



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL CERTIFIED MAIL  
FAIRFIELD COUNTY**

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: 01-08008**

**DATE: 3/22/00**

The Cyril-Scott Company  
Bob Wilson  
PO Box 310 3950 Lancaster-New Lexington Road  
Lancaster, OH 43130

Enclosed please find an Ohio EPA Permit to Install which will allow you to install the described source(s) in a manner indicated in the permit. Because this permit contains several conditions and restrictions, I urge you to read it carefully.

The Ohio EPA is urging companies to investigate pollution prevention and energy conservation. Not only will this reduce pollution and energy consumption, but it can also save you money. If you would like to learn ways you can save money while protecting the environment, please contact our Office of Pollution Prevention at (614) 644-3469.

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,

Thomas G. Rigo, Manager  
Field Operations and Permit Section  
Division of Air Pollution Control

cc: USEPA

CDO



STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install

Issue Date: 3/22/00

**FINAL PERMIT TO INSTALL 01-08008**

Application Number: 01-08008  
APS Premise Number: 0123010198  
Permit Fee: **\$800**  
Name of Facility: The Cyril-Scott Company  
Person to Contact: Bob Wilson  
Address: PO Box 310 3950 Lancaster-New Lexington Road  
Lancaster, OH 43130

Location of proposed air contaminant source(s) [emissions unit(s)]:

**3950 Lancaster New Lexington Rd  
Lancaster, Ohio**

Description of proposed emissions unit(s):

**Nebiola IV (K020) and PI I (K021) heatset web offset printing press.**

The above named entity is hereby granted a Permit to Install for the above described emissions unit(s) pursuant to Chapter 3745-31 of the Ohio Administrative Code. Issuance of this permit 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 emissions unit(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 and specifications, the above described emissions unit(s) of pollutants will be granted the necessary permits to operate (air) or NPDES permits as applicable.

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 Related to Monitoring and Recordkeeping 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 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 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 prove to be inadequate 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 application must be made to the Director for the installation or modification of any other emissions unit(s).

**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**

This facility is permitted to operate each source described by this Permit to Install for a 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. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within thirty (30) days after commencing operation of the emissions unit(s) covered by this permit.

**14. Construction Compliance Certification**

**The Cyril-Scott Company**  
**PTI Application: 01-08008**  
**Issued: 3/22/00**

**Facility ID: 0123010198**

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>
PM	.66
SO2	.034
CO	4.69
Nox	5.61
OC	40.1

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

### A. Applicable Emissions Limitations and/or Control Requirements

- 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>
K020 - Nebiola IV heatset web offset printing press controlled by a catalytic incinerator	OAC rule 3745-31-05(A)(3)	Particulate emissions shall not exceed 0.077 lb/hr and 0.33 ton/yr.
		Sulfur Dioxide emissions shall not exceed .0038 lb/hr and 0.017 ton /yr.
		Organic compound emissions shall not exceed 3.5 lbs/hr and 15.2 tons /yr.
		Carbon Monoxide emissions shall not exceed 0.53 lb/hr and 2.32 ton /yr..
		Nitrogen Oxide emissions shall not exceed 0.64 lb/hr and 2.78 tons/yr.
	See A.2.b below	
	OAC rule 3745-17-07(A)(1)	Opacity shall not exceed 20 percent as a six minute average, except as provided by rule.
	OAC rule 3745-17-11(B)(1)	The limits established by this rule are less stringent than those established pursuant to BAT.
	OAC rule 3745-21-07(G)(3)	The limits established by this rule are less stringent than those established

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**The C**

**PTI A**

**Issued: 3/22/00**

Emissions Unit ID: **K020**

pursuant to BAT.

## **2. Additional Terms and Conditions**

- 2.a** Limitations for SO<sub>2</sub>, NO<sub>x</sub> and CO reflect the unit's potential to emit based on AP-42 emission factors. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- 2.b** The permittee shall control OC emissions from this emissions unit through the use of a catalytic incinerator with a minimum control efficiency of 95%.
- 2.c** Organic compound emissions from this emissions unit shall be reduced overall by a minimum of 95%.

## **B. Operational Restrictions**

1. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 650 degrees Fahrenheit. The average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is in operation and applying more than 186 pounds of ink, shall not be less than 80 percent of the average temperature difference during the most recent performance test that demonstrated the emissions unit was in compliance.

