

1

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. 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.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCE(S)

The proposed source(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 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 are inadequate or cannot meet applicable standards.

If the construction of the proposed source(s) has already begun or has been completed prior to the date the Director of the Ohio 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 Ohio Administrative Code

2

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

(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 prove to be inadequate or cannot meet applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 15 days of the effective date of this permit to install.

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.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

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.

3

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be made at least 90 days prior to start-up of the source.

NINETY DAY OPERATING PERIOD

The facility will be permitted to operate during a 90-day period in accordance with OAC Rule 3745-35-02(C)(4)(b). The purpose of this period of operation is to fulfill the performance tests conditions used in the determination of compliance with the provisions of this Permit to Install or other applicable Ohio EPA rules.

SOURCE OPERATION AFTER COMPLETION OF CONSTRUCTION

This facility is permitted to operate each source described by this permit to install for period of up to one year from the date the source commenced operation. This 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.

4

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
-------------------------------	-------------------------------------	--------------------------	---	--

AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **S Rosenthal & Company Inc** located in **Hamilton** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Ohio EPA Source Number</u>	<u>Source Identification Description</u>	<u>BAT Determination</u>
R002	4-unit heatset web offset press controlled by a thermal incinerator - Toshiba	6-unit heatset web offset press controlled by a thermal incinerator - Hantscho Mark 16
R005	8-unit heatset web offset press controlled by a thermal incinerator - Hantcho Mark 20	5-unit sheetfed offset press
		Incinerator with a 90 percent control efficiency of ink emissions. Compliance with OC content limitations and daily and annual usage limitations. Use of non-photochemically reactive materials. Compliance with the air toxics policy. Incinerator with a 90 percent

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
control efficiency of ink emissions. Compliance with OC content limitations and daily and annual usage limitations. Use of non-photochemically reactive materials. Compliance with the air toxics policy.	control efficiency of ink emissions. Compliance with OC content limitations and daily and annual usage limitations. Use of non-photochemically reactive materials. Compliance with the air toxics policy.		3745-15-07 Applicable Federal & OAC Rules (G) * 3745-31-05 3745-21-07 (G) * 3745-31-05 3745-15-07 3745-21-07 (G) *	Permit Allowable Mass Emissions and/or Control/Usage Requirements See Term and Condition A.1. and A.2. See Term and Condition F.1. Less stringent
Incinerator with a 90 percent	with the air toxics policy.		3745-31-05 (BAT)	See Term and Condition A.3. and A.4. See Term and Condition F.1. Less stringent

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
See Term and Condi on A.5. and A.6. See Term and Condi on F.1. Less stringe nt	nt			
0.58 pound OC/hour 27.71 pounds OC/day 2.98 TPY OC See Term and Condi on F.1 Less stringe				

Facility Name: **S Rosenthal & Company Inc**
Application Number: **14-4567**
Date: **August 19, 1998**

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Organic Compound	30.1

REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Hamilton County Dept. of Env. Services, 1632 Central Parkway, Cincinnati, OH 45210.**

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Hamilton County Dept. of Env. Services, 1632 Central Parkway, Cincinnati, OH 45210.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Applicable Emission Limitations and/or Control Requirements

1. The following organic compound (OC) emissions limitations from the incinerator exhaust (ink only) shall not be exceeded for emissions unit R002:
 - a. 3.6 pounds per hour;
 - b. 86.4 pounds per day; and,
 - c. 8.85 tons per year
2. The following organic compound (OC) emissions limitations from all materials employed on emissions unit R002 shall not be exceeded:
 - a. 145.2 pounds per day; and,
 - b. 15.52 tons per year
3. The following organic compound (OC) emissions limitations from the incinerator exhaust (ink only) shall not be exceeded for emissions unit R005:

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

- a. 3.0 pounds per hour;
 - b. 72 pounds per day; and,
 - c. 3.24 tons per day
4. The following organic compound (OC) emissions limitations from all materials employed on emissions unit R005 shall not be exceeded:
 - a. 97.1 pounds per day; and,
 - b. 5.26 tons per year
 5. The following organic compound (OC) emissions limitations from the incinerator exhaust (ink only) shall not be exceeded for emissions unit R006:
 - a. 2.4 pounds per hour;
 - b. 57.6 pounds per day; and,
 - c. 1.95 tons per year
 6. The following organic compound (OC) emissions limitations from all materials employed on emissions unit R006 shall not be exceeded:
 - a. 95.8 pounds per day; and,
 - b. 6.31 tons per year
 7. The following organic compound (OC) emissions limitations from all materials employed (unless otherwise noted) on emissions unit R009 shall not be exceeded:
 - a. 0.58 pounds per hour (ink and fountain solution);
 - b. 27.7 pounds per day; and,
 - c. 2.98 tons per year
 8. The potential emissions [as defined by OAC rule 3745-77-01(BB)] of Hazardous Air Pollutants (HAPs) as

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

identified in Section 112(b) of Title III of the Clean Air Act from this facility shall be less than 10 TPY for any single HAP and 25 TPY for any combination of HAPs. Compliance with the above limitations shall be determined on a rolling, 12-month summation.

