State of Ohio Environmental Protection Agency

Street Address: Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329 Mailing Address: Lazarus Gov. Center

RE: FINAL PERMIT TO INSTALL **CERTIFIED MAIL**
HAMILTON COUNTY
Application No: 14-04918
DATE: 11/2/2000

Quebecor World Red Bank Division
Cameron Beaty
760 Fujitec Drive
Lebanon, OH 45036

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, buy 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

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

CC: USEPA **HCDES**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install **Issue Date: November 2, 2000**
Terms and Conditions **Effective Date: November 2, 2000**

FINAL PERMIT TO INSTALL 14-04918

Application Number:	14-04918
APS Premise Number:	1431070458
Permit Fee:	**$1400**
Name of Facility:	Quebecor World Red Bank Division
Person to Contact:	Cameron Beaty
Address:	760 Fujitec Drive Lebanon, OH 45036

Location of proposed air contaminant source(s) [emissions unit(s)]:
3600 Red Bank Road
Cincinnati, **Ohio**

Description of proposed emissions unit(s):
Heatset Web Offset (Lithographic) 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 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

Pollutant	Tons Per Year
OC	98.6

Emissions Unit ID: **R001**

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements
R001 - 8 Unit Hantscho HWOPL, (Heatset Web Offset Printing Line) ID-836 with thermal oxidizer (modification)	OAC rule 3745-31-05(A)(3)
	OAC rule 3745-31-05(D)
	OAC rule 3745-21-07(G)
	OAC rule 3745-17-11(B)
	OAC rule 3745-17-07(A)

Applicable Emissions Limitations/Control Measures	
See Terms A.2.a, A.2.b, and A.2.d.	56.1 TPY OC The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-31-05(D) and OAC rule 3745-17-11.
Dryer and oxidizer emissions combined: 0.15 lb/MMBtu NOx from the thermal oxidizer. 0.1 lb/MMBtu NOx from the dryers 18.1 TPY NOx Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	See terms A.2.c, A.2.f, A.2.h and B.3. Exempt (See section B.1.) 0.551 lb/hour PM/PM10
0.37 lb/MMBtu CO from the thermal oxidizer. 0.084 lb/MMBtu CO from the dryers 12.1 TPY CO Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	Visible particulate emissions shall not exceed 20% opacity as a six-minute average.
0.053 lb/MMBtu SO2 from the thermal oxidizer. 0.0006 lb/MMBtu SO2 from the dryers 2.0 TPY SO2 Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	
0.015 lb/MMBtu PM/PM10 from the thermal oxidizer. 0.0076 lb/MMBtu PM/PM10 from the dryers 1.5 TPY PM/PM10 Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	

2. Additional Terms and Conditions

2.a Combined organic compound emissions from the oxidizer exhaust of emissions units R001, R002, R004, R008, R009 and R011 shall not exceed 30.37 pounds per hour.

2.b Daily organic compound emissions from each emissions units R001, R002, R004, R008, R009 and R011 shall not exceed 307.5 pounds per day, which includes the limits of 121.5 pounds per day for the oxidizer exhaust and 186.0 pounds per day from the fugitive emissions associated with the fountain solutions, blanket wash (including rubber revitalizer), metering roller clear, and non piling additive.

2.c The following Organic Compound (OC) contents shall not be exceeded for all emission units:

a.	Ink	50% by wt. OC
b.	Adhesives	1.0 % by wt. OC
c.	Blanket wash	100% by wt. OC
d.	Metering Roller Cleaner	100% by wt. OC
e.	Fountain solution No.1	30% by wt. OC
f.	Fountain solution No.2	85% by wt. OC
g.	Non piling additive	50% by wt. OC
h.	Fountain solution No. 3	35% by wt. OC
i.	Aqueous coatings	10% by wt. OC

2.d The permittee shall operate and maintain a thermal oxidizer capable of maintaining, at a minimum, a 90.0 % (by weight of organic compounds) control efficiency at maximum hourly coating capacity from the oven exhaust for emissions units R001, R002, R004, R008, R009 and R011.

2.e 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.

2.f The actual emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

2.g Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the OC content

limits, usage limits, the use of a thermal oxidizer and compliance with the air toxics policy.

2.h The combined annual organic compound emissions from emissions units R001, R002, R004, R007, R008, R009 and R011 shall not exceed 98.6 tons per year 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.

2. The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when emissions units R001, R002, R004, R008, R009 and R011 are in operation shall not be more than 50 degrees Fahrenheit below the average combustion temperature during the most recent performance test that demonstrated compliance with the 90.0 percent overall VOC destruction efficiency requirement.

3. Coating and cleanup material usages for emissions units R001, R002, R004, R007, R008, R009 and R011 combined shall not exceed the following limits:

		Material Usages Tons/yr**
a.	Inks	1050
b.	Blanket wash***	60
c.	Metering Roller Cleaner	6
d.	Fountain solution No. 1*	65
e.	Fountain solution No. 2*	8
f.	Non Piling Additive	10
g.	Adhesives	50
h.	Fountain Solution No. 3*	1.1
i.	Aqueous coatings	9

* This usage limit is for the fountain solution concentrate.
** Compliance with the annual usage limitations shall be determined based on a rolling, 12-month summation.
*** Blanket wash includes rubber revitalizer.

4. To ensure an evaporative OC/VOC loss from the hand cleanup process of no more than 75% (by weight) from solvents having a vapor pressure greater than 10 mmHg (0.19 psia) at 20 degrees Celsius (68 degrees Fahrenheit), all rags utilized in the cleanup process shall be stored in closed

containers.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit:

   a. The company identification of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating employed in this emissions unit.

   b. The percent (%) by weight of the organic compound content of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating for this emissions unit.

   c. The number of pounds of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating employed in this emissions unit.

   d. A record of each liquid organic material employed in each emissions unit indicating whether or not the liquid organic material is photochemically reactive as defined in OAC rule 3745-21-01(C)(5).

   e. The total rolling, 12-month summation of the ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating usage in Tons employed for emissions units R001, R002, R004, R007, R008, R009 and R011.

   f. The total rolling, 12-month summation of the controlled Organic Compound (OC) emissions in tons per year from the inks, adhesives, blanket wash (including rubber revitalizer), metering roller cleaners, fountain solutions, non piling additives and aqueous coatings for emissions units R001, R002, R004, R007, R008, R009 and R011.

2. The permittee shall collect and record the following information each month for the entire facility:

   a. The name and identification number of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating as applied or as concentrate.

   b. The individual HAP* content for each HAP of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating in pounds of individual HAP per pound of material, as applied or as concentrate.

   c. The total combined HAP content of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating in pounds of combined HAPs per pound of material, as applied or as concentrate [sum all the individual HAP contents from (b)].

   d. The number of pounds of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, aqueous coating and non piling additive material employed.

   e. 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)].

   f. The total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month [the sum of (c) times (d)].

   g. The updated rolling, 12-month summation of the individual HAP emissions for each HAP from all coatings and cleanup materials employed, in pounds or tons.

   h. The updated rolling, 12-month summation of the combined HAP emissions for all HAP from all coatings and cleanup materials employed, in pounds or tons.

   * A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency 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 combustion temperature within the thermal oxidizer when emissions units R001, R002, R004, R008, R009 and R011 are in operation. Units shall be in degrees

Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, was more than 50 degrees Fahrenheit below the average combustion temperature during the most recent performance test that demonstrated compliance with the 90.0 percent overall VOC destruction efficiency requirement.

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

4. The permit to install for this emissions unit (R001) 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 this emissions unit 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):

Pollutant: Glycol ethers
TLV (ug/m3): 121,000
Maximum Hourly Emission Rate (lbs/hr): 5.72
Predicted 1 Hour Maximum Ground-Level Concentration at 26 meters (ug/m3):1999.4
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 2881

Pollutant: Napthalene
TLV (ug/m3): 52,000
Maximum Hourly Emission Rate (lbs/hr): 0.027
Predicted 1 Hour Maximum Ground-Level Concentration at 26 meters (ug/m3): 5.3
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 1238

Physical changes to or in the method of operation of the emissions unit after it's 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.).

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 it's 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 the photochemically reactive material(s) and the estimated total quantity of material(s) emitted each such day.

2. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emissions limitations in term A.2.f. 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.

3. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified in term B.2.

4. The permittee shall submit reports which specify the updated rolling, 12-month summation of organic compound emissions in TPY for each calendar month from emissions units R001, R002, R004, R007, R008, R009 and R011, combined.

5. The permittee shall submit reports which specify the updated rolling, 12-month summation of total usages in tons from the inks, adhesives, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coatings from emissions units R001, R002, R004, R007, R008, R009 and R011, combined for each calendar month.