## **C. Monitoring and/or Recordkeeping Requirements**

1. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

2. The permittee shall collect and record the following information each day:

- a. All 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit.
- b. All 3-hour blocks of time (when the emissions unit was in operation and applying more than 186 pounds of ink per hour) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the most recent performance test that demonstrated the emissions unit was in compliance;

and,

- c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

3. The permittee shall collect and record the following information for each day for the coating operation:

- a. The company identification for each coating and cleanup material employed.
- b. The number of gallons of each coating and cleanup material employed.
- c. The organic compound content of each coating and cleanup material, in pounds per gallon.
- d. The total uncontrolled organic compound emission rate for all coatings and cleanup materials, in pound per day.
- e. The total controlled organic compound emission rate for all coatings and cleanup materials, in pounds per day (i.e., the value from (d) multiplied by the overall control efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance).
- f. The total number of hours the emissions unit was in operation.
- g. The average hourly controlled organic compound emission rate for all coatings and cleanup materials, i.e., (e)/(f), in pounds per hour (average).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

4. Per DAPC guidance, the following assumptions will be used in calculating the OC emissions for emissions unit K020: 20 percent (by weight) of the solvent in the inks is retained in the web after the dryer. The remaining 80 percent (by weight) of the OCs in the inks is vented to the catalytic incinerator. 30 percent of the fountain solution emissions is fugitive, and 70 percent is vented to the catalytic incinerator. For blanket wash systems, 50 percent of the solvent is fugitive, and 50 percent is retained in the clothes. For the OC vented to the incinerator and generated by the ink and the fountain solution, a capture efficiency of 100% shall be used for the calculations.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time when the emissions unit was in operation during which the average temperature of the exhaust gases immediately before the catalyst bed or the average temperature difference across the catalyst bed does not comply with the temperature limitations specified above.
2. The permittee shall submit deviation (excursion) reports which include the following information:
  - a. An identification of each day during which the average hourly total controlled organic compound emissions exceeded 3.5 pounds per hour, and the actual average hourly organic compound emissions for each such day.

The permittee shall also submit annual reports which specify the total organic compound emissions from emissions unit K020 for the previous calendar year. These reports shall be submitted by January 31 of each year.

3. 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 Ohio EPA Central District Office.
  - 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 Ohio EPA, Central District Office. 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.)

## **E. Testing Requirements**

1. Compliance with the emission limitations of this permit shall be determined in accordance with the following method(s):

Emission Limitation: Particulate emissions shall not exceed 0.077 lb/hr and 0.33 ton/yr.

Emissions Unit ID: **K020****Applicable Compliance Method:**

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

Emission limitation: Sulfur Dioxide emissions shall not exceed .0038 lb/hr and 0.017 ton /yr.

Applicable Compliance Method: Compliance with the SO<sub>2</sub> emission limits shall be based upon an emission factor of .6 lb SO<sub>2</sub>/million cubic feet(from table 1.4-2(7/98) of AP-42,5th edition) and a maximum natural gas consumption of 6350 CFH(from the oven and incinerator combined). If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6C

Emission limitation: Nitrogen Oxide emissions shall not exceed 0.64 lb/hr and 2.78 tons/yr.

Applicable Compliance Method: Compliance with the NO<sub>x</sub> emission limits shall be based upon an emission factor of 100 lb NO<sub>x</sub>/million cubic feet(from table 1.4-2(2/98) of AP-42,5th edition) and a maximum natural gas consumption of 6350 CFH (from the oven and incinerator combined). If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7E.

Emission limitation: Carbon Monoxide emissions shall not exceed 0.53 lb/hr and 2.32 ton /yr.

Applicable Compliance Method: Compliance with the CO emission limits shall be based upon an emission factor 84 lbs CO/million cubic feet(from table 1.4-2(2/98) of AP-42,5th edition) and a maximum natural gas consumption of 6350 CFH (from the oven and incinerator combined). If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10

Emission limitation: Organic compound emissions shall not exceed 3.5 lbs/hr and 15.2 tons /yr.

Applicable Compliance Method: Compliance with the 3.5 lb OC/hr emission limit shall be based upon the required DRE testing required in these special terms and conditions , an assumed capture efficiency of 100% (for the OC vented to the incinerator and generated by the ink and the fountain solution,)and the emission calculation methodology specified in C.3 above.