9. The following Organic Compound (OC) contents, including water and exempt solvents, shall not be exceeded for emissions units R002, R005 and R006:
 - a. Ink 3.75 pounds OC/gallon;
 - b. Fountain Solution 0.061 pound OC/gallon; and,
 - c. Cleanup Solvent 6.92 pounds OC/gallon
10. The following Organic Compound (OC) contents, including water and exempt solvents, shall not be exceeded for emissions unit R009:
 - a. Ink 3.75 pounds OC/gallon;
 - b. Fountain Solution 0.16 pound OC/gallon; and,
 - c. Cleanup Solvent 6.92 pounds OC/gallon
11. The permittee shall operate and maintain a thermal incinerator capable of maintaining, at a minimum, a 90 percent (by weight of organic compounds) control efficiency at maximum hourly coating capacity from the oven exhaust for emissions units R002, R005 and R006.
12. The hourly and/or daily emission limitation(s) outlined in this permit are based upon the maximum hourly production/application rate at 24 hours per day. Therefore, no hourly and/or daily records are required.

The annual emission limitations are based on a rolling, 12-month summation.

B. Operational Restrictions

1. The use of photochemically reactive material as defined in OAC rule 3745-21-01(C) (5) is prohibited in emissions units R002, R005, R006 and R009.

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

2. The average combustion temperature within the thermal incinerator, used to control ink emissions, for any 3-hour block of time when emissions unit R002, R005 and R006 are in operation shall not be less than 1275 degrees Fahrenheit.
3. The following usage limitations shall not be exceeded for emissions unit R002:
 - a. Ink 59000 gallons;
 - b. Fountain Solution 68800 gallons; and,
 - c. Cleanup Solvent 1320 gallons
4. The following usage limitations shall not be exceeded for emissions unit R005:
 - a. Ink 21616 gallons;
 - b. Fountain Solution 32000 gallons; and,
 - c. Cleanup Solvent 300 gallons
5. The following usage limitations shall not be exceeded for emissions unit R006:
 - a. Ink 13000 gallons;
 - b. Fountain Solution 43200 gallons; and,
 - c. Cleanup Solvent 880 gallons
6. The following usage limitations shall not be exceeded for emissions unit R009:
 - a. Ink 8250 gallons;
 - b. Fountain Solution 10400 gallons; and,
 - c. Cleanup Solvent 400 gallons
7. The cleanup solvent usage is based on the amount evaporated.

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

8. Compliance with the outlined usage limitations for emissions units R002, R005, R006 and R009 shall be determined on a rolling, 12-month summation. The facility has submitted quarterly reports so compliance can be determined with the rolling summation limit upon issuance of the permit.
9. Solvent soiled rags shall be stored in closed containers.

C. Monitoring and Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for each emissions unit:
 - a. the company identification of each ink, fountain solution and cleanup material employed in this emissions unit;
 - b. the organic compound content of each ink, fountain solution and cleanup material employed in this emissions unit;
 - c. the number of gallons of each ink, fountain solution and cleanup material employed in this emissions unit;
 - d. a record of each liquid organic material employed in this emissions unit indicating, whether or not the liquid organic material is photochemically reactive as identified in OAC rule 3745-21-01(C) (5);
 - e. the calculated, controlled OC emissions from all inks, fountain solutions and cleanup materials employed in this emissions unit; and,
 - f. the rolling, 12-month summation of the ink, fountain solution and cleanup material usage figures.
2. The permittee shall collect and record the following information each month for the entire facility:

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

- a. the name and identification number of each ink and fountain solution employed;
- b. the individual Hazardous Air Pollutant (HAP) content for each HAP of each ink and fountain solution in pounds of individual HAP per gallon of coating, as applied;
- c. the total combined HAP content of each ink and fountain solution in pounds of combined HAPs per gallon of coating, as applied [sum all the individual HAP contents from (b)];
- d. the number of gallons of each ink and fountain solution employed;
- e. the name and identification of each cleanup material employed;
- f. the individual HAP content for each HAP of each cleanup material in pounds of individual HAP per gallon of cleanup material, as applied;
- g. the total combined HAP content of each cleanup material in pounds of combined HAPs per gallon of cleanup material, as applied [sum all the individual HAP contents from (f)];
- h. the number of gallons of each cleanup material employed;
- i. the total individual HAP emissions for each HAP from all coatings and cleanup materials employed, in pounds or tons per month [for each HAP the sum of (b) times (d) for each coating and the sum of (f) times (h) for each cleanup material];
- j. the total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month [the sum of (c) times (d) for each coating plus the sum of (g) times (h) for each cleanup material];
- k. the updated rolling, 12-month summation of the

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

individual HAP emissions for each HAP from all materials used; and,

1. the updated rolling, 12-month summation of the combined HAP emissions for all HAPs from all materials used.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Hamilton County Dept. of Env. Services contact. This information does not have to be kept on a line-by-line basis.

