



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL MODIFICATION
HAMILTON COUNTY**

CERTIFIED MAIL

Street Address:

122 S. Front Street

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Mailing Address:

Lazarus Gov. Center
P.O. Box 1049

Application No: 14-03153

DATE: 6/10/2003

S Rosenthal and Co Inc
James Brown
9933 Alliance Rd
Cincinnati, OH 45219

Enclosed Please find a modification to the Ohio EPA Permit To Install referenced above which will modify the terms and conditions.

You are hereby notified that this action by the Director is final and may be appealed to the Ohio Environmental Review Appeals Commission pursuant to Chapter 3745.04 of the Ohio Revised Code. The appeal must be in writing and set forth the action complained of and the grounds upon which the appeal is based. It must be filed within thirty (30) days after the notice of the Directors action. A copy of the appeal must be served on the Director of the Ohio Environmental Protection Agency within three (3) days of filing with the Commission. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

Environmental Review Appeals Commission
236 East Town Street, Room 300
Columbus, Ohio 43215

Very truly yours,

Michael W. Ahern

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

HCDES



**Permit To Install
Terms and Conditions**

**Issue Date: 6/10/2003
Effective Date: 6/10/2003**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 14-03153

Application Number: 14-03153
APS Premise Number: 1431052165
Permit Fee: **\$0**
Name of Facility: S Rosenthal and Co Inc
Person to Contact: James Brown
Address: 9933 Alliance Rd
Cincinnati, OH 45219

Location of proposed air contaminant source(s) [emissions unit(s)]:
**9933 Alliance Rd
Cincinnati, Ohio**

Description of proposed emissions unit(s):
Administrative modification for emission unit R004, to incorporate USEPA comments.

The above named entity is hereby granted a modification to the permit to install described above pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this modification does not constitute expressed or implied approval or agreement that, if constructed or modified in accordance with the plans included in the application, the above described source(s) of environmental pollutants will operate in compliance with applicable State and Federal laws and regulations, and does not constitute expressed or implied assurance that if constructed or modified in accordance with those plans included in the application, the above described source(s) of pollutants will be granted the necessary operating permits.

This permit is granted subject to the conditions attached hereto.


Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS**A. Permit to Install General Terms and Conditions****1. Compliance Requirements**

The emissions unit(s) identified in this Permit to Install shall remain in full compliance with all applicable State laws and regulations and the terms and conditions of this permit.

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

- a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
- b. Except as otherwise may be provided in the terms and conditions for a specific emissions unit, quarterly written reports of (a) any deviations (excursions) from emission limitations, operational restrictions, and control device operating parameter limitations that have been detected by the testing, monitoring, and recordkeeping requirements specified in this permit, (b) the probable cause of such deviations, and (c) any corrective actions or preventive measures which have been or will be taken, shall be submitted to the appropriate Ohio EPA District Office or local air agency. If no deviations occurred during a calendar quarter, the permittee shall submit a quarterly report, which states that no deviations occurred during that quarter. The reports shall be submitted quarterly, i.e., by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. Records Retention Requirements

Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of five years from the date the record was created. Support information shall include, but not be limited to, all calibration and maintenance records and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by this permit. Such records may be maintained in computerized form.

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized

representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

Any scheduled maintenance of air pollution control equipment shall be performed in accordance with paragraph (A) of OAC rule 3745-15-06. The malfunction of any emissions units or any associated air pollution control system(s) shall be reported to the appropriate Ohio EPA District Office or local air agency in accordance with paragraph (B) of OAC rule 3745-15-06. Except as provided in that rule, any scheduled maintenance or malfunction necessitating the shutdown or bypassing of any air pollution control system(s) shall be accompanied by the shutdown of the emissions unit(s) that is (are) served by such control system(s).

6. Permit Transfers

Any transferee of this permit shall assume the responsibilities of the prior permit holder. The appropriate Ohio EPA District Office or local air agency must be notified in writing of any transfer of this permit.

7. Air Pollution Nuisance

The air contaminants emitted by the emissions units covered by this permit shall not cause a public nuisance, in violation of OAC rule 3745-15-07.