6. The permittee shall submit deviation reports which identify all exceedances of the OC content limitations in term A.2.c.

7. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing lines and related coatings) shall be used to determine the OC contents of the inks and coatings.

2. The OC emissions are calculated by multiplying the percent (%) by weight OC content times the material usage rate times the ink retention consistent with the Ohio EPA Engineering Guide #56 times the control efficiency.

3. Compliance with the visible particulate emission limitation in term A.1 shall be demonstrated by Method 9, 40 CFR Part 60, Appendix A.

4. Compliance with the percent by weight OC content and the usage limitations shall be determined by the recordkeeping in term C.1.

5. The permittee shall conduct emission testing for the oxidizer for emissions units R001, R002, R004, R008, R009 and R011 in accordance with the following requirements:

   a. The emission testing shall be conducted within 3 months after the initial operation of emission unit R011.

   b. The emission testing shall be conducted to demonstrate compliance with the 90.0 % control efficiency limitation for organics.

Emissions Unit ID: **R001**

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 appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency.

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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

6. Compliance with the HAP emission limitation in term A.2.f shall be determined by the record keeping in term C.2.

7. Compliance with the PM, SO2, NOX and CO limits will be determined by multiplying the fuel usage by the AP-42 emission factor (section 1.3 and 1.4).

F. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 14-4569 as issued on May 12,1999.

2. The following terms and conditions are federally enforceable: A.2.2.a - A.2.2.h, B.1 - B.4, C.1 - C.3, D.1 - D.7 and E.1- E.7.

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
R002 - 5 Unit Hantscho Mark VI HWOPL, ID-538 with thermal oxidizer (modification)	OAC rule 3745-31-05(A)(3)	
		OAC rule 3745-31-05(D)
		OAC rule 3745-21-07(G)
		OAC rule 3745-17-11(B)
		OAC rule 3745-17-07(A)

Applicable Emissions Limitations/Control Measures	
See Terms A.2.a, A.2.b and A.2.d.	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-31-05(D) and OAC rule 3745-17-11.
Dryer and oxidizer emissions combined: 0.15 lb/MMBtu NOx from the thermal oxidizer. 0.1 lb/MMBtu NOx from the dryers 18.1 TPY NOx Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	See terms A.2.c, A.2.f, A.2.h and B.3.
0.37 lb/MMBtu CO from the thermal oxidizer. 0.084 lb/MMBtu CO from the dryers 12.1 TPY CO Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	Exempt (See section B.1.)
0.053 lb/MMBtu SO2 from the thermal oxidizer. 0.0006 lb/MMBtu SO2 from the dryers 2.0 TPY SO2 Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	0.551 lb/hour PM/PM10
0.015 lb/MMBtu PM/PM10 from the thermal oxidizer. 0.0076 lb/MMBtu PM/PM10 from the dryers 1.5 TPY PM/PM10 Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	Visible particulate emissions shall not exceed 20% opacity as a six-minute average.
56.1 TPY OC	

2. Additional Terms and Conditions

2.a Combined organic compound emissions from the oxidizer exhaust of emissions units R001, R002, R004, R008, R009 and R011 shall not exceed 30.37 pounds per hour.

2.b Daily organic compound emissions from each emissions units R001, R002, R004, R008, R009 and R011 shall not exceed 307.5 pounds per day, which includes the limits of 121.5 pounds per day for the oxidizer exhaust and 186.0 pounds per day from the fugitive emissions associated with the fountain solutions, blanket wash (including rubber revitalizer), metering roller clear, and non piling additive.

2.c The following Organic Compound (OC) contents shall not be exceeded for all emission units:

a.	Ink	50% by wt. OC
b.	Adhesives	1.0 % by wt. OC
c.	Blanket wash	100% by wt. OC
d.	Metering Roller Cleaner	100% by wt. OC
e.	Fountain solution No.1	30% by wt. OC
f.	Fountain solution No.2	85% by wt. OC
g.	Non piling additive	50% by wt. OC
h.	Fountain solution No. 3	35% by wt. OC
i.	Aqueous coatings	10% by wt. OC

2.d The permittee shall operate and maintain a thermal oxidizer capable of maintaining, at a minimum, a 90.0 % (by weight of organic compounds) control efficiency at maximum hourly coating capacity from the oven exhaust for emissions units R001, R002, R004, R008, R009 and R011.

2.e 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.

2.f The actual emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

2.g Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the OC content limits, usage limits, the use of a thermal oxidizer and compliance with the air toxics policy.

2.h The combined annual organic compound emissions from emissions units R001, R002, R004, R007, R008, R009 and R011 shall not exceed 98.6 tons per year 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.

2. The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when emissions units R001, R002, R004, R008, R009 and R011 are in operation shall not be more than 50 degrees Fahrenheit below the average combustion temperature during the most recent performance test that demonstrated compliance with the 90.0 percent overall VOC destruction efficiency requirement.

3. Coating and cleanup material usages for emissions units R001, R002, R004, R007, R008, R009 and R011 combined shall not exceed the following limits:

		Material Usages Tons/yr**
a.	Inks	1050
b.	Blanket wash***	60
c.	Metering Roller Cleaner	6
d.	Fountain solution No. 1*	65
e.	Fountain solution No. 2*	8

f.	Non Piling Additive	10
g.	Adhesives	50
h.	Fountain solution No. 3*	1.1
i.	Aqueous Coatings	9

* This usage limit is for the fountain solution concentrate.

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

*** Blanket wash includes rubber revitalizer.

4. To ensure an evaporative OC/VOC loss from the hand cleanup process of no more than 75% (by weight) from solvents having a vapor pressure greater than 10 mmHg (0.19 psia) at 20 degrees Celsius (68 degrees Fahrenheit), all rags utilized in the cleanup process shall be stored in closed containers.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit:

   a. The company identification of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating employed in this emissions unit.

   b. The percent (%) by weight of the organic compound content of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating for this emissions unit.

   c. The number of pounds of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating employed in this emissions unit.

   d. A record of each liquid organic material employed in each emissions unit indicating whether or not the liquid organic material is photochemically reactive as defined in OAC rule 3745-21-01(C)(5).

   e. The total rolling, 12-month summation of the ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating usage in Tons employed for emissions units R001, R002, R004, R007, R008, R009 and R011.

f. The total rolling, 12-month summation of the controlled Organic Compound (OC) emissions in tons per year from the inks, adhesives, blanket wash (including rubber revitalizer), metering roller cleaners, fountain solutions, non piling additives and aqueous coatings for emissions units R001, R002, R004, R007, R008, R009 and R011.

2. The permittee shall collect and record the following information each month for the entire facility:

a. The name and identification number of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating as applied or as concentrate.

b. The individual HAP* content for each HAP of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating in pounds of individual HAP per pound of material, as applied or as concentrate.

c. The total combined HAP content of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating in pounds of combined HAPs per pound of material, as applied or as concentrate [sum all the individual HAP contents from (b)].

d. The number of pounds of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating employed.

e. 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)].

f. The total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month [the sum of (c) times (d)].

g. The updated rolling, 12-month summation of the individual HAP emissions for each HAP from all coatings and cleanup materials employed, in pounds or tons.

h. The updated rolling, 12-month summation of the combined HAP emissions for all HAP from all coatings and cleanup materials employed, in pounds or tons.

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency 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 combustion temperature within the thermal oxidizer when emissions units R001, R002, R004, R008, R009 and R011 are in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, was more than 50 degrees Fahrenheit below the average combustion temperature during the most recent performance test that demonstrated compliance with the 90.0 percent overall VOC destruction efficiency requirement.

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

4. The permit to install for this emissions unit (R002) 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 this emissions unit 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):

Pollutant: Glycol ethers
TLV (ug/m3): 121,000
Maximum Hourly Emission Rate (lbs/hr): 5.72
Predicted 1 Hour Maximum Ground-Level Concentration at 26 meters (ug/m3):1999.4
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 2881

Pollutant: Napthalene
TLV (ug/m3): 52,000
Maximum Hourly Emission Rate (lbs/hr): 0.027
Predicted 1 Hour Maximum Ground-Level Concentration at 26 meters (ug/m3): 5.3
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 1238

Physical changes to or in the method of operation of the emissions unit after it's 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.).

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 it's 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 the photochemically reactive material(s) and the estimated total quantity of material(s) emitted each such day.

2. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emissions limitations in term A.2.f. 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.

3. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified in term B.2.

4. The permittee shall submit reports which specify the updated rolling, 12-month summation of organic compound emissions in TPY for each calendar month from emissions units R001, R002, R004, R007, R008, R009 and R011, combined.

