State of Ohio Environmental Protection Agency

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

Street Address:
122 S. Front Street
Lazarus Gov. Center **TELE:** (614) 644-3020 **FAX:** (614) 644-2329
Mailing Address:
Lazarus Gov. Center
P.O. Box 1049

Application No: 14-05691
Fac ID: 1431480237
DATE: 11/25/2005

Sun Chemical
Zhaleh Naghibzadeh
135 West Lake Street
Northlake, IL 60164

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

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

Environmental Review Appeals Commission
309 South Fourth Street, Room 222
Columbus, Ohio 43215

Sincerely,

Michael W. Ahern

Michael W. Ahern, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: **USEPA** **HCDES**

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install **Issue Date: 11/25/2005**
Terms and Conditions **Effective Date: 11/25/2005**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 14-05691

Application Number:	14-05691
Facility ID:	1431480237
Permit Fee:	**$1300**
Name of Facility:	Sun Chemical
Person to Contact:	Zhaleh Naghibzadeh
Address:	135 West Lake Street Northlake, IL 60164

Location of proposed air contaminant source(s) [emissions unit(s)]:
12049 Centron Place
Cincinnati, **Ohio**

Description of proposed emissions unit(s):
Administrative modification to PTI 14-05691.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Joseph P. Koncelik

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

a. Reports of any required monitoring and/or recordkeeping information shall be submitted to the appropriate Ohio EPA District Office or local air agency.

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon

the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Termination of Permit to Install

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

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

10. Public Disclosure

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

11. Applicability

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

12. Best Available Technology

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

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

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 ninety (90) 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	38.4
PM/PM10	0.35
Single HAP	9.9
Combined HAPs	24.9

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	
P022 - Liquid ink mixer 1 with cover and baghouse - modification	OAC rule 3745-31-05(A)(3)	
		OAC rule 3745-31-05(C) (to avoid being a major stationary source for purposes of non attainment review).
		OAC rule 3745-35-07(B) (to avoid being subject to Title V permitting requirements)
		OAC rule 3745-35-07(B) (to avoid being subject to Title V permitting requirements).
		OAC rule 3745-17-07(A)(1)
		OAC rule 3745-17-07(B)(1)
		OAC rule 3745-21-07(G)(2)

Emissions Unit ID: **P022**

	Applicable Emissions Limitations/Control Measures	
OAC rule 3745-17-11	Organic compound (OC) emissions from the mixer shall not exceed 2.28 pounds per hour. Particulate emissions (PE) from the mixer shall not exceed 0.03 pound per hour and 0.35 tons per year (TPY) for emissions units P022, P023, P024, P026, P027, P031 and P032 , combined. Particulate matter 10 microns and less in diameter (PM10) emissions from this emissions unit shall not exceed 0.03 pound per hour and 0.35 TPY for emissions units P022, P023, P024, P026, P027, P031 and P032 , combined. PE = PM10 See term and conditions A.2.a. and B.2 The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-35-07(B), 3745-17-07(A)(1) and 3745-17-07(B)(1). Organic compound (OC) emissions from emissions units P022, P023, P024, P026, P027,	P029, P030, P031, P032 and P033 , combined shall not exceed 38.4 TPY OC, based on a rolling, 12-month summation. The permittee has existing records to demonstrate compliance with this limit upon permit issuance. See term and condition B.1. See term and condition A.2.b. See term and condition A.2.d. See term and condition A.2.c. Exempt, due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held July 18, 2002. The emission limitation specified by this rule is less stringent than the requirements of OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the usage and emissions limitations and use of a cover and baghouse.

2.b The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), , P026 (Liquid Ink Mixer 5), P027 (Liquid Ink Mixer 6), , P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit 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.

The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2.c Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.

2.d Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

2.e The hourly OC and PM-PM10 emissions limitations outlined are based upon the emissions unit's Potential To Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.

B. Operational Restrictions

1. The maximum annual production rate for emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined shall not exceed 16,126,240

pounds of ink per year, based upon a rolling, 12-month summation of the production rates. The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2. The OC content of the inks mixed in this emissions unit shall not exceed 35% by weight.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall collect and record the following information each month for all organic compounds used in the formulation of finished inks for emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 :

a. The name and identification of each batch of ink produced.

b. The amount of each organic material used in the formulation of inks, in pounds.

c. The total combined monthly OC emissions, in tons per month. This calculation shall be based on the following equation:

The summation of [(b) x (0.0136 pound OC emitted/pound OC processed*)/2000] for each liquid organic material used in the formulation of inks.

* Emission factor derived from the testing of similar sources by Sun Chemical.

d. The rolling, 12-month summation of OC emissions (the summation of the current month's emission total and the previous eleven calendar months emission totals)

e. The OC content, in percent by weight, for each batch.