Emission limitation: 95% DRE

Applicable Compliance Method: The permittee shall conduct, or have conducted, emissions testing for this emissions unit to demonstrate compliance with the 95 % minimum DRE requirement in accordance with the following requirements:

- a. The emission testing shall be conducted within 90 days of issuance of this PTI.
- b. The following test method(s) shall be employed to determine the destruction and removal efficiency of the control device controlling organic compound emissions from this emissions unit: 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 or 25A, as appropriate
- c. The test(s) shall be conducted while this emissions unit and K019 are operated at or near their maximum capacity and venting emissions to the control device unless otherwise specified or approved by the Ohio EPA, Central District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. 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 Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office 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 Ohio EPA, Central District Office 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 Ohio EPA, Central District Office.

Emission Limitation: Opacity shall not exceed 20% opacity as a six minute average.

Applicable Compliance Method: Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

Emission limitation: 95% overall control of OC emissions

**The Cyril-Scott Company**  
**PTI Application: 01-09000**  
**Issued**

**Facility ID: 0123010198**

Emissions Unit ID: **K020**

Applicable Compliance Method: Compliance shall be determined through the emission calculation methodology specified in C.3 above, the DRE emissions testing required by these terms and conditions and an assumed capture efficiency of 100%(for the OC vented to the incinerator and generated by the ink and the fountain solution,). If required, the permittee shall demonstrate compliance with the overall control requirement through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, 25 Or 25A, and 40 CFR Part 51, Appendix M, Method 204.

**F. Miscellaneous Requirements**

1. This PTI replaces PTI number 01-5704, as issued on August 2, 1995.

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

**A. Applicable Emissions Limitations and/or Control Requirements**

- 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.

<b><u>Operations, Property, and/or Equipment</u></b>	<b><u>Applicable Rules/Requirements</u></b>	OAC rule 3745-21-07(G)(3)
K021 - PI I heatset offset printing press controlled by a catalytic incinerator	OAC rule 3745-31-05(A)(3)	
	OAC rule 3745-17-07(A)(1)	
	OAC rule 3745-17-11(B)(1)	

**Applicable Emissions  
Limitations/Control Measures**

Particulate emissions shall not exceed 0.077 lb/hr and 0.33 ton/yr.

Sulfur Dioxide emissions shall not exceed .0038 lb/hr and 0.017 ton /yr.

Organic compound emissions shall not exceed 5.68 lbs/hr and 24.88 tons /yr.

Carbon Monoxide emissions shall not exceed 0.54 lb/hr and 2.37 ton /yr..

Nitrogen Oxide emissions shall not exceed 0.65 lb/hr and 2.83 tons/yr.

See A.2.b below

Opacity shall not exceed 20 percent as a six minute average, except as provided by rule.

The limits established by this rule are less stringent than those established pursuant to BAT.

The limits established by this rule are less stringent than those established pursuant to BAT.

## **2. Additional Terms and Conditions**

- 2.a** Limitations for SO<sub>2</sub>, NO<sub>x</sub> and CO reflect the unit's potential to emit based on AP-42 emission factors. Therefore, it is not necessary to develop record keeping and/or reporting requirements to ensure compliance with these limits.
- 2.b** The permittee shall control OC emissions from this emissions unit through the use of a catalytic incinerator with a minimum control efficiency of 95%.
- 2.c** Organic compound emissions from this emissions unit shall be reduced overall by a minimum of 95%.

## **B. Operational Restrictions**

- 1. The average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 650 degrees Fahrenheit. The average temperature difference across the catalyst bed, for any 3-hour block of time when the emissions unit is in operation and applying more than 278 pounds of ink, shall not be less than 80 percent of the average temperature difference during the most recent performance test that demonstrated the emissions unit was in compliance.

## **C. Monitoring and/or Recordkeeping Requirements**

- 1. The permittee shall operate and maintain continuous temperature monitors and recorder(s) which measure and record(s) the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitors and recorder(s) shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.
- 2. The permittee shall collect and record the following information each day:
  - a. All 3-hour blocks of time (when the emissions unit was in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was less than 650 degrees Fahrenheit.
  - b. All 3-hour blocks of time (when the emissions unit was in operation and applying more than 278 pounds of ink per hour) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference during the

Emissions Unit ID: **K021**

most recent performance test that demonstrated the emissions unit was in compliance; and,

- c. A log of the downtime for the capture (collection) system, control device, and monitoring equipment, when the associated emissions unit was in operation.

3. The permittee shall collect and record the following information for each day for the coating operation:

- a. The company identification for each coating and cleanup material employed.
- b. The number of gallons of each coating and cleanup material employed.
- c. The organic compound content of each coating and cleanup material, in pounds per gallon.
- d. The total uncontrolled organic compound emission rate for all coatings and cleanup materials, in pound per day.
- e. The total controlled organic compound emission rate for all coatings and cleanup materials, in pounds per day (i.e., the value from (d) multiplied by the overall control efficiency from the most recent performance test that demonstrated that the emissions unit was in compliance).
- f. The total number of hours the emissions unit was in operation.
- g. The average hourly controlled organic compound emission rate for all coatings and cleanup materials, i.e., (e)/(f), in pounds per hour (average).