5. The permittee shall submit reports which specify the updated rolling, 12-month summation of total usages in tons from the inks, adhesives, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additives and aqueous coatings for emissions unit R001, R002, R004, R007, R008, R009 and R011, combined for each calendar month.

6. The permittee shall submit deviation reports which identify all exceedances of the OC content limitations in term A.2.c.

7. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing lines and related coatings) shall be used to determine the OC contents of the inks and coatings.

2. The OC emissions are calculated by multiplying the percent (%) by weight OC content times the material usage rate times the ink retention consistent with the Ohio EPA Engineering Guide #56 times the control efficiency.

3. Compliance with the visible particulate emission limitation in term A.1 shall be demonstrated by Method 9, 40 CFR Part 60, Appendix A.

4. Compliance with the percent by weight OC content and the usage limitations shall be determined by the recordkeeping in term C.1.

5. The permittee shall conduct emission testing for the oxidizer for emissions units R001, R002, R004, R008, R009 and R011 in accordance with the following requirements:

   a. The emission testing shall be conducted within 3 months after the initial operation of emission unit R011.

   b. The emission testing shall be conducted to demonstrate compliance with the 90.0 % control efficiency limitation for organics.

   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 appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency.

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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

6. Compliance with the HAP emission limitation in term A.2.f shall be determined by the record keeping in term C.2.

7. Compliance with the PM, SO2, NOX and CO limits will be determined by multiplying the fuel usage by the AP-42 emission factor (section 1.3 and 1.4).

F. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 14-4569 as issued on May 12,1999.

2. The following terms and conditions are federally enforceable: A.2.2.a - A.2.2.h, B.1 - B.4, C.1 - C.3, D.1 - D.7 and E.1- E.7.

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
R004 - 8 Unit Harris M-1000B HWOPL ID-838A with thermal oxidizer (modification)	OAC rule 3745-31-05(A)(3)	
		OAC rule 3745-31-05(D)
		OAC rule 3745-21-07(G)
		OAC rule 3745-17-11(B)
		OAC rule 3745-17-07(A)

Applicable Emissions Limitations/Control Measures	
See Terms A.2.a, A.2.b, and A.2.d.	56.1 TPY OC The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-31-05(D) and OAC rule 3745-17-11.
Dryer and oxidizer emissions combined: 0.15 lb/MMBtu NOx from the thermal oxidizer. 0.1 lb/MMBtu NOx from the dryers 18.1 TPY NOx Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	See terms A.2.c, A.2.f, A.2.h and B.3. Exempt (See section B.1.)
0.37 lb/MMBtu CO from the thermal oxidizer. 0.084 lb/MMBtu CO from the dryers 12.1 TPY CO Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	0.551 lb/hour PM/PM10 Visible particulate emissions shall not exceed 20% opacity as a six-minute average.
0.053 lb/MMBtu SO2 from the thermal oxidizer. 0.0006 lb/MMBtu SO2 from the dryers 2.0 TPY SO2 Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	
0.015 lb/MMBtu PM/PM10 from the thermal oxidizer. 0.0076 lb/MMBtu PM/PM10 from the dryers 1.5 TPY PM/PM10 Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	

Emissions Unit ID: **R004**

2. Additional Terms and Conditions

2.a Combined organic compound emissions from the oxidizer exhaust of emissions units R001, R002, R004, R008, R009 and R011 shall not exceed 30.37 pounds per hour.

2.b Daily organic compound emissions from each emissions units R001, R002, R004, R008, R009 and R011 shall not exceed 307.5 pounds per day, which includes the limits of 121.5 pounds per day for the oxidizer exhaust and 186.0 pounds per day from the fugitive emissions associated with the fountain solutions, blanket wash (including rubber revitalizer), metering roller clear, and non piling additive.

2.c The following Organic Compound (OC) contents shall not be exceeded for all emission units:

a.	Ink	50% by wt. OC
b.	Adhesives	1.0 % by wt. OC
c.	Blanket wash	100% by wt. OC
d.	Metering Roller Cleaner	100% by wt. OC
e.	Fountain solution No.1	30% by wt. OC
f.	Fountain solution No.2	85% by wt. OC
g.	Non piling additive	50% by wt. OC
h.	Fountain solution No. 3	35% by wt. OC
i.	Aqueous coatings	10% by wt. OC

2.d The permittee shall operate and maintain a thermal oxidizer capable of maintaining, at a minimum, a 90.0 % (by weight of organic compounds) control efficiency at maximum hourly coating capacity from the oven exhaust for emissions units R001, R002, R004, R008, R009 and R011.

2.e 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.

2.f The actual emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

2.g Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the OC content

limits, usage limits, the use of a thermal oxidizer and compliance with the air toxics policy.

2.h The combined annual organic compound emissions from emissions units R001, R002, R004, R007, R008, R009 and R011 shall not exceed 98.6 tons per year 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.

2. The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when emissions units R001, R002, R004, R008, R009 and R011 are in operation shall not be more than 50 degrees Fahrenheit below the average combustion temperature during the most recent performance test that demonstrated compliance with the 90.0 percent overall VOC destruction efficiency requirement.

3. Coating and cleanup material usages for emissions units R001, R002, R004, R007, R008, R009 and R011 combined shall not exceed the following limits:

		Material Usages Tons/yr**
a.	Inks	1050
b.	Blanket wash***	60
c.	Metering Roller Cleaner	6
d.	Fountain solution No. 1*	65
e.	Fountain solution No. 2*	8
f.	Non Piling Additive	10
g.	Adhesives	50
h.	Fountain solution No. 3*	1.1
i.	Aqueous Coatings	9

* This usage limit is for the fountain solution concentrate.
** Compliance with the annual usage limitations shall be determined on a rolling, 12-month summation.
*** Blanket wash includes rubber revitalizer.

4. To ensure an evaporative OC/VOC loss from the hand cleanup process of no more than 75% (by weight) from solvents having a vapor pressure greater than 10 mmHg (0.19 psia) at 20 degrees Celsius (68 degrees Fahrenheit), all rags utilized in the cleanup process shall be stored in closed

containers.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit:

   a. The company identification of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating employed in this emissions unit.

   b. The percent (%) by weight of the organic compound content of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating for this emissions unit.

   c. The number of pounds of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating employed in this emissions unit.

   d. A record of each liquid organic material employed in each emissions unit indicating whether or not the liquid organic material is photochemically reactive as defined in OAC rule 3745-21-01(C)(5).

   e. The total rolling, 12-month summation of the ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating usage in Tons employed for emissions units R001, R002, R004, R007, R008, R009 and R011.

   f. The total rolling, 12-month summation of the controlled Organic Compound (OC) emissions in tons per year from the inks, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additives and aqueous coatings for emissions units R001, R002, R004, R007, R008, R009 and R011.

2. The permittee shall collect and record the following information each month for the entire facility:

a. The name and identification number of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating as applied or as concentrate.

b. The individual HAP* content for each HAP of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating in pounds of individual HAP per pound of material, as applied or as concentrate.

c. The total combined HAP content of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating in pounds of combined HAPs per pound of material, as applied or as concentrate [sum all the individual HAP contents from (b)].

d. The number of pounds of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating material employed.

e. 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)].

f. The total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month [the sum of (c) times (d)].

g. The updated rolling, 12-month summation of the individual HAP emissions for each HAP from all coatings and cleanup materials employed, in pounds or tons.

h. The updated rolling, 12-month summation of the combined HAP emissions for all HAP from all coatings and cleanup materials employed, in pounds or tons.

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency 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 combustion temperature within the thermal oxidizer when emissions units R001, R002, R004, R008, R009 and R011 are in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, was more than 50 degrees Fahrenheit below the average combustion temperature during the most recent performance test that demonstrated compliance with the 90.0 percent overall VOC destruction efficiency requirement.

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

4. The permit to install for this 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 this emissions unit 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):

Pollutant: Glycol ethers
TLV (ug/m3): 121,000
Maximum Hourly Emission Rate (lbs/hr): 5.72
Predicted 1 Hour Maximum Ground-Level Concentration at 26 meters (ug/m3):1999.4
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 2881

Pollutant: Napthalene
TLV (ug/m3): 52,000
Maximum Hourly Emission Rate (lbs/hr): 0.027
Predicted 1 Hour Maximum Ground-Level Concentration at 26 meters (ug/m3): 5.3
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 1238

Physical changes to or in the method of operation of the emissions unit after it's 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.).

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 it's 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 the photochemically reactive material(s) and the estimated total quantity of material(s) emitted each such day.

2. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emissions limitations in term A.2.f. 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.

3. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time

during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified in term B.2.

4. The permittee shall submit reports which specify the updated rolling, 12-month summation of organic compound emissions in TPY for each calendar month from emissions units R001, R002, R004, R007, R008, R009 and R011, combined.

5. The permittee shall submit reports which specify the updated rolling, 12-month summation of total usages in tons from the inks, adhesives, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solutions, non piling additives and aqueous coatings for emissions units R001, R002, R004, R007, R008, R009 and R011, combined for each calendar month.

6. The permittee shall submit deviation reports which identify all exceedances of the OC content limitations in term A.2.c.

7. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing lines and related coatings) shall be used to determine the OC contents of the inks and coatings.

2. The OC emissions are calculated by multiplying the percent (%) by weight OC content times the material usage rate times the ink retention consistent with the Ohio EPA Engineering Guide #56 times the control efficiency.

3. Compliance with the visible particulate emission limitation in term A.1 shall be demonstrated by Method 9, 40 CFR Part 60, Appendix A.

4. Compliance with the percent by weight OC content and the usage limitations shall be determined by the recordkeeping in term C.1.

5. The permittee shall conduct emission testing for the oxidizer for emissions units R001, R002, R004, R008, R009 and R011 in accordance with the following requirements:

   a. The emission testing shall be conducted within 3 months after the initial operation of emission unit R011.

   b. The emission testing shall be conducted to demonstrate compliance with the 90.0 % control efficiency limitation for organics.

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 appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency.

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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

6. Compliance with the HAP emission limitation in term A.2.f shall be determined by the record keeping in term C.2.

7. Compliance with the PM, SO2, NOX and CO limits will be determined by multiplying the fuel usage by the AP-42 emission factor (section 1.3 and 1.4).

F. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 14-4569 as issued on May 12,1999.

2. The following terms and conditions are federally enforceable: A.2.2.a - A.2.2.h, B.1 - B.4, C.1 - C.3, D.1 - D.7 and E.1- E.7.

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
R007 - Hiedelburg Sheetfed Offset Printing Press	OAC rule 3745-31-05(A)(3)	See Terms A.2.a. 4.64 TPY OC The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D)
	OAC rule 3745-31-05(D)	See Terms A.2.b, A.2.c. and B.2.
	OAC rule 3745-21-07(G)	Exempt (See section B.1.)

2. Additional Terms and Conditions

2.a Daily organic emissions from emissions unit R007 shall not exceed 36.5 pounds per day .

2.b The following Organic Compound (OC) contents shall not be exceeded for all emission units:

a.	Ink	50% by wt. OC
b.	Adhesives	1.0 % by wt. OC
c.	Blanket wash	100% by wt. OC
d.	Metering Roller Cleaner	100% by wt. OC
e.	Fountain solution No. 1	30% by wt. OC

f.	Fountain solution No. 2	85% by wt. OC
g.	Fountain solution No. 3	35% by wt. OC
h.	Non piling additive	50% by wt. OC
i.	Aqueous coatings	10% by wt. OC

2.c The actual emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

2.d Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the OC content limits and usage limits.

B. Operational Restrictions

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

2. Coating and cleanup material usages for emissions units R001, R002, R004, R007, R008, R009 and R011 combined shall not exceed the following limits:

		Material Usages Tons/yr**
a.	Inks	1050
b.	Blanket wash***	60
c.	Metering Roller Cleaner	6
d.	Fountain solution No. 1*	65
e.	Fountain solution No. 2*	8
f.	Non Piling Additive	10
g.	Adhesives	50
h.	Fountain solution No. 3*	1.1
i.	Aqueous Coatings	9

* This usage limit is for the fountain solution concentrate.
** Compliance with the annual usage limitations shall be determined on a rolling, 12-month summation.
*** Blanket wash includes rubber revitalizer.

3. To ensure an evaporative OC/VOC loss from the hand cleanup process of no more than 75% (by weight) from solvents having a vapor pressure greater than 10 mmHg (0.19 psia) at 20 degrees

Celsius (68 degrees Fahrenheit), all rags utilized in the cleanup process shall be stored in closed containers.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit:

   a. The company identification of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating employed in this emissions unit.

   b. The percent (%) by weight of the organic compound content of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating for this emissions unit.

   c. The number of pounds of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating 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 defined in OAC rule 3745-21-01(C)(5).

   e. The total rolling, 12-month summation of the ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating in Tons employed for emissions units R001, R002, R004, R007, R008, R009 and R011.

   f. The total rolling, 12-month summation of the controlled Organic Compound (OC) emissions in tons per year from the inks, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating for emissions units R001, R002, R004, R007, R008, R009 and R011.

2. The permittee shall collect and record the following information each month for the entire facility:

   a. The name and identification number of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating as applied or as concentrate.

   b. The individual HAP* content for each HAP of each ink, adhesive, blanket wash (including

rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating in pounds of individual HAP per pound of material, as applied or as concentrate.

c. The total combined HAP content of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating in pounds of combined HAPs per pound of material, as applied or as concentrate [sum all the individual HAP contents from (b)].

d. The number of pounds of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating material employed.

e. 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)].

f. The total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month [the sum of (c) times (d)].

g. The updated rolling, 12-month summation of the individual HAP emissions for each HAP from all coatings and cleanup materials employed, in pounds or tons.

h. The updated rolling, 12-month summation of the combined HAP emissions for all HAP from all coatings and cleanup materials employed, in pounds or tons.

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency contact. This information does not have to be kept on a line-by-line basis.

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 the photochemically reactive material(s) and the estimated total quantity of material(s) emitted each such day.

2. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emissions limitations in term A.2.c. 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.

3. The permittee shall submit reports which specify the updated rolling, 12-month summation of organic compound emissions in TPY for each calendar month from emissions units R001, R002, R004, R007, R008, R009 and R011, combined.

4. The permittee shall submit reports which specify the updated rolling, 12-month summation of total usages in tons from the inks, adhesives, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additives and aqueous coatings for emissions unit R001, R002, R004, R007, R008, R009 and R011, combined for each calendar month.

5. The permittee shall submit deviation reports which identify all exceedances of the OC content limitations in term A.2.b.

6. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing lines and related coatings) shall be used to determine the OC contents of the inks and coatings.

2. The OC emissions are calculated by multiplying the percent (%) by weight OC content times the material usage rate times the ink retention consistent with the Ohio EPA Engineering Guide #56.

3. Compliance with the percent by weight OC content and the usage limitations shall be determined by the recordkeeping in term C.1.

4. Compliance with the HAP emission limitation will be determined by the record keeping in term C.2.

F. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 14-4569 as issued on May 12,1999.

2. The following terms and conditions are federally enforceable: A.2.2.a - A.2.2.d, B.1 - B.3, C.1, C.2, D.1 - D.6 and E.1- E.5.

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
R008 - 6 Unit Hantscho HWOPL ID-636 with thermal oxidizer (modification)	OAC rule 3745-31-05(A)(3)	
		OAC rule 3745-31-05(D)
		OAC rule 3745-21-07(G)
		OAC rule 3745-17-11(B)
		OAC rule 3745-17-07(A)

Applicable Emissions Limitations/Control Measures	
See Terms A.2.a, A.2.b and A.2.d.	56.1 TPY The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-31-05(D) and OAC rule 3745-17-11.
Dryer and oxidizer emissions combined: 0.15 lb/MMBtu NOx from the thermal oxidizer. 0.1 lb/MMBtu NOx from the dryers 18.1 TPY NOx Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	See terms A.2.c, A.2.f, A.2.h and B.3. Exempt (See section B.1.)
0.37 lb/MMBtu CO from the thermal oxidizer. 0.084 lb/MMBtu CO from the dryers 12.1 TPY CO Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	0.551 lb/hour PM/PM10 Visible particulate emissions shall not exceed 20% opacity as a six-minute average.
0.053 lb/MMBtu SO2 from the thermal oxidizer. 0.0006 lb/MMBtu SO2 from the dryers 2.0 TPY SO2 Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	
0.015 lb/MMBtu PM/PM10 from the thermal oxidizer. 0.0076 lb/MMBtu PM/PM10 from the dryers 1.5 TPY PM/PM10 Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	

Emissions Unit ID: **R008**

2. Additional Terms and Conditions

2.a Combined organic compound emissions from the oxidizer exhaust of emissions units R001, R002, R004, R008, R009 and R011 shall not exceed 30.37 pounds per hour.

2.b Daily organic compound emissions from each emissions units R001, R002, R004, R008, R009 and R011 shall not exceed 307.5 pounds per day, which includes the limits of 121.5 pounds per day for the oxidizer exhaust and 186.0 pounds per day from the fugitive emissions associated with the fountain solutions, blanket wash (including rubber revitalizer), metering roller clear, and non piling additive.