2. The permittee shall collect and record the following information each month for emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), P026 (Liquid Ink Mixer 5), P027 (Liquid Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste

Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit:

a. The name and identification number of each batch of ink produced containing a HAP(s).

b. The number of pounds of each batch of ink produced.

c. The individual Hazardous Air Pollutant (HAP) content for each HAP per pound of ink produced in pounds of individual HAP per pound of ink.

d. The total combined HAP content of each ink in pounds of combined HAPs per pound of ink [sum all the individual HAP contents from (c)].

e. The total individual HAP emissions for each HAP from all inks employed in pounds or tons per month [for each individual HAP, the summation of (b) x 1.36 percent x (c)].

f. The total combined HAP emissions from all inks employed in pounds or tons per month [the summation of (b) x 1.36 percent x (d)].

g. The updated rolling, 12-month summation for individual HAP emissions for each

HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

h. The updated rolling, 12-month summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

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

3. The permittee shall maintain monthly record of the following information:

a. The production rate for each month, in pounds of ink.

b. The rolling, 12-month summation of the production rates, in pounds of ink.

D. Reporting Requirements

1. The permittee shall submit annual reports to Hamilton County Department of Environmental Services which specify the total organic compound emissions from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 . These reports shall be submitted by January 30 of each year and cover the previous calendar year.

2. The permittee shall submit deviation (excursion) reports for any exceedance of the emission limitations listed in Term and condition A.1. and/or B.2.

3. The permittee shall submit quarterly deviation reports which identify any exceedance of the HAP emission limitations set forth in term A.2.b. If no exceedances occurred during the reporting period then a report is required stating so.

4. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation.

5. 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. Compliance with the emission limitations in Term and condition A.1. of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

2.28 lbs/hr OC

Applicable Compliance Method:

The hourly OC emission rate is based on the emission units potential to emit. The potential to emit was calculated by: (maximum production rate of 600 pounds per hour) x (35% percent by weight OC content, in pounds of OC processed) x (80% equipment usage**) x (0.0136 pound OC emitted/ pound OC processed*).

b. Emission Limitation:

0.03 lb/hr PM-PM10

Applicable Compliance Method:

The hourly PM-PM10 emission rate is based on the emission units potential to emit. The potential to emit was calculated by: [(maximum production rate of 600 pounds per hour) x (35% added pigment) x (80% equipment usage*) x (0.1% AP-42 emission factor) x {(80% capture efficiency) x (99.9% control efficiency)} + (maximum production rate of 600 pounds per hour) x (35% added pigment) x (80% equipment usage**) x (0.1% AP-42 emission factor) x {1-(80% capture efficiency)}].

c. Emission Limitation:

0.35 TPY PM-PM10 for emissions units P022, P023, P024, P026, P027, P031 and P032 , combined.

Applicable Compliance Limitation:

The annual PM-PM10 emission rate is based on the emission units potential to emit. The emissions unit is assumed to be in compliance as long as compliance with the hourly rate is maintained. The annual PM-PM10 emission rate was calculated by: [{(9,960,159 pounds of ink per year) x (35% added pigment) x (0.1% AP-42 emission factor) x {(80% capture efficiency) x (99.9% control efficiency)} + (9,960,159 pounds of ink per year) x (35% added pigment) x (0.1% AP-42 emission factor) x {1-(80% capture efficiency)}]/(2000) for emissions units P022, P023, P024, P026, P027, P031 and P032 combined.

d. Emission Limitation:

38.4 TPY OC from emissions units P022, P023, P024, P026, P027, P029,

P030, P031, P032 and P033 combined

Applicable Compliance Method:

Compliance with the annual organic compound emission limitations in term A.1. shall be based upon the record keeping requirements as specified in term C.1.

e. Emission Limitation:

9.9 TPY for any single HAP and 24.9 TPY for combined HAPs

Applicable Compliance Method:

Compliance with the HAP emission limitations in term A.2.b. shall be demonstrated by the record keeping requirements specified in term C.2.

f. Usage Limitation:

16,126,240 pounds of ink per year

Applicable Compliance Method:

Compliance with the production rate limitation in term B.1. shall be based upon the record keeping requirements as specified in term C.3.

g. Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

h. Emission Limitation:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a

three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(3).

** The 80% equipment usage is based on the maximum mixing capacity of the mixer.

F. Miscellaneous Requirements

1. The terms and conditions in this permit supersede Permit to Install 14-4638, as issued on May 12, 1999, Permit to Install 14-1080, as issued on September 17, 1986 and Permit to Install 14-05691, as issued on June 21, 2005.

