

COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
SOUTHCENTRAL REGION - FIELD OPERATIONS  
AIR QUALITY CONTROL PROGRAM

OPERATING PERMIT

In accordance with provisions of the Air Pollution Control Act, the Act of January 8, 1960, P.L. 2119, as amended, and after due consideration of an application received under Chapter 127 of the rules and regulations of the Department of Environmental Protection, the Department hereby issues this permit for the operation of the air contamination source described below.

Permit No: 36-2026 Source & Air  
Cleaning Device: Printing Facility

Owner: R. R. Donnelley & Sons Company (See Attached)

Address: 1375 Harrisburg Pike  
Lancaster, PA 17601

Attention: Mr. John Hallgren Location: Lancaster West Plant  
Sr. Vice President, Division Director Lancaster City  
Lancaster County

This permit is subject to the following conditions:

Ozone

1. That the source and any associated air cleaning devices are to be:
  - a. operated in such a manner as not to cause air pollution;
  - b. in compliance with the specifications and conditions of the Reasonably Available Control Technology (RACT) plan;
  - c. operated and maintained in a manner consistent with good operating and maintenance practices.
2. This permit is valid only for the specific equipment, location and owner named above.
3. This operating permit is valid for a limited time only and may be renewed before its expiration. Requests for an operating permit renewal must be in writing and must be accompanied by a fee in the amount of \$600 payable to the "Commonwealth of Pennsylvania - Clean Air Fund." The request should be made on the attached Interim Application for Renewal of a Permit to Operate form and must be received by the Department along with a completed Compliance History form (attached) no later than JAN 1 2000.
4. See attached.

EPA, REGION III

Failure to comply with the conditions placed on this permit is a violation of Section 127.444. Violation of this or any other provision of Article III of the rules and regulations of the Department of Environmental Protection will result in suspension or revocation of this permit and/or prosecution under Section 9 of the Air Pollution Control Act.

Issued: JUL 14 1995

Expires: June 30, 2000

*John E. ...*  
Program Manager

PERMIT NO. 36-2026

R. R. DONNELLEY & SONS COMPANYSource, Continued

- A. The heatset web offset lithographic printing presses and control equipment includes the following:

<u>Source</u>	<u>Manufacturer</u>
1. Eight-Unit Double Web Press LCM-681 and Two Dryers	Harris (M-1000B) TEC Systems (C-3800)
2. Eight-Unit Double Web Press LCM-682 and Two Dryers	Harris (M-1000B) TEC Systems (C-3800)
3. Eight-Unit Double Web Press LCM-683 and Two Dryers	Harris (M-1000B) TEC Systems (C-3800)
4. Six-Unit Single Web Press LCM-684 and One Dryer	Harris (M-1000B) TEC Systems (C-3800)
5. Eight-Unit Double Web Press LCM-685 and Two Dryers	Harris (M-1000B) TEC Systems (P390)

The above equipment is controlled by two thermal incinerators (Katec, Inc. and Thermo Electron).

- B. The non-heatset web offset lithographic printing presses include the following:

1. Four-Unit Double Web Press LDM-671	Harris (N-90000)
2. Two-Unit Double Web Press LDM-676	K & B (Commander)
3. Eight-Unit Double Web Press LDM-677	Harris (N-90000)
4. Four-Unit Double Web Press LDM-678	Harris (N-90000)
5. Four-Unit Double Web Press LDM-679	Harris (N-90000)

- C. The non-heatset web letter presses include the following:

1. Two-Unit Double Web Press LDM-674	Wood-Hoe
2. Two-Unit Double Web Press LDM-675	Wood-Hoe

- D. Two Industrial Steam Boilers
- |  |                             |
|--|-----------------------------|
|  | Cleaver-Brooks (CB-700-350) |
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R. R. DONNELLEY & SOMS COMPANYConditions, Continued