8. Termination of Permit to Install

This Permit to Install shall terminate within eighteen months of the effective date of the Permit to Install if the owner or operator has not undertaken a continuing program of installation or modification or has not entered into a binding contractual obligation to undertake and complete within a reasonable time a continuing program of installation or modification. This deadline may be extended by up to 12 months if application is made to the Director within a reasonable time before the termination date and the party shows good cause for any such extension.

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions

S Rosenthal and Co Inc

PTI Application: 14-03153

Modification Issued: 6/10/2003

Facility ID: 1431052165

and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

If the construction of the proposed emissions unit(s) has already begun or has been completed prior to the date the Director of the Environmental Protection Agency approves the permit application and plans, the approval does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the approved plans. The action of beginning and/or completing construction prior to obtaining the Director's approval constitutes a violation of OAC rule 3745-31-02. Furthermore, issuance of the Permit to Install does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Approval of the plans in any case is not to be construed as an approval of the facility as constructed and/or completed. Moreover, issuance of the Permit to Install is not to be construed as a waiver of any rights that the Ohio Environmental Protection Agency (or other persons) may have against the applicant for starting construction prior to the effective date of the permit. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed facilities cannot meet the requirements of this permit or cannot meet applicable standards.

10. Public Disclosure

The facility is hereby notified that this permit, and all agency records concerning the operation of this permitted source, are subject to public disclosure in accordance with OAC rule 3745-49-03.

11. Applicability

This Permit To Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate Permit To Install for the installation or modification of any other emissions unit(s) are required for any emissions unit for which a Permit To Install is required.

12. Best Available Technology

As specified in OAC Rule 3745-31-05, all new sources must employ Best Available Technology (BAT). Compliance with the terms and conditions of this permit will fulfill this requirement.

13. Source Operation and Operating Permit Requirements After Completion of Construction

a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter

S Rosenthal and Co Inc

PTI Application: 14-03153

Modification Issued: 6/10/2003

Facility ID: 1431052165

3745-77, the permittee shall submit a complete Title V permit application or a complete Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. Permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the source(s) covered by this permit.

14. Construction Compliance Certification

The applicant shall provide Ohio EPA with a written certification (see enclosed form) that the facility has been constructed in accordance with the Permit to Install application and the terms and conditions of the Permit to Install. The certification shall be provided to Ohio EPA upon completion of construction but prior to startup of the source.

15. Fees

The permittee shall pay fees to the Director of the Ohio EPA in accordance with ORC section 3745.11 and OAC Chapter 3745-78. The permittee shall pay all applicable Permit to Install fees within 30 days after the issuance of this Permit to Install.

B. Permit to Install Summary of Allowable Emissions

The following information summarizes the total allowable emissions, by pollutant, based on the individual allowable emissions of each air contaminant source identified in this permit.

SUMMARY (for informational purposes only)
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons Per Year</u>
OC	14.7
PM/PM10	2.41

PART II - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. Applicable Emissions Limitations and/or Control Requirements

- 1. The specific operations(s), property, and/or equipment which constitute this emissions unit are listed in the following table along with the applicable rules and/or requirements and with the applicable emissions limitations and/or control measures. Emissions from this unit shall not exceed the listed limitations, and the listed control measures shall be specified in narrative form following the table.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	<u>Applicable Emissions Limitations/Control Measures</u>
R004 - Heatset web offset press w/ drying oven (8-unit Lithographic Press)	OAC rule 3745-31-05(A)(3)	See terms A.2.a, A.2.b, A.2.c, A.2.d, and A.2.e. 0.551 lb/hour PM10 2.41 TPY PM/PM10 The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1) and OAC rule 3745-17-11(B).
	OAC rule 3745-21-07(G)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-17-07(A)(1)	See term A.2.f.
	OAC rule 3745-17-11(B)	0.551 lb/hour PM (particulate emissions)

2. Additional Terms and Conditions

- 2.a The OC emissions from the oven exhaust (ink only) shall not exceed 8.1 lbs/hour, 193.4

lbs/day, and 11.8 tons per year.