2. The following terms and conditions of this permit are federally enforceable: A., B., C., D. and E.

Emissions Unit ID: **P023**

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	
P023 - Liquid ink mixer 2 with cover and baghouse - modification	OAC rule 3745-31-05(A)(3)	OAC rule 3745-31-05(C) (to avoid being a major stationary source for purposes of non attainment review).
		OAC rule 3745-35-07(B) (to avoid being subject to Title V permitting requirements)
		OAC rule 3745-35-07(B) (to avoid being subject to Title V permitting requirements)
		OAC rule 3745-17-07(A)(1)
		OAC rule 3745-17-07(B)(1)
		OAC rule 3745-21-07(G)(2)

OAC rule 3745-17-11	Applicable Emissions <u>Limitations/Control Measures</u> Organic compound (OC) emissions from the mixer shall not exceed 1.52 pounds per hour. Particulate emissions (PE) from the mixer shall not exceed 0.02 pound per hour and 0.35 tons per year (TPY) for emissions units P022, P023, P024, P026, P027, P031 and P032 , combined. Particulate matter 10 microns and less in diameter (PM10) emissions from this emissions unit shall not exceed 0.02 pound per hour and 0.35 TPY for emissions units P022, P023, P024, P026, P027, P031 and P032 , combined. PE = PM10 See term and conditions A.2.a. and B.2 The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-35-07(B), 3745-17-07(A)(1) and 3745-17-07(B)(1). Organic compound (OC) emissions from emissions units	P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 , combined shall not exceed 38.4 TPY OC, based on a rolling, 12-month summation. The permittee has existing records to demonstrate compliance with this limit upon permit issuance. See terms and conditions B.1. See term and condition A.2.b. See term and condition A.2.d. See term and condition A.2.c. Exempt due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held July 18, 2002. The emission limitation specified by this rule is less stringent than the requirements of OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the usage and emissions limitations and use of a cover and baghouse.

2.b The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), P026 (Liquid Ink Mixer 5), P027 (Liquid Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit 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.

The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2.c Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.

2.d Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

2.e The hourly OC and PM-PM10 emissions limitations outlined are based upon the emissions unit's Potential To Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.

B. Operational Restrictions

1. The maximum annual production rate for emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined shall not exceed 16,126,240

pounds of ink per year, based upon a rolling, 12-month summation of the production rates. The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2. The OC content of the inks mixed in this emissions unit shall not exceed 35% by weight.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall collect and record the following information each month for all organic compounds used in the formulation of finished inks for emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 :

a. The name and identification of each batch of ink produced.

b. The amount of each organic material used in the formulation of inks, in pounds.

c. The total combined monthly OC emissions, in tons per month. This calculation shall be based on the following equation:

The summation of [(b) x (0.0136 pound OC emitted/ pound OC processed*)/2000] for each liquid organic material used in the formulation of inks.

* Emission factor derived from the testing of similar sources by Sun Chemical.

d. The rolling, 12-month summation of OC emissions (the summation of the current month's emission total and the previous eleven calendar months emission totals).

e. The OC content, in percent by weight, for each batch.

2. The permittee shall collect and record the following information each month for emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), P026 (Liquid Ink Mixer 5), P027 (Liquid

Ink Mixer 6),P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit:

a. The name and identification number of each batch of ink produced containing a HAP(s).

b. The number of pounds of each batch of ink produced.

c. The individual Hazardous Air Pollutant (HAP) content for each HAP per pound of ink produced in pounds of individual HAP per pound of ink.

d. The total combined HAP content of each ink in pounds of combined HAPs per pound of ink [sum all the individual HAP contents from (c)].

e. The total individual HAP emissions for each HAP from all inks employed in pounds or tons per month [for each individual HAP, the summation of (b) x 1.36 percent x (c)].

f. The total combined HAP emissions from all inks employed in pounds or tons per month [the summation of (b) x 1.36 percent x (d)].

g. The updated rolling, 12-month summation for individual HAP emissions for each

HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

h. The updated rolling, 12-month summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

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

3. The permittee shall maintain monthly record of the following information:

a. The production rate for each month, in pounds of ink.

b. The rolling, 12-month summation of the production rates, in pounds of ink.

D. Reporting Requirements

1. The permittee shall submit annual reports to Hamilton County Department of Environmental Services which specify the total organic compound emissions from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 . These reports shall be submitted by January 30 of each year and cover the previous calendar year.

2. The permittee shall submit deviation (excursion) reports for any exceedance of the emission limitations listed in Term and condition A.1 and/or B.2.

3. The permittee shall submit quarterly deviation reports which identify any exceedance of the HAP emission limitations set forth in term A.2.b. If no exceedances occurred during the reporting period then a report is required stating so.

4. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation.