2.c The following Organic Compound (OC) contents shall not be exceeded for all emission units:

a.	Ink	50% by wt. OC
b.	Adhesives	1.0 % by wt. OC
c.	Blanket wash	100% by wt. OC
d.	Metering Roller Cleaner	100% by wt. OC
e.	Fountain solution No.1	30% by wt. OC
f.	Fountain solution No.2	85% by wt. OC
g.	Non piling additive	50% by wt. OC
h.	Fountain solution No. 3	35% by wt. OC
i.	Aqueous coatings	10% by wt. OC

2.d The permittee shall operate and maintain a thermal oxidizer capable of maintaining, at a minimum, a 90.0 % (by weight of organic compounds) control efficiency at maximum hourly coating capacity from the oven exhaust for emissions units R001, R002, R004, R008, R009 and R011.

2.e 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.

2.f The actual emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

2.g Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the OC content limits, usage limits, the use of a thermal oxidizer and compliance with the Air Toxics

Policy.

2.h The combined annual organic compound emissions from emissions units R001, R002, R004, R007, R008, R009 and R011 shall not exceed 98.6 tons per year 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.

2. The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when emissions units R001, R002, R004, R008, R009 and R011 are in operation shall not be more than 50 degrees Fahrenheit below the average combustion temperature during the most recent performance test that demonstrated compliance with the 90.0 percent overall VOC destruction efficiency requirement.

3. Coating and cleanup material usages for emissions units R001, R002, R004, R007, R008, R009 and R011 combined shall not exceed the following limits:

		Material Usages Tons/yr**
a.	Inks	1050
b.	Blanket wash***	60
c.	Metering Roller Cleaner	6
d.	Fountain solution No. 1*	65
e.	Fountain solution No. 2*	8
f.	Non Piling Additive	10
g.	Adhesives	50
h.	Fountain solution No. 3*	1.1
i.	Aqueous Coatings	9

* This usage limit is for the fountain solution concentrate.
** Compliance with the annual usage limitations shall be determined on a rolling, 12-month summation.
*** Blanket wash includes rubber revitalizer.

4. To ensure an evaporative OC/VOC loss from the hand cleanup process of no more than 75% (by weight) from solvents having a vapor pressure greater than 10 mmHg (0.19 psia) at 20 degrees Celsius (68 degrees Fahrenheit), all rags utilized in the cleanup process shall be stored in closed

containers.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit:

   a. The company identification of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating employed in this emissions unit.

   b. The percent (%) by weight of the organic compound content of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating for this emissions unit.

   c. The number of pounds of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating employed in this emissions unit.

   d. A record of each liquid organic material employed in each emissions unit indicating whether or not the liquid organic material is photochemically reactive as defined in OAC rule 3745-21-01(C)(5).

   e. The total rolling, 12-month summation of the ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating usage in Tons employed for emissions units R001, R002, R004, R007, R008, R009 and R011.

   f. The total rolling, 12-month summation of the controlled Organic Compound (OC) emissions in tons per year from the inks, adhesives, blanket wash (including rubber revitalizer), metering roller cleaners, fountain solutions, non piling additives and aqueous coatings for emissions units R001, R002, R004, R007, R008, R009 and R011.

2. The permittee shall collect and record the following information each month for the entire facility:

   a. The name and identification number of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating as applied or as concentrate.

   b. The individual HAP* content for each HAP of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and

aqueous coating in pounds of individual HAP per pound of material, as applied or as concentrate.

c. The total combined HAP content of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating in pounds of combined HAPs per pound of material, as applied or as concentrate [sum all the individual HAP contents from (b)].

d. The number of pounds of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating material employed.

e. 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)].

f. The total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month [the sum of (c) times (d)].

g. The updated rolling, 12-month summation of the individual HAP emissions for each HAP from all coatings and cleanup materials employed, in pounds or tons.

h. The updated rolling, 12-month summation of the combined HAP emissions for all HAP from all coatings and cleanup materials employed, in pounds or tons.

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency 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 combustion temperature within the thermal oxidizer when emissions units R001, R002, R004, R008, R009 and R011 are in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, was more than 50 degrees Fahrenheit below the average combustion

temperature during the most recent performance test that demonstrated compliance with the 90.0 percent overall VOC destruction efficiency requirement.

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

4. The permit to install for this emissions unit (R008) 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 this emissions unit 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):

Pollutant: Glycol ethers
TLV (ug/m3): 121,000
Maximum Hourly Emission Rate (lbs/hr): 5.72
Predicted 1 Hour Maximum Ground-Level Concentration at 26 meters (ug/m3):1999.4
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 2881

Pollutant: Napthalene
TLV (ug/m3): 52,000
Maximum Hourly Emission Rate (lbs/hr): 0.027
Predicted 1 Hour Maximum Ground-Level Concentration at 26 meters (ug/m3): 5.3
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 1238

Physical changes to or in the method of operation of the emissions unit after it's 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.).

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 it's 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 the photochemically reactive material(s) and the estimated total quantity of material(s) emitted each such day.

2. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emissions limitations in term A.2.f. 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.

3. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified in term B.2.

4. The permittee shall submit reports which specify the updated rolling, 12-month summation of organic compound emissions in TPY for each calendar month from emissions units R001, R002, R004, R007, R008, R009 and R011, combined.

5. The permittee shall submit reports which specify the updated rolling, 12-month summation of total usages in tons from the inks, adhesives, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating for emission units R001, R002, R004, R007, R008, R009 and R011, combined for each calendar month.

6. The permittee shall submit deviation reports which identify all exceedances of the OC content limitations in term A.2.c.

7. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing lines and related coatings) shall be used to determine the OC contents of the inks and coatings.

2. The OC emissions are calculated by multiplying the percent (%) by weight OC content times the material usage rate times the ink retention consistent with the Ohio EPA Engineering Guide #56 times the control efficiency.

3. Compliance with the visible particulate emission limitation in term A.1 shall be demonstrated by Method 9, 40 CFR Part 60, Appendix A.

4. Compliance with the percent by weight OC content and the usage limitations shall be determined by the recordkeeping in term C.1.

5. The permittee shall conduct emission testing for the oxidizer for emissions units R001, R002, R004, R008, R009 and R011 in accordance with the following requirements:

a. The emission testing shall be conducted within 3 months after the initial operation of emission unit R011.

b. The emission testing shall be conducted to demonstrate compliance with the 90.0 % control efficiency limitation for organics.

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 appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency.

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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

6. Compliance with the HAP emission limitation in term A.2.f shall be determined by the record keeping in term C.2.

7. Compliance with the PM, SO2, NOX and CO limits will be determined by multiplying the fuel usage by the AP-42 emission factor (section 1.3 and 1.4).

F. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 14-4569 as issued on May 12,1999.

2. The following terms and conditions are federally enforceable: A.2.2.a - A.2.2.h, B.1 - B.4, C.1 - C.3, D.1 - D.7 and E.1- E.7.

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
R009 - 5 Unit Hantscho HWOPL ID-536 with thermal oxidizer (modification)	OAC rule 3745-31-05(A)(3)	
		OAC rule 3745-31-05(D)
		OAC rule 3745-21-07(G)
		OAC rule 3745-17-11(B)
		OAC rule 3745-17-07(A)

Applicable Emissions Limitations/Control Measures	
See Terms A.2.a, A.2.b and A.2.d	56.1 TPY OC
Dryer and oxidizer emissions combined: 0.15 lb/MMBtu NOx from the thermal oxidizer. 0.1 lb/MMBtu NOx from the dryers 18.1 TPY NOx Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-31-05(D) and OAC rule 3745-17-11. See terms A.2.c, A.2.f, A.2.h and B.3.
0.37 lb/MMBtu CO from the thermal oxidizer. 0.084 lb/MMBtu CO from the dryers 12.1 TPY CO Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	Exempt (See section B.1.)
0.053 lb/MMBtu SO2 from the thermal oxidizer. 0.0006 lb/MMBtu SO2 from the dryers 2.0 TPY SO2 Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	0.551 lb/hour PM/PM10
0.015 lb/MMBtu PM/PM10 from the thermal oxidizer. 0.0076 lb/MMBtu PM/PM10 from the dryers 1.5 TPY PM/PM10 Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	Visible particulate emissions shall not exceed 20% opacity as a six-minute average.

2. Additional Terms and Conditions

2.a Combined organic compound emissions from the oxidizer exhaust of emissions units R001, R002, R004, R008, R009 and R011 shall not exceed 30.37 pounds per hour.