[Note: The coating information must be for the coatings as employed, including any thinning solvents added at the emissions unit.]

4. \* Per DAPC guidance, the following assumptions will be used in calculating the OC emissions for emissions unit K021: 20 percent (by weight) of the solvent in the inks is retained in the web after the dryer. The remaining 80 percent (by weight) of the OCs in the inks is vented to the catalytic incinerator. 30 percent of the fountain solution emissions is fugitive, and 70 percent is vented to the catalytic incinerator. For blanket wash systems, 50 percent of the solvent is fugitive, and 50 percent is retained in the clothes. For the OC vented to the incinerator and generated by the ink and the fountain solution, a capture efficiency of 100% shall be used for the calculations.

#### **D. Reporting Requirements**

1. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time when the emissions unit was in operation during which the average temperature of the exhaust gases immediately before the catalyst bed or the average temperature difference across the catalyst bed does not comply with the temperature limitations specified above.
2. The permittee shall submit deviation (excursion) reports which include the following information:
  - a. An identification of each day during which the average hourly total controlled organic compound emissions exceeded 5.68 pounds per hour, and the actual average hourly organic compound emissions for each such day.

The permittee shall also submit annual reports which specify the total organic compound emissions from emissions unit K021 for the previous calendar year. These reports shall be submitted by January 31 of each year.

3. 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 Ohio EPA Central District Office.
  - 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 Ohio EPA, Central District Office. 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.)

#### **E. Testing Requirements**

1. Compliance with the emission limitations of this permit shall be determined in accordance with the following method(s):

Emission Limitation: Particulate emissions shall not exceed 0.077 lb/hr and 0.33 ton/yr.

Applicable Compliance Method:

If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 5.

Emission limitation: Sulfur Dioxide emissions shall not exceed .0038 lb/hr and 0.017 ton /yr.

Applicable Compliance Method: Compliance with the SO<sub>2</sub> emission limits shall be based upon an emission factor of .6 lb SO<sub>2</sub>/million cubic feet(from table 1.4-2(7/98) of AP-42,5th **edition**) and a maximum natural gas consumption of 6450 CFH(from the oven and incinerator combined). If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 6C

Emission limitation: Nitrogen Oxide emissions shall not exceed 0.65 lb/hr and 2.83 tons/yr.

Applicable Compliance Method: Compliance with the NO<sub>x</sub> emission limits shall be based upon an emission factor of 100 lb NO<sub>x</sub>/million cubic feet(from table 1.4-2(2/98) of AP-42,5th edition) and a maximum natural gas consumption of 6450 CFH (from the oven and incinerator combined). If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 7E.

Emission limitation: Carbon Monoxide emissions shall not exceed 0.54 lb/hr and 2.37 ton /yr.

Applicable Compliance Method: Compliance with the CO emission limits shall be based upon an emission factor 84 lbs CO/million cubic feet(from table 1.4-2(2/98) of AP-42,5th edition) and a maximum natural gas consumption of 6450 CFH (from the oven and incinerator combined). If required, the permittee shall demonstrate compliance with this emission limitation through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4 and 10

Emission limitation: Organic compound emissions shall not exceed 5.68 lbs/hr and 24.88 tons /yr.

Applicable Compliance Method: Compliance with the 5.68 lb OC/hr emission limit shall be based upon the required DRE testing required in these special terms and conditions , an assumed capture efficiency of 100% (for the OC vented to the incinerator and generated by the ink and the fountain solution,)and the emission calculation methodology specified in C.3 above.

Emission limitation: 95% DRE

Applicable Compliance Method: The permittee shall conduct, or have conducted, emissions testing for this emissions unit to demonstrate compliance with the 95 % minimum DRE requirement in accordance with the following requirements:

- a. The emission testing shall be conducted within 90 days of issuance of this PTI.
- b. The following test method(s) shall be employed to determine the destruction and removal efficiency of the control device controlling organic compound emissions from this emissions unit: 40 CFR Part 60, Appendix A, Methods 1 through 4 and 25 or 25A, as appropriate
- c. The test(s) shall be conducted while this emissions unit and K013 are operated at or near their maximum capacity and venting emissions to the control device unless otherwise specified or approved by the Ohio EPA, Central District Office.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the Ohio EPA, Central District Office. 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 Ohio EPA, Central District Office's refusal to accept the results of the emission test(s).