5. 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. Compliance with the emission limitations in Term and condition A.1. of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

1.52 lbs/hr OC

Applicable Compliance Method:

The hourly OC emission rate is based on the emission units potential to emit. The potential to emit was calculated by: (maximum production rate of 400 pounds per hour) x (35% percent by weight VOC content, in pounds of OC processed) x (80% equipment usage**) x (0.0136 pound OC emitted/pound OC processed*).

b. Emission Limitation:

0.02 lb/hr PM-PM10

Applicable Compliance Method:

The hourly PM-PM10 emission rate is based on the emission units potential to emit. The potential to emit was calculated by: [(maximum production rate of 400 pounds per hour) x (35% added pigment) x (80% equipment usage**) x (0.1% AP-42 emission factor) x {(80% capture efficiency) x (99.9% control efficiency)} + (maximum production rate of 400 pounds per hour) x (35% added pigment) x (80% equipment usage*) x (0.1% AP-42 emission factor) x {1-(80% capture efficiency)}].

c. Emission Limitation:

0.35 TPY PM-PM10 for emissions units P022, P023, P024, P026, P027, P031 and P032 , combined.

Applicable Compliance Limitation:

The annual PM-PM10 emission rate is based on the emission units potential to emit. The emissions unit is assumed to be in compliance as long as compliance with the hourly rate is maintained. The annual PM-PM10 emission rate was calculated by: [{(9,960,159 pounds of ink per year) x (35% added pigment) x (0.1% AP-42 emission factor) x {(80% capture efficiency) x (99.9% control efficiency)} + (9,960,159 pounds of ink per year) x (35% added pigment) x (0.1% AP-42 emission factor) x {1-(80% capture efficiency)}]/(2000) for

emissions units P022, P023, P024, P026, P027, P031 and P032 combined.

d. Emission Limitation:

38.4 TPY OC from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined

Applicable Compliance Method:

Compliance with the annual organic compound emission limitations in term A.1. shall be based upon the record keeping requirements as specified in term C.1.

e. Emission Limitation:

9.9 TPY for any single HAP and 24.9 TPY for combined HAPs

Applicable Compliance Method:

Compliance with the HAP emission limitations in term A.2.b. shall be demonstrated by the record keeping requirements specified in term C.2.

f. Usage Limitation:

16,126,240 pounds of ink per year

Applicable Compliance Method:

Compliance with the production rate limitation in term B.1. shall be based upon the record keeping requirements as specified in term C.3.

g. Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

h. Emission Limitation:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(3).

** The 80% equipment usage is based on the maximum mixing capacity of the mixer.

F. Miscellaneous Requirements

1. The terms and conditions in this permit supersede Permit to Install 14-4638, as issued on May 12, 1999, Permit to Install 14-1080, as issued on September 17, 1986 and Permit to Install 14-05691, as issued on June 21, 2005.

2. The following terms and conditions of this permit are federally enforceable: A., B., C., D. and E.

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	
P024 - Liquid ink mixer 3 with cover and baghouse - modification	OAC rule 3745-31-05(A)(3)	OAC rule 3745-31-05(C)(to avoid being a major stationary source for purposes of non attainment review).
		OAC rule 3745-35-07(B) (to avoid being subject to Title V permitting requirements)
		OAC rule 3745-35-07(B) (to avoid being subject to Title V permitting requirements)
		OAC rule 3745-17-07(A)(1)
		OAC rule 3745-17-07(B)(1)
		OAC rule 3745-21-07(G)(2)

OAC rule 3745-17-11	Applicable Emissions <u>Limitations/Control Measures</u> Organic compound (OC) emissions from the mixer shall not exceed 1.90 pounds per hour. Particulate emissions (PE) from the mixer shall not exceed 0.03 pound per hour and 0.35 tons per year (TPY) for emissions units P022, P023, P024, P026, P027, P031 and P032 , combined. Particulate matter 10 microns and less in diameter (PM10) emissions from this emissions unit shall not exceed 0.03 pound per hour and 0.35 TPY for emissions units P022, P023, P024, P026, P027, P031 and P032 , combined. PE = PM10 See term and conditions A.2.a. and B.2 The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-35-07(B), 3745-17-07(A)(1) and 3745-17-07(B)(1). Organic compound (OC) emissions from emissions units	P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 , combined shall not exceed 38.4 TPY OC, based on a rolling, 12-month summation. The permittee has existing records to demonstrate compliance with this limit upon permit issuance. See term and condition B.1. See term and condition A.2.b. See term and condition A.2.d. See term and condition A.2.c. Exempt due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held July 18, 2002. The emission limitation specified by this rule is less stringent than the requirements of OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the usage and emissions limitations and use of a cover and baghouse.

2.b The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), P026 (Liquid Ink Mixer 5), P027 (Liquid Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit 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.

The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2.c Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.

2.d Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

2.e The hourly OC and PM-PM10 emissions limitations outlined are based upon the emissions unit's Potential To Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.