The hourly and daily OC emission limitations are based on the maximum production capacity of the equipment; therefore, no record keeping, reporting, or testing is required to demonstrate compliance with the hourly or daily OC emission limitations.

Compliance with the annual OC emissions limitation shall be determined based upon a rolling, 12-month summation.

- 2.b** The OC emissions from all materials (including inks, fountain solutions and cleanup materials) shall not exceed a combined total of 214.6 lbs/day and 14.7 tons/year.

The daily OC emissions limitation is based on the maximum production capacity of the equipment; therefore, no record keeping, reporting, or testing is required to demonstrate compliance with the daily OC emission limits.

Compliance with the annual OC emissions limitation shall be determined based upon a rolling, 12-month summation.

- 2.c** The use of any photochemically reactive material as defined in OAC rule 3745-21-01(C)(5) is prohibited.

- 2.d** The following organic compound limitations shall not be exceeded:

Inks - 3.1 lbs/gal

Fountain Solution - 0.014 lb/gal

Cleanup Material - 6.5 lbs/gal

Ink means liquid material applied by a roll printer. Fountain solution means a surface coating applied to a lithographic plate to render the non-image areas unreceptive to ink. Cleanup materials means all materials used to remove excess printing inks, oils and paper components from press equipment.

- 2.e** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the specified mass emission rates, the use of non-photochemically reactive materials and compliance with the Air Toxic's Policy.
- 2.f** Visible particulate emissions from any stack associated with this emissions unit shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

B. Operational Restrictions

1. The maximum annual material usage for this emissions unit shall not exceed the following:

Inks - 9500 gallons/year
Fountain Solution - 59,200 gallons/year
Cleanup Material - 750 gallons/year.

Compliance with the annual usage limitations shall be determined based upon a rolling, 12-month summation.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records of the following information:
 - a. The name and identification of each ink, fountain solution and cleanup material employed, as applied.
 - b. An identification of each ink, fountain solution and cleanup material employed, indicating whether or not each ink, fountain solution and cleanup material is a photochemically reactive material.
 - c. The OC content of each ink, fountain solution and cleanup material, as applied, in pounds per gallon.
 - d. The number of gallons of each ink, fountain solution and cleanup material employed.
 - e. The rolling, 12-month summation of usage in gallons of each ink, fountain solution and cleanup material employed.
 - f. The OC emissions from all inks, i.e., the sum of c times d for all inks employed divided by 2000, in tons per month.
 - g. The rolling, 12-month summation of the total OC emissions from all inks, i.e., the sum of (f) for the previous 12 calendar months, in tons per year.
 - h. The OC emissions from all inks, fountain solutions and cleanup materials, i.e., the sum of c times d for all inks, fountain solutions and cleanup materials employed divided by 2000, in tons per month.

Emissions Unit ID: **R004**

- i. The updated rolling, 12-month summation of the total OC emissions from all inks, fountain solutions and cleanup materials, i.e., the sum of (h) for the previous 12 calendar months, in tons per year.

Monthly records shall be completed within 15 days following the end of each calendar month.

2. The permittee shall maintain for this facility all purchase orders and invoices of OC-containing materials. The permittee shall retain such purchase orders and invoices for at least five years from their date of issuance. Upon request, the permittee shall make available to the Director of the Ohio EPA, or an authorized representative of the Director, such purchase orders and invoices for use in confirming the general accuracy of the records maintained and the reports submitted regarding material usage.
3. The permit to install for emissions unit R004 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by these emissions units using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s) from emissions unit R004:

Pollutant : Naphthalene
TLV (ug/m3): 52,429
Maximum Hourly Emission Rate (lbs/hr): 8.1
Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m3): 250.1
MAGLC (ug/m3): 1248

