

217/782-2113

FEDERALLY ENFORCEABLE STATE OPERATING PERMIT - RENEWAL

PERMITTEE

E & D Web, Inc.
Attn: Mr. Christopher B. Love, CEO
4633 West 16th Street
Cicero, Illinois 60804

<u>Application No.:</u> 80110002	<u>I.D. No.:</u> 031051AAF
<u>Applicant's Designation:</u>	<u>Date Received:</u> September 12, 2000
<u>Subject:</u> Printing Plant	
<u>Date Issued:</u> April 17, 2001	<u>Expiration Date:</u> April 17, 2006
<u>Location:</u> 4633 West 16th Street, Cicero	

This permit is hereby granted to the above-designated Permittee to OPERATE emission source(s) and/or air pollution control equipment consisting of operation of six heatset web presses with dryers and one thermal oxidizer, two boilers, and one Hogger paper collection system as described in 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 emissions of air pollutants from the source to less than major source thresholds (i.e., 25 tons/year for volatile organic material (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 permit(s) issued for this location.
2. 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.
 3. Operation of the six heatset web presses shall comply with 35 Ill. Adm. Code 218.407 including the following:
 - a. The thermal oxidizer shall be operated to provide VOM emission

reduction of 90%, by weight, from the press dryer exhaust(s) pursuant to 35 Ill. Adm. Code 218.407(a)(1)(C).

- b. The total VOM content in the as-applied fountain solution shall not exceed 5%, by weight, and the as-applied fountain solution contains no alcohol pursuant to 35 Ill. Adm. Code 218.407(a)(1)(A).

- c. The thermal oxidizer is operated at all times when the printing line is in operation.
 - d. The VOM composite partial vapor pressure of as-used cleaning solution is less than 10 mmHg at 20EC (68EF) pursuant to 35 Ill. Adm. Code 218.407(a)(4)(B).
- 4a. The Permittee shall maintain records of the following items pursuant to 35 Ill. Adm. Code 218.411(b)(3):
- i. Thermal oxidizer monitoring data in accordance with 35 Ill. Adm. Code 218.410(c) or (d).
 - ii. A log of operating time for oxidizer, monitoring equipment, and the associated printing line.
 - iii. A maintenance log for the thermal oxidizer and monitoring equipment detailing all routine and non-routine maintenance performed, including dates and duration of any outages.
- b. The Permittee shall maintain all applicable records for fountain solution pursuant to 35 Ill. Adm. Code 218.411(c)(2) including:
- i. Name and identification of each batch of fountain solution prepared for use on one or more lithographic printing lines, the lithographic printing line(s) using such batch of fountain solution, and the applicable VOM content limitation for the batch.
- c. The Permittee shall maintain all applicable records for cleaning solution pursuant to 35 Ill. Adm. Code 218.411(d)(2) including:
- i. Name and identification of each cleaning solution.
 - ii. Date and time of preparation, and each subsequent modification, of the batch.
 - iii. Molecular weight, density and VOM composite partial vapor pressure of each cleaning solvent.
 - iv. The total amount of each cleaning solvent used to prepare the as-used cleaning solution.
 - v. The VOM composite partial vapor pressure of each as-used cleaning solutions.
- d. These records shall be retained for three years and shall be available for inspection and copying by the Illinois EPA.
5. Any records showing violation of 35 Ill. Adm. Code 218.407, shall be reported by sending copy of such record to the Illinois EPA within 30 days following the occurrence of violation, in accordance with 35 Ill. Adm. Code 218.411(b), (c), and (d).

- 6a. The thermal oxidizer combustion chambers shall be preheated to the manufacturer's recommended temperature but not lower than 1380EF, before the printing process is begun; this temperature shall be maintained during the printing process.

- b. The thermal oxidizer shall be equipped with continuous temperature indicators and strip chart recorders for the afterburner combustion chamber temperatures.

- 7. Emissions and operation of the six heatset web presses shall not exceed the following limits:

<u>Material</u>	<u>Material Usage</u>		<u>VOM</u>	<u>VOM Emissions</u>	
	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>	<u>Content</u> <u>(Wt. %)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
Ink	47.0	491.9	38	2.2	18.7
Gold Scratchoff	2.0	20.2	42	0.1	0.9
Silver Scratchoff	2.0	20.2	46	0.1	0.9
Fountain Solution	0.3	3.1	8.2	0.1	0.3
Cleaning Solvent	0.1	0.6	94.1	0.1	0.6

These limits are based on 90% destruction efficiency by thermal oxidizer for ink and scratchoff materials, maximum material usage, and VOM content as indicated in the permit application and shown above. Compliance with annual limits shall be determined from a running total of 12 months of data.