Personnel from the Ohio EPA, Central District Office 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 Ohio EPA, Central District Office 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 Ohio EPA, Central District Office.

Emission Limitation: Opacity shall not exceed 20% opacity as a six minute average.

Applicable Compliance Method: Compliance shall be determined through visible emission observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9.

Emission limitation: 95% overall control of OC emissions

**The Cyril-Scott Company**  
**PTI Application: 01-09000**  
**Issued**

**Facility ID: 0123010198**

**Emissions Unit ID: K021**

Applicable Compliance Method: Compliance shall be determined through the emission calculation methodology specified in C.3 above, the DRE emissions testing required by these terms and conditions and an assumed capture efficiency of 100%(for the OC vented to the incinerator and generated by the ink and the fountain solution,). If required, the permittee shall demonstrate compliance with the overall control requirement through emission tests performed in accordance with 40 CFR Part 60, Appendix A, Methods 1 through 4, 25 0r 25A, and 40 CFR Part 51, Appendix M, Method 204.

**F. Miscellaneous Requirements**

1. This PTI replaces PTI number 01-1905, , as issued on August 2, 1995.

**NEW SOURCE REVIEW FORM B**

PTI Number: 01-08008

Facility ID: 0123010198

FACILITY NAME The Cyril-Scott Company

FACILITY DESCRIPTION Printing facility

CITY/TWP Lancaster

Emissions Unit ID: **K021**

SIC CODE 2752

SCC CODE 4-02-013-01

EMISSIONS UNIT ID K020

EMISSIONS UNIT DESCRIPTION Nebiola IV heatset web offset printing press controlled by a catalytic incinerator

DATE INSTALLED already modified

EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter	attainment	.077	.33	.077	.33
PM <sub>10</sub>					
Sulfur Dioxide	attainment	.0038	.017	.0038	.017
Organic Compounds	attainment	3.5	15.2	3.5	15.2
Nitrogen Oxides	attainment	.64	2.78	.64	2.78
Carbon Monoxide	attainment	.53	2.32	.53	2.32
Lead					
Other: Air Toxics					

## APPLICABLE FEDERAL RULES:

NSPS?

NESHAP?

PSD?

OFFSET POLICY?

**WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?**

Enter Determination Compliance with the permitted emission limits and applicable rules; Use of a catalytic incinerator w/ a minimum DRE of 95%. OAC rule 3745-31-05.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? \$ 250,000

**TOXIC AIR CONTAMINANTS**

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED\*? YES x NO

IDENTIFY THE AIR CONTAMINANTS:



25 **NEW SC**

PTI Num

**FACILITY**

Emissions Unit ID: **K021** \_\_\_\_\_

**FACILITY DESCRIPTION** Printing press **CITY/TWP** Lancaster

**Please describe any hard copy information is being submitted with this recommendation (Please send hard copy information to Pam McGraner, DAPC Central Office - Air Quality Modeling and Planning):**

A hard copy of the calculations for the proposed emission units will be sent over through inter office mail.

**Please provide any additional permit specific notes as you deem necessary:**

The Cyril Scott Company has submitted a PTI application for the modification of a two heatset web offset printing presses The modification has already occurred(in 1998)

The emission limits, including the organic compound emission limits, in this permit are established based upon BAT (3745-31-05) . The main component of BAT for these emissions units include the use of a Catalytic incinerator with a minimum DRE. I have included the appropriate monitoring, record keeping and reporting to ensure continual compliance with the permitted emission limits. We will send over a hardcopy a copy of the calculations that explain how the proposed emission limits were developed. The Ohio EPA Air Toxics Policy does not apply because these two sources do not emit more than one ton of any single air toxic.

Cyril Scott has a PTE for each criteria pollutant below 250 tons for purposes of determining PSD applicability.

Note that the permit contains emission testing requirements to ensure compliance with the OC emission limits.Please call me if you have any questions(728-3813).

The fee for each emission units K020 and K021 would be \$200 given the process weight rate. However, both were modified prior to obtaining a PTI. As a result , the total fee for each is \$400 and the total for the PTI is \$800.

**Please fill in the following for this permit:**

**TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS**

<u>Pollutant</u>	<u>Tons Per Year</u>
PM	.66
SO2	.034
CO	4.69
Nox	5.61
OC	40.1