual basis to demonstrate their equipment is operating within the limitations established by the permit.

VI. REQUEST FOR COMMENTS

It is the Illinois EPA's determination that this source meets all applicable state and federal air pollution control requirements, subject to the conditions of the proposed renewal permit. The Illinois EPA, therefore, proposes to renew the federally enforceable limits for the above referenced equipment to the Weyerhaeuser Company.

Comments are requested on the proposed conditions of this permit renewal by the Illinois EPA. If substantial public interest is shown in this matter, the Illinois EPA will consider holding a public hearing in accordance with 35 Ill. Adm. Code Part 166.

JDK:93100112:jar