Physical changes to or in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup

materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

Modification Issued: 6/10/2003

4. If the permittee determines that the "Air Toxic Policy" will be satisfied with the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is(are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the Air Toxic Policy:"
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying each day during which any photochemically reactive material, as defined in OAC rule 3745-21-01(C)(5), was employed in this emissions unit. This report shall identify the cause for the use of photochemically reactive material(s) and the estimated total quantity of material(s) for each such day. This report shall be submitted to the Hamilton County Department of Environmental Services within 45 days after the exceedance occurs.
2. The permittee shall notify the Hamilton County Department of Environmental Services in writing identifying any exceedance of the annual emission limitations of 11.8 tons of OC per year based on a rolling, 12-month summation from the oven exhaust (ink only) and 14.7 tons of OC per year from all materials based on a rolling, 12-month summation (including inks, fountain solutions and cleanup materials). The notification shall include a copy of each such record, an explanation for the exceedance and what is being done to correct the violation. The notification shall be submitted within 30 days after the end of that rolling 12-month period in which the exceedance occurred. Exceeding the rolling, 12-month limitation is a violation for each day of the last month of each 12 month period in which the limitation is exceeded, regardless of whether a compliance plan is submitted.
3. The permittee shall submit quarterly reports which specify the updated rolling, 12-month summation of usages in gallons from the inks, fountain solution and cleanup material for emissions

S Rosenthal and Co Inc
PTI Application: 14 03153
Modif

Facility ID: 1431052165

Emissions Unit ID: **R004**

unit R004 for each calendar month. These reports shall be submitted by February 15, May 15, August 15 and November 15 of each year and shall cover the previous calendar quarter.

Modification Issued: 6/10/2003

4. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing the use of noncomplying inks, fountain solution and/or cleanup material (i.e., Organic Compound Limitations). The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.

E. Testing Requirements

1. OAC rule 3745-21-10(B) shall be used to determine the OC contents of the inks, fountain solutions and cleanup materials. If pursuant to 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or Method 24A cannot be used, the permittee shall notify the Administrator of USEPA and shall use formulation data for the material to demonstrate compliance until USEPA provides and alternative analytical procedures or alternative precision statements for Method 24 or 24A.
2. Compliance with the annual OC emissions limitations outlined in this permit shall be demonstrated by multiplying the OC content in pounds per gallon times the material usage rate in gallons times the retention rate consistent with the Ohio EPA Engineering Guide #56.

ink emissions:

For ink 20 percent of the OC's in heatset inks are retained by the substrate, 80 percent goes to the dryer. Since emission unit R004 is not required to be vented to a control device, emissions would be calculated at 80 percent being emitted as demonstrated in the following equation:

$$\text{gallons ink /month} \times \text{pounds OC/gallon ink} \times (1-.20) = \text{pounds OC/month}$$

fountain solution emissions:

70 percent of the OC's are captured into the press dryer and 30 percent are fugitive. Since emissions unit R004 is not required to be vented to a control device, emissions would be calculated at 100 percent being emitted as demonstrated in the following equation:

$$\text{gallons of fountain solution/month} \times \text{pounds OC per gallon fountain solution} = \text{pounds of OC per month}$$

cleanup emissions:

Emission unit R004 does not employ an automatic blanket wash system so 100 percent of the cleanup solvent is emitted as demonstrated in the following equation:

$$\text{gallons cleanup solvent/month} \times \text{pounds OC/gallon of cleanup solvent} = \text{pounds of OC per month}$$

Emissions Unit ID: R004

Compliance with the OC emission limitations shall be determined by the record keeping in term C.1.

3. Compliance with the visible particulate emission limitation shall be demonstrated by the methods outlined in 40 CFR Part 60, Appendix A, Method 9.
4. Compliance with the PM/PM10 emissions limitations shall be determined by multiplying 0.551 lb/hour by 8760 hours per year then dividing by 2000 lbs/ton.
5. Compliance with the usage limitations in term B.1 shall be demonstrated by the record keeping in term C.1.

F. Miscellaneous Requirements

1. The terms and conditions in this permit to install shall supersede permit to install 14-03153 issued on March 16, 1994 and modified on April 6, 1995 for this emissions unit.