2.b Daily organic compound emissions from each emissions units R001, R002, R004, R008, R009 and R011 shall not exceed 307.5 pounds per day, which includes the limits of 121.5 pounds per day for the oxidizer exhaust and 186.0 pounds per day from the fugitive emissions associated with the fountain solutions, blanket wash (including rubber revitalizer), metering roller clear, and non piling additive.

2.c The following Organic Compound (OC) contents shall not be exceeded for all emission units:

a.	Ink	50% by wt. OC
b.	Adhesives	1.0 % by wt. OC
c.	Blanket wash	100% by wt. OC
d.	Metering Roller Cleaner	100% by wt. OC
e.	Fountain solution No.1	30% by wt. OC
f.	Fountain solution No.2	85% by wt. OC
g.	Non piling additive	50% by wt. OC
h.	Fountain solution No. 3	35% by wt. OC
i	.Aqueous coatings	10% by wt. OC

2.d The permittee shall operate and maintain a thermal oxidizer capable of maintaining, at a minimum, a 90.0 % (by weight of organic compounds) control efficiency at maximum hourly coating capacity from the oven exhaust for emissions units R001, R002, R004, R008, R009 and R011.

2.e 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.

2.f The actual emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

2.g Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the OC content limits, usage limits, the use of a thermal oxidizer and compliance with the Air Toxics

Policy.

2.h The combined annual organic compound emissions from emissions units R001, R002, R004, R007, R008, R009 and R011 shall not exceed 98.6 tons per year 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.

2. The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when emissions units R001, R002, R004, R008, R009 and R011 are in operation shall not be more than 50 degrees Fahrenheit below the average combustion temperature during the most recent performance test that demonstrated compliance with the 90.0 percent overall VOC destruction efficiency requirement.

3. Coating and cleanup material usages for emissions units R001, R002, R004, R007, R008, R009 and R011 combined shall not exceed the following limits:

		Material Usages Tons/yr**
a.	Inks	1050
b.	Blanket wash***	60
c.	Metering Roller Cleaner	6
d.	Fountain solution No. 1*	65
e.	Fountain solution No. 2*	8
f.	Non Piling Additive	10
g.	Adhesives	50
h.	Fountain solution No. 3*	1.1
i.	Aqueous Coatings	9

* This usage limit is for the fountain solution concentrate.
** Compliance with the annual usage limitations shall be determined on a rolling, 12-month summation.
*** Blanket wash includes rubber revitalizer.

4. To ensure an evaporative OC/VOC loss from the hand cleanup process of no more than 75% (by weight) from solvents having a vapor pressure greater than 10 mmHg (0.19 psia) at 20 degrees Celsius (68 degrees Fahrenheit), all rags utilized in the cleanup process shall be stored in closed containers.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit:

   a. The company identification of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating employed in this emissions unit.

   b. The percent (%) by weight of the organic compound content of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating for this emissions unit.

   c. The number of pounds of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating employed in this emissions unit.

   d. A record of each liquid organic material employed in each emissions unit indicating whether or not the liquid organic material is photochemically reactive as defined in OAC rule 3745-21-01(C)(5).

   e. The total rolling, 12-month summation of the ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating usage in Tons employed for emissions units R001, R002, R004, R008, R009 and R011.

   f. The total rolling, 12-month summation of the controlled Organic Compound (OC) emissions in tons per year from the inks, adhesives, blanket wash (including rubber revitalizer), metering roller cleaners, fountain solutions, non piling additives and aqueous coatings for emissions units R001, R002, R004, R007, R008, R009 and R011.

2. The permittee shall collect and record the following information each month for the entire facility:

   a. The name and identification number of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating as applied or as concentrate.

   b. The individual HAP* content for each HAP of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating in pounds of individual HAP per pound of material, as applied or as concentrate.

   c. The total combined HAP content of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating in pounds of combined HAPs per pound of material, as applied or as concentrate [sum all the individual HAP contents from (b)].

   d. The number of pounds of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, aqueous coating and non piling additive material employed.

   e. 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)].

   f. The total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month [the sum of (c) times (d)].

   g. The updated rolling, 12-month summation of the individual HAP emissions for each HAP from all coatings and cleanup materials employed, in pounds or tons.

   h. The updated rolling, 12-month summation of the combined HAP emissions for all HAP from all coatings and cleanup materials employed, in pounds or tons.

   * A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency 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 combustion temperature within the thermal oxidizer when emissions units R001, R002, R004, R008, R009 and R011 are in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated

and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer, was more than 50 degrees Fahrenheit below the average combustion temperature during the most recent performance test that demonstrated compliance with the 90.0 percent overall VOC destruction efficiency requirement.

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

4. The permit to install for this emissions unit (R009) 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 this emissions unit 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):

Pollutant: Glycol ethers
TLV (ug/m3): 121,000
Maximum Hourly Emission Rate (lbs/hr): 5.72
Predicted 1 Hour Maximum Ground-Level Concentration at 26 meters (ug/m3):1999.4
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 2881

Pollutant: Napthalene
TLV (ug/m3): 52,000
Maximum Hourly Emission Rate (lbs/hr): 0.027
Predicted 1 Hour Maximum Ground-Level Concentration at 26 meters (ug/m3): 5.3
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 1238

Physical changes to or in the method of operation of the emissions unit after it's 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.).

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 it's 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 the photochemically reactive material(s) and the estimated total quantity of material(s) emitted each such day.

2. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emissions limitations in term A.2.f. 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.

3. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified in term B.2.

4. The permittee shall submit reports which specify the updated rolling, 12-month summation of organic compound emissions in TPY for each calendar month from emissions units R001, R002, R004, R007, R008, R009 and R011, combined.

5. The permittee shall submit reports which specify the updated rolling, 12-month summation of total usages in tons from the inks, adhesives, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution and non piling additives for emission units R001, R002, R004, R007, R008, R009 and R011, combined for each calendar month.

6. The permittee shall submit deviation reports which identify all exceedances of the OC content limitations in term A.2.c.

7. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing lines and related coatings) shall be used to determine the OC contents of the inks and coatings.

2. The OC emissions are calculated by multiplying the percent (%) by weight OC content times the material usage rate times the ink retention consistent with the Ohio EPA Engineering Guide #56 times the control efficiency.

3. Compliance with the visible particulate emission limitation in term A.1 shall be demonstrated by Method 9, 40 CFR Part 60, Appendix A.

4. Compliance with the percent by weight OC content and the usage limitations shall be determined by the recordkeeping in term C.1.

5. The permittee shall conduct emission testing for the oxidizer for emissions units R001, R002, R004, R008, R009 and R011 in accordance with the following requirements:

a. The emission testing shall be conducted within 3 months after the initial operation of emission unit R011.

b. The emission testing shall be conducted to demonstrate compliance with the 90.0 % control efficiency limitation for organics.

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 appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency.

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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

6. Compliance with the HAP emission limitation in term A.2.f shall be determined by the record keeping in term C.2.

7. Compliance with the PM, SO2, NOX and CO limits will be determined by multiplying the fuel usage by the AP-42 emission factor (section 1.3 and 1.4).

F. Miscellaneous Requirements

1. The terms and conditions listed in this permit to install shall supercede all the air pollution control requirements for this emission unit contained in permit to install 14-4569 as issued on May 12,1999.

2. The following terms and conditions are federally enforceable: A.2.2.a - A.2.2.h, B.1 - B.4, C.1 - C.3, D.1 - D.7 and E.1- E.7.

Emissions Unit ID: **R011**

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.

Operations, Property, and/or Equipment	Applicable Rules/Requirements	
R011 - 5 Unit Harris Heatset Press No 538B with thermal oxidizer	OAC rule 3745-31-05(A)(3)	
		OAC rule 3745-31-05(D)
		OAC rule 3745-21-07(G)
		OAC rule 3745-17-11(B)
		OAC rule 3745-17-07(A)

Applicable Emissions Limitations/Control Measures	
See Terms A.2.a, A.2.b and A.2.d	56.1 TPY OC
Dryer and oxidizer emissions combined: 0.15 lb/MMBtu NOx from the thermal oxidizer. 0.1 lb/MMBtu NOx from the dryers 18.1 TPY NOx Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A), OAC rule 3745-31-05(D) and OAC rule 3745-17-11. See terms A.2.c, A.2.f, A.2.h and B.3.
0.37 lb/MMBtu CO from the thermal oxidizer. 0.084 lb/MMBtu CO from the dryers 12.1 TPY CO Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	Exempt (See section B.1.)
0.053 lb/MMBtu SO2 from the thermal oxidizer. 0.0006 lb/MMBtu SO2 from the dryers 2.0 TPY SO2 Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	0.551 lb/hour PM/PM10
0.015 lb/MMBtu PM/PM10 from the thermal oxidizer. 0.0076 lb/MMBtu PM/PM10 from the dryers 1.5 TPY PM/PM10 Total from emissions unit R001, R002, R004, R008, R009 and R011 combined.	Visible particulate emissions shall not exceed 20% opacity as a six-minute average.