3. The permittee shall operate and maintain a continuous temperature monitor and recorder which measures and records the incinerator combustion temperature when emissions units R002, R005 and R006 are in operation. Units shall be in degrees Fahrenheit.

The monitoring and recording devices shall be capable of accurately measuring the desired parameter and shall be calibrated, operated and maintained in accordance with the manufacturer's recommendations, instructions and operating manuals.

The permittee shall collect and record the following information for each day for the control equipment associated with emissions units R002, R005 and R006:

- a. a log of the downtime for the capture (collection) system, control device and monitoring equipment, when the associated emissions unit was in operation; and,
 - b. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit was in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent emissions test that demonstrated the emissions unit was in compliance.
4. 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

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

date the record was created, unless otherwise specified in this permit. 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.

D. Reporting Requirements

1. The permittee shall submit an annual report which identifies each day during which any photochemically reactive material was employed in emissions units R002, R005, R006 and R009. This report shall identify the cause for the use of the photochemically reactive material(s) and the estimated total quantity of material(s) emitted each such day. This report shall be submitted by January 31 of each year and shall cover the previous 12 calendar months.
2. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the emissions unit is in operation, was more than 50 degrees Fahrenheit below the average temperature during the most recent performance test that demonstrated the emissions unit was in compliance.
3. The permittee shall submit annual reports which specify the total organic compound emissions from emissions units R002, R005, R006 and R009 for the previous calendar year. These reports shall be submitted by January 31 of each year.
4. The permittee shall notify the Director (the Hamilton County Dept. of Env. Services) of any exceedance of the HAP emissions limitations set forth in this Permit to Install. The permittee shall submit annual reports which identify all exceedances of these limitations, as well as the corrective actions that were taken to achieve compliance. These reports shall be submitted by January 31 of each year. If no exceedances occurred during the reporting period then a report is required stating so.

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

5. 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 Hamilton County Dept. of Env. Services; and,
 - 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 Hamilton County Dept. of Env. Services. 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 30, April 30, July 30, and October 30 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).

6. The permittee shall submit deviation reports which identify all exceedances of the rolling, 12-month gallon usage limitations and/or OC content limitations in T&C B.

E. Compliance Methods/Testing Requirements

1. The OC emissions are calculated by multiplying the OC content by the ink, fountain solution and/or cleanup material usage rate, with ink retention and solvent retention percentages consistent with the Ohio EPA engineering guide no. 56 and no. 68.

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

2. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing inks and related coatings) shall be used to determine the OC contents of the inks and coatings.
3. The permittee shall conduct, or have conducted, emission testing for this emissions unit in accordance with the following requirements:
 - a. the emission testing shall be conducted within 3 months after issuance of the permit;
 - b. the emission testing shall be conducted to demonstrate compliance with the 90 percent control efficiency limitation for organic compounds;
 - c. the following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate(s): Method 25 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA approved test methods may be used with prior approval from the Ohio EPA;
 - d. the test(s) shall be conducted while the emissions unit is operating at or near its maximum capacity, unless otherwise specified or approved by the Hamilton County Dept. of Env. Services; and,
 - e. the control efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 or the approved alternative test protocol (e.g. the mass balance protocol approved on 10/25/95). The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Hamilton County Dept. of Env.

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

Services. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the test(s), and the person(s) who will be conducting the test(s).

Failure to submit such notification for review and approval prior to the test(s) may result in the Hamilton County Dept. of Env. Service's refusal to accept the results of the emission test(s).

Personnel from the Hamilton County Dept. of Env. Service shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Hamilton County Dept. of Env. Service within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Hamilton County Dept. of Env. Service.

4. Compliance with the OC content and gallon usage limitations will be determined by the recordkeeping in Term C.1.

F. Miscellaneous

1. If probable cause exist indicating that any of the emissions units R002, R005 R006 or R009 are causing or contributing to a nuisance in violation of Ohio Administrative Code rule 3745-15-07, the owner or operator of these emissions units shall be required to submit and implement a control program which will bring the emissions unit into compliance.

20

Facility Name: **S Rosenthal & Company Inc**

Application Number: **14-4567**

Date: **August 19, 1998**

2. The following terms and conditions shall supersede all the air pollution control requirements contained in the modification to permit to install 14-3153 issued for emissions units R002, R005 and R006 on April 6, 1995:

Special Terms and Conditions A-F

3. The following terms and conditions shall supersede all the air pollution control requirements contained in permit to install 14-3153 issued for emissions unit R009 on March 16, 1994:

Special Terms and Conditions A-F