B. Operational Restrictions

1. The maximum annual production rate for emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined shall not exceed 16,126,240

pounds of ink per year, based upon a rolling, 12-month summation of the production rates. The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2. The OC content of the inks mixed in this emissions unit shall not exceed 35% by weight.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall collect and record the following information each month for all organic compounds used in the formulation of finished inks for emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 :

a. The name and identification of each batch of ink produced.

b. The amount of each organic material used in the formulation of inks, in pounds.

c. The total combined monthly OC emissions, in tons per month. This calculation shall be based on the following equation:

The summation of [(b) x (0.0136 pound OC emitted/pound OC processed*)/2000] for each liquid
organic material used in the formulation of inks.

* Emission factor derived from the testing of similar sources by Sun Chemical.

d. The rolling, 12-month summation of OC emissions (the summation of the current month's emission total and the previous eleven calendar months emission totals).

e. The OC content, in percent by weight, for each batch.

2. The permittee shall collect and record the following information each month for emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023

(Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), P026 (Liquid Ink Mixer 5), P027 (Liquid Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit:

a. The name and identification number of each batch of ink produced containing a HAP(s).

b. The number of pounds of each batch of ink produced.

c. The individual Hazardous Air Pollutant (HAP) content for each HAP per pound of ink produced in pounds of individual HAP per pound of ink.

d. The total combined HAP content of each ink in pounds of combined HAPs per pound of ink [sum all the individual HAP contents from (c)].

e. The total individual HAP emissions for each HAP from all inks employed in pounds or tons per month [for each individual HAP, the summation of (b) x 1.36 percent x (c)].

f. The total combined HAP emissions from all inks employed in pounds or tons per month [the summation of (b) x 1.36 percent x (d)].

g. The updated rolling, 12-month summation for individual HAP emissions for each HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

h. The updated rolling, 12-month summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

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

3. The permittee shall maintain monthly record of the following information:

a. The production rate for each month, in pounds of ink.

b. The rolling, 12-month summation of the production rates, in pounds of ink.

D. Reporting Requirements

1. The permittee shall submit annual reports to Hamilton County Department of Environmental Services which specify the total organic compound emissions from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 . These reports shall be submitted by January 30 of each year and cover the previous calendar year.

2. The permittee shall submit deviation (excursion) reports for any exceedance of the emission limitations listed in Term and condition A.1 and/or B.2.

3. The permittee shall submit quarterly deviation reports which identify any exceedance of the HAP emission limitations set forth in term A.2.b. If no exceedances occurred during the reporting period then a report is required stating so.

4. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation.

5. 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. Compliance with the emission limitations in Term and condition A.1. of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

1.90 lbs/hr OC

Applicable Compliance Method:

The hourly OC emission rate is based on the emission units potential to emit. The potential to emit was calculated by: (maximum production rate of 500 pounds per hour) x (35% percent by weight VOC content, pounds of OC processed) x (80% equipment usage**) x (0.0136 pound OC emitted/ pound OC

processed*).

b. Emission Limitation:

0.03 lb/hr PM-PM10

Applicable Compliance Method:

The hourly PM-PM10 emission rate is based on the emission units potential to emit. The potential to emit was calculated by: [(maximum production rate of 500 pounds per hour) x (35% added pigment) x (80% equipment usage**) x (0.1% AP-42 emission factor) x {(80% capture efficiency) x (99.9% control efficiency)} + (maximum production rate of 500 pounds per hour) x (35% added pigment) x (80% equipment usage*) x (0.1% AP-42 emission factor) x {1-(80% capture efficiency)}].

c. Emission Limitation:

0.35 TPY PM-PM10 for emissions units P022, P023, P024, P026, P027, P031 and P032 , combined.

Applicable Compliance Limitation:

The annual PM-PM10 emission rate is based on the emission units potential to emit. The emissions unit is assumed to be in compliance as long as compliance with the hourly rate is maintained. The annual PM-PM10 emission rate was calculated by: [{(9,960,159 pounds of ink per year) x (35% added pigment) x (0.1% AP-42 emission factor) x {(80% capture efficiency) x (99.9% control efficiency)} + (9,960,159 pounds of ink per year) x (35% added pigment) x (0.1% AP-42 emission factor) x {1-(80% capture efficiency)}]/(2000) for emissions units P022, P023, P024, P026, P027, P031 and P032 combined.

d. Emission Limitation:

38.4 TPY OC from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined

Applicable Compliance Method:

Compliance with the annual organic compound emission limitations in term A.1.

shall be based upon the record keeping requirements as specified in term C.1.

e. Emission Limitation:

9.9 TPY for any single HAP and 24.9 TPY for combined HAPs

Applicable Compliance Method:

Compliance with the HAP emission limitations in term A.2.b. shall be demonstrated by the record keeping requirements specified in term C.2.

f. Usage Limitation:

16,126,240 pounds of ink per year

Applicable Compliance Method:

Compliance with the production rate limitation in term B.1. shall be based upon the record keeping requirements as specified in term C.3.

g. Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

h. Emission Limitation:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, and

the procedures specified in OAC rule 3745-17-03(B)(3).