2. Additional Terms and Conditions

2.a Combined organic compound emissions from the oxidizer exhaust of emissions units R001, R002, R004, R008, R009 and R011 shall not exceed 30.37 pounds per hour.

2.b Daily organic compound emissions from each emissions units R001, R002, R004, R008, R009 and R011 shall not exceed 307.5 pounds per day, which includes the limits of 121.5 pounds per day for the oxidizer exhaust and 186.0 pounds per day from the fugitive emissions associated with the fountain solutions, blanket wash (including rubber revitalizer), metering roller clear, and non piling additive.

2.c The following Organic Compound (OC) contents shall not be exceeded for all emission units:

a.	Ink	50% by wt. OC
b.	Adhesives	1.0 % by wt. OC
c.	Blanket wash	100% by wt. OC
d.	Metering Roller Cleaner	100% by wt. OC
e.	Fountain solution No.1	30% by wt. OC
f.	Fountain solution No.2	85% by wt. OC
g.	Non piling additive	50% by wt. OC
h.	Fountain solution No. 3	35% by wt. OC
i.	Aqueous coatings	10% by wt. OC

2.d The permittee shall operate and maintain a thermal oxidizer capable of maintaining, at a minimum, a 90.0 % (by weight of organic compounds) control efficiency at maximum hourly coating capacity from the oven exhaust for emissions units R001, R002, R004, R008, R009 and R011.

2.e 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.

2.f The actual emissions of Hazardous Air Pollutants (HAPs) as identified in Section 112(b) of Title III of the Clean Air Act from this facility shall not exceed 9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs. Compliance with the above limitations shall be based on a rolling, 12-month summation.

2.g Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the OC content

limits, usage limits, the use of a thermal oxidizer and compliance with the Air Toxics Policy.

2.h The combined annual organic compound emissions from emissions units R001, R002, R004, R007, R008, R009 and R011 shall not exceed 98.6 tons per year 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.

2. The average combustion temperature within the thermal oxidizer, for any 3-hour block of time when emissions units R001, R002, R004, R008, R009 and R011 are in operation shall not be more than 50 degrees Fahrenheit below the average combustion temperature during the most recent performance test that demonstrated compliance with the 90.0 percent overall VOC destruction efficiency requirement.

3. Coating and cleanup material usages for emissions units R001, R002, R004, R007, R008, R009 and R011 combined shall not exceed the following limits:

		Material Usages Tons/yr**
a.	Inks	1050
b.	Blanket wash***	60
c.	Metering Roller Cleaner	6
d.	Fountain solution No. 1*	65
e.	Fountain solution No. 2*	8
f.	Non Piling Additive	10
g.	Adhesives	50
h.	Fountain solution No. 3*	1.1
i.	Aqueous Coatings	9

* This usage limit is for the fountain solution concentrate.
** Compliance with the annual usage limitations shall be determined on a rolling, 12-month summation.
*** Blanket wash includes rubber revitalizer.

4. To ensure an evaporative OC/VOC loss from the hand cleanup process of no more than 75% (by weight) from solvents having a vapor pressure greater than 10 mmHg (0.19 psia) at 20 degrees Celsius (68 degrees Fahrenheit), all rags utilized in the cleanup process shall be stored in closed

containers.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for this emissions unit:

   a. The company identification of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating employed in this emissions unit.

   b. The percent (%) by weight of the organic compound content of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating for this emissions unit.

   c. The number of pounds of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating employed in this emissions unit.

   d. A record of each liquid organic material employed in each emissions unit indicating whether or not the liquid organic material is photochemically reactive as defined in OAC rule 3745-21-01(C)(5).

   e. The total rolling, 12-month summation of the ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating usage in Tons employed for emissions units R001, R002, R004, R007, R008, R009 and R011.

   f. The total rolling, 12-month summation of the controlled Organic Compound (OC) emissions in tons per year from the inks, adhesives, blanket wash (including rubber revitalizer), metering roller cleaners, fountain solutions, non piling additives and aqueous coatings for emissions units R001, R002, R004, R007, R008, R009 and R011.

2. The permittee shall collect and record the following information each month for the entire facility:

   a. The name and identification number of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating as applied or as concentrate.

   b. The individual Hazardous Air Pollutant (HAP)* content for each HAP of each ink,

adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating in pounds of individual HAP per pound of material, as applied or as concentrate.

c. The total combined HAP content of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating in pounds of combined HAPs per pound of material, as applied or as concentrate [sum all the individual HAP contents from (b)].

d. The number of pounds of each ink, adhesive, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solution, non piling additive and aqueous coating material employed.

e. 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)].

f. The total combined HAP emissions from all coatings and cleanup materials employed, in pounds or tons per month [the sum of (c) times (d)].

g. The updated rolling, 12-month summation of the individual HAP emissions for each HAP from all coatings and cleanup materials employed, in pounds or tons.

h. The updated rolling, 12-month summation of the combined HAP emissions for all HAP from all coatings and cleanup materials employed, in pounds or tons.

* A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your Ohio EPA field office or local air agency 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 combustion temperature within the thermal oxidizer when emissions units R001, R002, R004, R008, R009 and R011 are in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. All 3-hour blocks of time during which the average combustion temperature within the

thermal oxidizer, was more than 50 degrees Fahrenheit below the average combustion temperature during the most recent performance test that demonstrated compliance with the 90.0 percent overall VOC destruction efficiency requirement.

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

4. The permit to install for this emissions unit (R011) 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 this emissions unit 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):

Pollutant: Glycol ethers
TLV (ug/m3): 121,000
Maximum Hourly Emission Rate (lbs/hr): 5.72
Predicted 1 Hour Maximum Ground-Level Concentration at 26 meters (ug/m3):1999.4
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 2881

Pollutant: Napthalene
TLV (ug/m3): 52,000
Maximum Hourly Emission Rate (lbs/hr): 0.027
Predicted 1 Hour Maximum Ground-Level Concentration at 26 meters (ug/m3): 5.3
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 1238

Physical changes to or in the method of operation of the emissions unit after it's 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.).

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 it's 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 the photochemically reactive material(s) and the estimated total quantity of material(s) emitted each such day.

2. The permittee shall notify the Hamilton County Department of Environmental Services of any exceedance of the HAP emissions limitations in term A.2.f. 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.

3. The permittee shall submit deviation (excursion) reports which identify all 3-hour blocks of time during which the average combustion temperature within the thermal oxidizer does not comply with the temperature limitation specified in term B.2.

4. The permittee shall submit reports which specify the updated rolling, 12-month summation of organic compound emissions in TPY for each calendar month from emissions units R001, R002, R004, R007, R008, R009 and R011, combined.

5. The permittee shall submit reports which specify the updated rolling, 12-month summation of total usages in tons from the inks, adhesives, blanket wash (including rubber revitalizer), metering roller cleaner, fountain solutions, non piling additives and aqueous coatings for emission units R001, R002, R004, R007, R008, R009 and R011, combined for each calendar month.

6. The permittee shall submit deviation reports which identify all exceedances of the OC content limitations in term A.2.c.

7. The deviation reports shall be submitted in accordance with the reporting requirements of the General Terms and Conditions of this permit.

E. Testing Requirements

1. Formulation data or USEPA method 24 (for coatings) or 24A (for flexographic and rotogravure printing lines and related coatings) shall be used to determine the OC contents of the inks and coatings.

2. The OC emissions are calculated by multiplying the percent (%) by weight OC content times the material usage rate times the ink retention consistent with the Ohio EPA Engineering Guide #56 times the control efficiency.

3. Compliance with the visible particulate emission limitation in term A.1 shall be demonstrated by Method 9, 40 CFR Part 60, Appendix A.

4. Compliance with the percent by weight OC content and the usage limitations shall be determined by the recordkeeping in term C.1.

5. The permittee shall conduct emission testing for the oxidizer for emissions units R001, R002, R004, R008, R009 and R011 in accordance with the following requirements:

a. The emission testing shall be conducted within 3 months after the initial operation of emission unit R011.

b. The emission testing shall be conducted to demonstrate compliance with the 90.0 % control efficiency limitation for organics.

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 appropriate Ohio EPA District Office or local air agency.