4. This operating permit consolidates Operating Permit Nos. 36-302-160 and 36-320-014B. Sources and any associated air cleaning devices, for the above permits, are to be in compliance with the specifications and conditions of the applicable plan approvals issued.
5. The company shall maintain records, at the facility, including purchase orders and/or invoices of solutions containing VOCs ~~and Hazardous Air Pollutants (HAPs)~~ used in the facility and documentation of the VOC content and HAPs, type and content, in the materials obtained through EPA approved test methods or procedures.
6. The company shall comply with the applicable recordkeeping and reporting requirements addressed in 25 Pa. Code, Chapter 129.95.
7. Records shall be maintained for a period of five (5) years at the facility and made available to the Department when requested.
8. Emission statements addressed in §135.21 shall be calculated on a month by month basis.
9. The following data shall be collected and recorded at least on a monthly basis and included in annual reports that are to be submitted to the Department on or before March 1 of each year:
  - a. Press Run Time (hours or impressions for each press)
  - b. Materials Containing VOCs ~~and HAPs~~ (for each source)
    - (1) Manufacturer
    - (2) Product Number and Type
    - (3) Usage (by weight and volume)
    - (4) Density (s.g. or lb/gal)
    - (5) VOC Content (% by weight) as applied
    - (6) Vapor Pressure (mm Hg)
    - (7) Hazardous Air Pollutants (type and % by weight)

The above information shall be submitted in a report format and in such a manner that further calculations are not required. Submitting only documents such as Material Safety Data Sheets (MSDSs) to satisfy the requirements of b. (1) through (7) is not acceptable.
10. For VOC emission calculation purposes, the total quantities of VOCs used shall be determined from the actual VOCs in each material and the quantities of each of those materials used rather than using overall averages.

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R. R. DONNELLEY & SONS COMPANYConditions, Continued

11. The company shall maintain, at the facility, supporting documentation including supporting calculations, emission estimation factors and assumptions with supporting documentation, and any other information required for determining compliance and make this information available to the Department when requested.
12. The destruction removal efficiency of the thermal oxidizers (Katec, Inc. and Thermo Electron) shall be at least 90% for VOCs as demonstrated through Department approved testing procedures in accordance with 25 Pa. Code, Chapter 139.

The following parameters shall be used to estimate VOC emissions from the listed sources:

- a. Printing Ink - 80% capture - 20% retained in the substrate.
  - b. Automatic Blanket Wash - 40% capture - 60% fugitive emissions.
  - c. Fountain Solution - 70% capture - 30% fugitive emissions.
  - d. Dryers - 100% capture efficiency - 100% ducted to the thermal oxidizers.
13. The temperature of the combustion chamber on the thermal oxidizer shall be maintained at least at 1,375°F when controlling VOCs from the press heatset dryers when presses are operating.
  14. The company shall collect and record information necessary for determining compliance with the requirements of Condition 13 at least once every shift while presses are operating.
  15. The weighted average VOC content of all heatset inks used for the heatset lithographic printing process shall not exceed 45% by weight.
  16. The weighted average VOC content of all non-heatset inks used for the non-heatset lithographic printing process shall not exceed 25% by weight.
  17. The fountain solution VOC content shall not exceed 3% by weight as applied.
  18. The cleaning solutions used for both automatic and manual cleaning shall have a VOC composite partial vapor pressure of less than or equal to 10 mm Hg at 20°C or containing less than 30% by weight VOC. The company shall limit the use of higher vapor pressure cleaning solutions to less than 5% by weight of the total manual cleaning solutions used.
  19. The company shall collect and record information necessary to verify compliance with the requirements of Conditions 15, 16, 17, and 18. The records shall be kept in a manner which allows verification of compliance without additional calculations.

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R. R. DONNELLEY & SONS COMPANY

Conditions, Continued

20. The company shall keep all containers containing VOC's ~~and HAP's~~ tightly closed when not in use. This includes containers containing cleanup solvents and used liquids containing VOC's ~~and HAP's~~. Solvent laden wipes shall be kept in closed containers when not in use.
21. If the company wants credit for VOCs from cleanup solvents that are retained in wipes and sent off site, or for other materials containing VOCs as liquid wastes, the company will need to submit a protocol, for Department approval, including the testing and recordkeeping procedures.
22. The expiration date shown on this RACT Operating Permit is for State purposes. For Federal Enforcement purposes this operating permit shall remain in effect as part of the State Implementation Plan (SIP) until replaced and approved by the U.S. Environmental Protection Agency (EPA). The operating permit shall become enforceable by EPA upon its approval as a revision to the SIP.