** The 80% equipment usage is based on the maximum mixing capacity of the mixer.

F. Miscellaneous Requirements

1. The terms and conditions in this permit supersede Permit to Install 14-4638, as issued on May 12, 1999, Permit to Install 14-1080, as issued on September 17, 1986 and Permit to Install 14-05691, as issued on June 21, 2005.

2. The following terms and conditions of this permit are federally enforceable: A., B., C., D. and E.

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	
P026 - Liquid ink mixer 5 with cover and baghouse - modification	OAC rule 3745-31-05(A)(3)	OAC rule 3745-31-05(C) (to avoid being a major stationary source for purposes of non attainment review).
		OAC rule 3745-35-07(B) (to avoid being subject to Title V permitting requirements)
		OAC rule 3745-35-07(B) (to avoid being subject to Title V permitting requirements)
		OAC rule 3745-17-07(A)(1)
		OAC rule 3745-17-07(B)(1)
		OAC rule 3745-21-07(G)(2)

	Applicable Emissions Limitations/Control Measures	
		P029, P030, P031, P032 and P033 , combined shall not exceed 38.4 TPY OC, based on a rolling, 12-month summation. The permittee has existing records to demonstrate compliance with this limit upon permit issuance.
OAC rule 3745-17-11	Organic compound (OC) emissions from the mixer shall not exceed 0.95 pound per hour.	
	Particulate emissions (PE) from the mixer shall not exceed 0.014 pound per hour and 0.35 tons per year (TPY) for emissions units P022, P023, P024, P026, P027, P031 and P032 , combined.	See term and condition B.1. See term and condition A.2.b.
	Particulate matter 10 microns and less in diameter (PM10) emissions from this emissions unit shall not exceed 0.014 pound per hour and 0.35 TPY for emissions units P022, P023, P024, P026, P027, P031 and P032 , combined.	See term and condition A.2.d. See term and condition A.2.c.
	PE = PM10	Exempt due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held July 18, 2002.
	See term and condition A.2.a. and B.2.	The emission limitation specified by this rule is less stringent than the requirements of OAC rule 3745-31-05(A)(3).
	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-35-07(B), 3745-17-07(A)(1) and 3745-17-07(B)(1).	
	Organic compound (OC) emissions from emissions units P022, P023, P024, P026, P027,	

2. Additional Terms and Conditions

2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the usage and emissions limitations and use of a cover and baghouse.

2.b The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), P026 (Liquid Ink Mixer 5), P027 (Liquid Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit 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.

The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2.c Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.

2.d Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

2.e The hourly OC and PM-PM10 emissions limitations outlined are based upon the emissions unit's Potential To Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.

B. Operational Restrictions

1. The maximum annual production rate for emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined shall not exceed 16,126,240

pounds of ink per year, based upon a rolling, 12-month summation of the production rates. The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2. The OC content of the inks mixed in this emissions unit shall not exceed 35% by weight.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall collect and record the following information each month for all organic compounds used in the formulation of finished inks for emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 :

a. The name and identification of each batch of ink produced.

b. The amount of each organic material used in the formulation of inks, in pounds.

c. The total combined monthly OC emissions, in tons per month. This calculation shall be based on the following equation:

The summation of [(b) x (0.0136 pound OC emitted/pound OC processed*)/2000] for each liquid organic material used in the formulation of inks.

* Emission factor derived from the testing of similar sources by Sun Chemical.

d. The rolling, 12-month summation of OC emissions (the summation of the current month's emission total and the previous eleven calendar months emission totals).

e. The OC content, in percent by weight, for each batch.

2. The permittee shall collect and record the following information each month for emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), P026 (Liquid Ink Mixer 5), P027 (Liquid

Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit:

a. The name and identification number of each batch of ink produced containing a HAP(s).

b. The number of pounds of each batch of ink produced.

c. The individual Hazardous Air Pollutant (HAP) content for each HAP per pound of ink produced in pounds of individual HAP per pound of ink.

d. The total combined HAP content of each ink in pounds of combined HAPs per pound of ink [sum all the individual HAP contents from (c)].

e. The total individual HAP emissions for each HAP from all inks employed in pounds or tons per month [for each individual HAP, the summation of (b) x 1.36 percent x (c)].

f. The total combined HAP emissions from all inks employed in pounds or tons per month [the summation of (b) x 1.36 percent x (d)].

g. The updated rolling, 12-month summation for individual HAP emissions for each

HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

h. The updated rolling, 12-month summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

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

3. The permittee shall maintain monthly record of the following information:

a. The production rate for each month, in pounds of ink.

b. The rolling, 12-month summation of the production rates, in pounds of ink.