Not later than 30 days prior to the proposed test date(s), the permittee shall submit an "Intent to Test" notification to the appropriate Ohio EPA District Office or local air agency.

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 District Office's or local air agency's refusal to accept the results of the emission test(s).

Personnel from the appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency 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 appropriate Ohio EPA District Office or local air agency.

6. Compliance with the HAP emission limitation in term A.2.f shall be determined by the record keeping in term C.2.

7. Compliance with the PM, SO2, NOX and CO limits will be determined by multiplying the fuel usage by the AP-42 emission factor (section 1.3 and 1.4).

F. Miscellaneous Requirements

1. The following terms and conditions are federally enforceable: A.2.2.a - A.2.2.h, B.1 - B.4, C.1 - C.3, D.1 - D.7 and E.1- E.7.

NEW SOURCE REVIEW FORM B

PTI Number: 14-04918 Facility ID: 1431070458

FACILITY NAME Quebecor World Red Bank Division

FACILITY DESCRIPTION Heatset Web Offset (Lithographic) Printing Press CITY/TWP Cincinnati

SIC CODE 2752 SCC CODE 4-05-001-01 EMISSIONS UNIT ID R001

EMISSIONS UNIT DESCRIPTION 8 Unit Hantscho HWOPL, ID-836 with thermal oxidizer (modification)

DATE INSTALLED

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			0.551 lb/hour	2.2
PM_{10}	Attainment			0.551 lb/hour	2.2
Sulfur Dioxide	Attainment			0.05 lb/MMBtu	2.0
Organic Compounds	Attainment				98.6
Nitrogen Oxides	Attainment			0.30 lb/MMBtu	22.6
Carbon Monoxide	Attainment			0.07 lb/MMBtu	5.6
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 Oxidizer with a control efficiency equal to or greater than 90.0%; emissions usage limitations; OC content limitations; compliance with the air toxics policy.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

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*? X YES ____ NO

IDENTIFY THE AIR CONTAMINANTS: Glycol ethers, Napthalene

NEW SOURCE REVIEW FORM B

PTI Number: 14-04918 Facility ID: 1431070458

FACILITY NAME Quebecor World Red Bank Division

FACILITY DESCRIPTION Heatset Web Offset (Lithographic) Printing CITY/TWP Cincinnati

Emissions Unit ID: **R011**

SIC CODE 2752 SCC CODE 4-05-001-01 EMISSIONS UNIT ID R002

EMISSIONS UNIT DESCRIPTION 5 Unit Hantscho HWOPL, ID-538 with thermal oxidizer (modification)

DATE INSTALLED

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			0.551 lb/hour	2.2
PM_{10}	Attainment			0.551 lb/hour	2.2
Sulfur Dioxide	Attainment			0.05 lb/MMBtu	2.0
Organic Compounds	Attainment				98.6
Nitrogen Oxides	Attainment			0.30 lb/MMBtu	22.6
Carbon Monoxide	Attainment			0.07 lb/MMBtu	5.6
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 Oxidizer with a control efficiency equal to or greater than 90.0%; emissions usage limitations; OC content limitations; compliance with the air toxics policy.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

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*? X YES ___ NO

IDENTIFY THE AIR CONTAMINANTS: Glycol ethers, Napthalene

12546.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 14-04918 Facility ID: 1431070458

FACILITY NAME Quebecor World Red Bank Division

FACILITY DESCRIPTION Heatset Web Offset (Lithographic) Printing CITY/TWP Cincinnati

Emissions Unit ID: **R011**

SIC CODE 2752 SCC CODE 4-05-001-01 EMISSIONS UNIT ID R004

EMISSIONS UNIT DESCRIPTION 8 Unit Harris HWOPL ID-838A with thermal oxidizer (modification)

DATE INSTALLED

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			0.551 lb/hour	2.2
PM_{10}	Attainment			0.551 lb/hour	2.2
Sulfur Dioxide	Attainment			0.05 lb/MMBtu	2.0
Organic Compounds	Attainment				98.6
Nitrogen Oxides	Attainment			0.30 lb/MMBtu	22.6
Carbon Monoxide	Attainment			0.07 lb/MMBtu	5.6
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 Oxidizer with a control efficiency equal to or greater than 90.0%; emissions usage limitations; OC content limitations; compliance with the air toxics policy.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

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*? X YES ___ NO

IDENTIFY THE AIR CONTAMINANTS: Glycol ethers, Napthalene

12546.wpd

NEW SC

PTI Num

FACILIT

Emissions Unit ID: **R011**

FACILITY DESCRIPTION Heatset Web Offset (Lithographic) Printing Press CITY/TWP Cincinnati

SIC CODE 2752 SCC CODE 4-05-001-01 EMISSIONS UNIT ID R007

EMISSIONS UNIT DESCRIPTION Hiedelburg Sheetfed Offset Printing Press

DATE INSTALLED

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				
PM_{10}	Attainment				
Sulfur Dioxide					
Organic Compounds	Attainment			36.5 lbs/day	98.6
Nitrogen Oxides					
Carbon Monoxide					
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 Usage and OC content limits

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? No

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

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:

NEW SOURCE REVIEW FORM B

PTI Number: 14-04918 Facility ID: 1431070458

FACILITY NAME Quebecor World Red Bank Division

FACILITY DESCRIPTION Heatset Web Offset (Lithographic) Printing CITY/TWP Cincinnati

Emissions Unit ID: **R011**

SIC CODE 2752 SCC CODE 4-05-001-01 EMISSIONS UNIT ID R008

EMISSIONS UNIT DESCRIPTION 6 Unit Hantscho HWOPL ID-636 with thermal oxidizer (modification)

DATE INSTALLED

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			0.551 lb/hour	2.2
PM_{10}	Attainment			0.551 lb/hour	2.2
Sulfur Dioxide	Attainment			0.05 lb/MMBtu	2.0
Organic Compounds	Attainment				98.6
Nitrogen Oxides	Attainment			0.30 lb/MMBtu	22.6
Carbon Monoxide	Attainment			0.07 lb/MMBtu	5.6
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 Oxidizer with a control efficiency equal to or greater than 90.0%; emissions usage limitations; OC content limitations; compliance with the air toxics policy.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

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*? X YES ___ NO

IDENTIFY THE AIR CONTAMINANTS: Glycol ethers, Napthalene

12546.wpd

NEW SOURCE REVIEW FORM B

PTI Number: 14-04918 Facility ID: 1431070458

FACILITY NAME Quebecor World Red Bank Division

FACILITY DESCRIPTION Heatset Web Offset (Lithographic) Printing CITY/TWP Cincinnati

Emissions Unit ID: **R011**

SIC CODE 2752 SCC CODE 4-05-001-01 EMISSIONS UNIT ID R009

EMISSIONS UNIT DESCRIPTION 5 Unit Hantscho HWOPL ID-536 with thermal oxidizer (modification)

DATE INSTALLED

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			0.551 lb/hour	2.2
PM_{10}	Attainment			0.551 lb/hour	2.2
Sulfur Dioxide	Attainment			0.05 lb/MMBtu	2.0
Organic Compounds	Attainment				98.6
Nitrogen Oxides	Attainment			0.30 lb/MMBtu	22.6
Carbon Monoxide	Attainment			0.07 lb/MMBtu	5.6
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 Oxidizer with a control efficiency equal to or greater than 90.0%; emissions usage limitations; OC content limitations; compliance with the air toxics policy.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

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*? X YES ___ NO

IDENTIFY THE AIR CONTAMINANTS: Glycol ethers, Napthalene

12546.wpd

NEW SC

PTI Num

FACILIT

Emissions Unit ID: **R011**

FACILITY DESCRIPTION Heatset Web Offset (Lithographic) Printing Press CITY/TWP Cincinnati

SIC CODE 2752 SCC CODE 4-05-001-01 EMISSIONS UNIT ID R011

EMISSIONS UNIT DESCRIPTION 5 Unit Harris Heatset Press No 538B with thermal oxidizer

DATE INSTALLED

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			0.551 lb/hour	2.2
PM_{10}	Attainment			0.551 lb/hour	2.2
Sulfur Dioxide	Attainment			0.05 lb/MMBtu	2.0
Organic Compounds	Attainment				98.6
Nitrogen Oxides	Attainment			0.30 lb/MMBtu	22.6
Carbon Monoxide	Attainment			0.07 lb/MMBtu	5.6
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 Oxidizer with a control efficiency equal to or greater than 90.0%; emissions usage limitations; OC content limitations; compliance with the air toxics policy.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes

OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

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*? X YES ___ NO

IDENTIFY THE AIR CONTAMINANTS: Glycol ethers, Napthalene