- 8. Emissions and operation of the printing ovens, afterburners and other fuel combustion sources shall not exceed the following limits:

<u>Natural Gas Consumption</u>	
<u>(mmscf/Mo)</u>	<u>(mmscf/Yr)</u>
28.5	285

<u>Pollutant</u>	<u>Emission Factor</u>	<u>Emissions</u>	
	<u>(Lb/mmscf)</u>	<u>(Tons/Mo)</u>	<u>(Tons/Yr)</u>
NO _x	100	1.5	14.3
CO	84	1.2	12.0
PM	7.6	0.1	1.1
VOM	5.5	0.1	0.8

These limits are based on maximum gas consumption and standard AP-42 emission factors. Compliance with annual limits shall be determined from a running total of 12 months of data.

- 9a. Within 90 days of a written request from the Illinois EPA the Permittee shall submit data on the VOM contents of the representative materials applied on the printing presses determined by laboratory analysis in accordance with 35 Ill. Adm. Code Section 218.105.

- b. The submitted data shall include: the VOM content of the materials, a justification of why these are representative, a description of the

sampling procedures, and documentation for the analysis.

- c. The Illinois EPA may provide additional time for the performance of this testing upon request from the Permittee which shows that it is not feasible to perform representative testing within 90 days.

10. Within 90 days of a written request from the Illinois EPA the volatile organic material emissions of the thermal oxidizer controlling the 5 heatset offset printing presses shall be measured by an approved testing service, during conditions which are representative of maximum emissions.

11. The following methods and procedures shall be used for testing of emissions, unless another method is approved by the Illinois EPA: Refer to 40 CFR 60, Appendix A for USEPA test methods.

Location of Sample Points	USEPA Method 1
Gas Flow and Velocity	USEPA Method 2
Volatile Organic Material	USEPA Method 25

12. These tests shall be performed to show that the thermal oxidizer system reduces VOM emissions from the printing dryers by 90%.

13. The Illinois EPA shall be notified in writing a minimum of thirty (30) days prior to the expected date of these tests and further notified a minimum of five (5) working days prior to the test of the exact date, time and place of these tests, to enable the Illinois EPA to witness these tests.

14a. The Permittee shall maintain records of the following items:

- i. Monthly and annual usage of all materials listed in Condition 7.
- ii. VOM contents of the materials used.
- iii. VOM emissions per month and per year.
- iv. Control device monitoring equipment.
- v. A log of operating time for the control device, monitoring equipment and the associated printing lines.
- vi. Natural gas usage (mmscf/month and mmscf/year).

b. 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 and 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 request for records during the course of a source inspection.

15. If there is an exceedance of the requirements of this permit as determined by this permit, the Permittee shall submit a report to the

Illinois EPA's Compliance Section within 30 days after the exceedance. The report shall include emission 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. This report should be sent to:

Illinois Environmental Protection Agency
Division of Air Pollution Control
Compliance Section (#40)
P.O. Box 19276
Springfield, Illinois 62794-9276

16. Copies of Final Report(s) for these tests shall be submitted to the Illinois EPA within fourteen (14) days after the test results are compiled and finalized.
17. The Final Report shall include as a minimum:
 - a. A summary of results.
 - b. General information.
 - c. Description of test method(s), including description of sampling points, sampling train, analysis equipment, and test schedule.
 - d. Detailed description of test conditions, including:
 - i. Process information, i.e., mode(s) of operation, process rate, e.g. fuel or raw material consumption,
 - ii. Control equipment information, i.e., equipment condition and operating parameters during testing, and
 - iii. A discussion of any preparatory actions taken, i.e., inspections, maintenance and repair.
 - e. Data and calculations, including copies of all raw data sheets and records of laboratory analyses, sample calculations, and data on equipment calibration.
 - f. An explanation of any discrepancies among individual tests or anomalous data.
 - g. The results of all quality control evaluation, including a copy of all quality control data.
18. 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

19. The Permittee shall submit the following additional information with the Annual Emissions Report, due May 1st of each year: annual ink usage, fountain solution usage, cleaning solution usage and other VOM containing material usages, also annual natural gas usage from the prior year. If there have been no exceedances during the prior calendar year the Annual Emissions Report shall include a statement of that effect.

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
USEPA

Attachment A - Emissions Summary

This attachment provides a summary of the maximum emissions from the presses and fuel combustion sources 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.

1. Emissions and operation of the six heatset web presses shall not exceed the following limits:

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