D. Reporting Requirements

1. The permittee shall submit annual reports to Hamilton County Department of Environmental Services which specify the total organic compound emissions from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 . These reports shall be submitted by January 30 of each year and cover the previous calendar year.

2. The permittee shall submit deviation (excursion) reports for any exceedance of the emission limitations listed in Term and condition A.1. and/or B.2.

3. The permittee shall submit quarterly deviation reports which identify any exceedance of the HAP emission limitations set forth in term A.2.b. If no exceedances occurred during the reporting period then a report is required stating so.

4. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation.

5. 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. Compliance with the emission limitations in Term and condition A.1. of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.95 lb/hr OC

Applicable Compliance Method:

The hourly OC emission rate is based on the emission units potential to emit. The potential to emit was calculated by: (maximum production rate of 250 pounds per hour) x (35% percent by weight OC content, in pounds of OC processed) x (80% equipment usage**) x (0.0136 pound OC emitted/ pound OC processed*).

b. Emission Limitation:

0.014 lb/hr PM-PM10

Applicable Compliance Method:

The hourly PM-PM10 emission rate is based on the emission units potential to emit. The potential to emit was calculated by: [(maximum production rate of 250 pounds per hour) x (35% added pigment) x (80% equipment usage**) x (0.1% AP-42 emission factor) x {(80% capture efficiency) x (99.9% control efficiency)} + (maximum production rate of 250 pounds per hour) x (35% added pigment) x (80% equipment usage*) x (0.1% AP-42 emission factor) x {1-(80% capture efficiency)}].

c. Emission Limitation:

0.35 TPY PM-PM10 for emissions units P022, P023, P024, P026, P027, P031 and P032 , combined.

Applicable Compliance Limitation:

The annual PM-PM10 emission rate is based on the emission units potential to emit. The emissions unit is assumed to be in compliance as long as compliance with the hourly rate is maintained. The annual PM-PM10 emission rate was calculated by: [{(9,960,159 pounds of ink per year) x (35% added pigment) x (0.1% AP-42 emission factor) x {(80% capture efficiency) x (99.9% control efficiency)} + (9,960,159 pounds of ink per year) x (35% added pigment) x (0.1% AP-42 emission factor) x {1-(80% capture efficiency)}]/(2000) for

emissions units P022, P023, P024, P026, P027, P031 and P032 combined.

d. Emission Limitation:

38.4 TPY OC from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined

Applicable Compliance Method:

Compliance with the annual organic compound emission limitations in term A.1. shall be based upon the record keeping requirements as specified in term C.1.

e. Emission Limitation:

9.9 TPY for any single HAP and 24.9 TPY for combined HAPs

Applicable Compliance Method:

Compliance with the HAP emission limitations in term A.2.b. shall be demonstrated by the record keeping requirements specified in term C.2.

f. Usage Limitation:

16,126,240 pounds of ink per year

Applicable Compliance Method:

Compliance with the production rate limitation in term B.1. shall be based upon the record keeping requirements as specified in term C.3.

g. Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

h. Emission Limitation:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(3).

** The 80% equipment usage is based on the maximum mixing capacity of the mixer.

F. Miscellaneous Requirements

1. The terms and conditions in this permit supersede Permit to Install 14-4638, as issued on May 12, 1999, Permit to Install 14-1080, as issued on September 17, 1986 and Permit to Install 14-05691, as issued on June 21, 2005.

2. The following terms and conditions of this permit are federally enforceable: A., B., C., D. and E.

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	
P027 - Liquid ink mixer 6 with cover and baghouse - modification	OAC rule 3745-31-05(A)(3)	
		OAC rule 3745-31-05(C) (to avoid being a major stationary source for purposes of non attainment review).
		OAC rule 3745-35-07(B) (to avoid being subject to Title V permitting requirements)
		OAC rule 3745-35-07(B) (to avoid being subject to Title V permitting requirements)
		OAC rule 3745-17-07(A)(1)
		OAC rule 3745-17-07(B)(1)

	Applicable Emissions Limitations/Control Measures	
OAC rule 3745-21-07(G)(2)		P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 , combined shall not exceed 38.4 TPY OC, based on a rolling, 12-month summation. The permittee has existing records to demonstrate compliance with this limit upon permit issuance.
OAC rule 3745-17-11	Organic compound (OC) emissions from the mixer shall not exceed 3.81 pounds per hour.	See term and condition B.1.
	Particulate emissions (PE) from the mixer shall not exceed 0.06 pound per hour and 0.35 tons per year (TPY) for emissions units P022, P023, P024, P026, P027, P031 and P032 , combined.	See term and condition A.2.b.
	Particulate matter 10 microns and less in diameter (PM10) emissions from this emissions unit shall not exceed 0.06 pound per hour and 0.35 TPY for emissions units P022, P023, P024, P026, P027, P031 and P032 , combined.	See term and condition A.2.d. See term and condition A.2.c. Exempt due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held July 18, 2002.
	PE = PM10	
	See term and condition A.2.a. and B.2.	The emission limitation specified by this rule is less stringent than the requirements of OAC rule 3745-31-05(A)(3).
	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-35-07(B), 3745-17-07(A)(1) and 3745-17-07(B)(1).	
	Organic compound (OC) emissions from emissions units	

2. Additional Terms and Conditions

2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the usage and emissions limitations and use of a cover and baghouse.

