

217/782-2113

CONSTRUCTION PERMIT

PERMITTEE

R. R. Donnelley & Sons Company
Attn: Stephen G. Seamans
801 North Union Street
Dwight, Illinois 60420-7032

Application No.: 03050052

I.D. No.: 105025AAF

Applicant's Designation:

Date Received: May 16, 2003

Subject: Press DM-915

Date Issued: October 6, 2003

Location: 801 North Union Street, Dwight

Permit is hereby granted to the above-designated Permittee to CONSTRUCT emission source(s) and/or air pollution control equipment consisting of a new non-heatset web offset lithographic press (DM-915) as described in the above-referenced application. This Permit is subject to standard conditions attached hereto and the following special condition(s):

1.0 UNIT SPECIFIC CONDITIONS

1.1 Units Non-heatset Offset Lithographic Printing Press

1.1.1 Description

A non-heatset offset lithographic printing press is being used to print telephone directories, and other material.

1.1.2 List of Emission Equipment and Pollution Control Equipment

Emission Units	Description	Emission Control Equipment
DM-915	Non-heatset Offset Lithographic Printing Press	None

1.1.3 Applicable Regulations

- a. An affected press for the purpose of these unit specific conditions is the non-heatset offset lithographic printing press as described in Condition 1.1.1 and 1.1.2.
- b. The affected press is subject to 35 IAC 215.301, which states that no person shall cause or allow the discharge of more than 3.6 Kg/hr (8 lbs/hr) of organic material into the atmosphere from any emission unit. If no odor nuisance exists this limitation shall apply only to photochemically reactive material [35 IAC 215.301].

1.1.4 Non-Applicability of Regulations

- a. This permit is issued based on The affected press not subject to 35 IAC 215.204(c), Coating Operations/Paper Coating, as the paper coating limitation does not apply to equipment used for both printing and paper coating if coating operations comply with requirements of 35 IAC 215.401. [35 IAC 215.204(c)].
- b. This permit is issued based on the affected press not representing a major modification subject to Section 112(g) of the Clean Air Act because the press is emitting less than 10 tons of hazardous air pollutants (HAPs) for a single HAP and much less than 25 tons for the combination of HAP's.

1.1.5 Operational and Work Practices

- a. At all times, the Permittee shall to the extent practicable, maintain and operate the affected press in a manner consistent with good air pollution control practice for minimizing emissions.
- b. Total ink usage in the affected press shall not exceed 138 tons/month and 830.50 tons/year.
- c. Cleanup and other Miscellaneous Solvent usage on the affected press, not including solvent contained in inks, shall not exceed 3.0 tons/month and 15.2 tons/year.

1.1.6 Emission Limitations

- a. Emissions of volatile organic material (VOM) from the affected press shall not exceed 5.0 tons per month and 26.65 tons per year.
- b. Emissions of HAPs from the affected press shall not exceed 3 tons/month and 9.02 tons/year for a single HAP and 4 tons/month and 22 tons/year for the combination of HAPs.
- c. Compliance with annual limits 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).

1.1.7 Testing Requirements

Upon request by the Illinois EPA, the VOM content of printing inks, fountain solution and coatings shall be determined by Method 24, 40 CFR 60, Appendix A, incorporated by reference in Section 215.105 [35 IAC 215.409].

1.1.8 Monitoring Requirements

None

1.1.9 Recordkeeping Requirements

The Permittee shall collect and record the following information for the affected press:

- a. Usage of ink, fountain solution, coating and blanket wash for the non-heatset web offset printing lines in tons/month and tons/year.
- b. The VOM and HAP content (VOM and HAP weight %) of the ink, fountain solution and cleaning solution used with basis, accompanied by a copy of the supporting information, e.g., supplier data sheet or laboratory analysis report.
- c. VOM and HAP emissions per month and per year in pounds or tons, with all supporting calculation and documentation.

1.1.10 Reporting Requirements

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 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.

1.1.11 Operational Flexibility

None

1.1.12 Compliance Procedures

Compliance with emission limits shall be determined using the emission factors and formulas listed below:

Ink VOM Emissions (E_I):

$$E_I = C_I(1-R_I)$$

Fountain Solution VOM Emissions (E_F):

$$E_F = C_F[1-(K)(J_F)]$$

Automatic Blanket Wash VOM Emissions (E_A):

$$E_A = C_A[1-(K)(J_A)]$$

Manual Blanket Wash VOM Emissions (E_M)

$$E_M = C_M(1-R_M)$$

Total VOM Emissions (E_T):

$$E_T = E_I + E_F + E_A + E_M$$

Where:

C_I = Ink VOM consumption (tons)

C_F = Fountain solution VOM consumption (tons)

C_A = Automatic blanket wash VOM consumption (tons)

C_M = Manual blanket wash VOM consumption (tons)

R_M = Retention factor for manual blanket wash
= 50%, for manual blanket wash with a VOM composite partial vapor pressure less than 10 mmHg at 20°C and the used cleaning towels are kept in closed containers.

= 0% for other manual blanket wash

R_I = Percent of ink VOM retained in printed product
(non-heatset = 95%)

K = Control efficiency of afterburner (non-heatset = 0%)

J_I = Capture efficiency of dryer and control system for ink VOM (non-heatset = 0%)

J_F = Capture efficiency of dryer and control system for fountain solution (non-heatset = 0%)

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J_A = Capture efficiency of dryer and control system
for automatic blanket wash VOM (non-heatset =
0%

It should be noted that the Permittee is allowed to operate under this construction permit until the next reopening of the CAAPP permit.

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

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

DES:RNG:psj

cc: Region 3