2.b The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), P026 (Liquid Ink Mixer 5), P027 (Liquid Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit 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.

The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2.c Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as specified by rule.

2.d Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

2.e The hourly OC and PM-PM10 emissions limitations outlined are based upon the emissions unit's Potential To Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.

B. Operational Restrictions

1. The maximum annual production rate for emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined shall not exceed 16,126,240

pounds of ink per year, based upon a rolling, 12-month summation of the production rates. The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2. The OC content of the inks mixed in this emissions unit shall not exceed 35% by weight.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall collect and record the following information each month for all organic compounds used in the formulation of finished inks for emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 :

a. The name and identification of each batch of ink produced.

b. The amount of each organic material used in the formulation of inks, in pounds.

c. The total combined monthly OC emissions, in tons per month. This calculation shall be based on the following equation:

The summation of [(b) x (0.0136 pound OC emitted/pound OC processed*)/2000] for each liquid organic material used in the formulation of inks.

* Emission factor derived from the testing of similar sources by Sun Chemical.

d. The rolling, 12-month summation of OC emissions (the summation of the current month's emission total and the previous eleven calendar months emission totals).

e. The OC content, in percent by weight, for each batch.

2. The permittee shall collect and record the following information each month for emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023

(Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), P026 (Liquid Ink Mixer 5), P027 (Liquid Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit:

a. The name and identification number of each batch of ink produced containing a HAP(s).

b. The number of pounds of each batch of ink produced.

c. The individual Hazardous Air Pollutant (HAP) content for each HAP per pound of ink produced in pounds of individual HAP per pound of ink.

d. The total combined HAP content of each ink in pounds of combined HAPs per pound of ink [sum all the individual HAP contents from (c)].

e. The total individual HAP emissions for each HAP from all inks employed in pounds or tons per month [for each individual HAP, the summation of (b) x 1.36 percent x (c)].

f. The total combined HAP emissions from all inks employed in pounds or tons per month [the summation of (b) x 1.36 percent x (d)].

g. The updated rolling, 12-month summation for individual HAP emissions for each

HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

h. The updated rolling, 12-month summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

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

3. The permittee shall maintain monthly record of the following information:

a. The production rate for each month, in pounds of ink.

b. The rolling, 12-month summation of the production rates, in pounds of ink.

D. Reporting Requirements

1. The permittee shall submit annual reports to Hamilton County Department of Environmental Services which specify the total organic compound emissions from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 . These reports shall be submitted by January 30 of each year and cover the previous calendar year.

2. The permittee shall submit deviation (excursion) reports for any exceedance of the emission limitations listed in Term and condition A.1 and/or B.2.

3. The permittee shall submit quarterly deviation reports which identify any exceedance of the HAP emission limitations set forth in term A.2.b. If no exceedances occurred during the reporting period then a report is required stating so.

4. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation.

5. 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. Compliance with the emission limitations in Term and condition A.1. of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

3.81 lbs/hr OC

Applicable Compliance Method:

The hourly OC emission rate is based on the emission units potential to emit. The potential to emit was calculated by: (maximum production rate of 1000 pounds per hour) x (35% percent by weight VOC content, in pounds of OC processed) x (80% equipment usage**) x (0.0136 pound OC emitted/pound OC processed*).

b. Emission Limitation:

0.06 lb/hr PM-PM10

Applicable Compliance Method:

The hourly PM-PM10 emission rate is based on the emission units potential to emit. The potential to emit was calculated by: [(maximum production rate of 1000 pounds per hour) x (35% added pigment) x (80% equipment usage**) x (0.1% AP-42 emission factor) x {(80% capture efficiency) x (99.9% control efficiency)} + (maximum production rate of 1000 pounds per hour) x (35% added pigment) x (80% equipment usage*) x (0.1% AP-42 emission factor) x {1-(80% capture efficiency)}].

c. Emission Limitation:

0.35 TPY PM-PM10 for emissions units P022, P023, P024, P026, P027, P031 and P032 , combined.

Applicable Compliance Limitation:

The annual PM-PM10 emission rate is based on the emission units potential to emit. The emissions unit is assumed to be in compliance as long as compliance with the hourly rate is maintained. The annual PM-PM10 emission rate was calculated by: [{(9,960,159 pounds of ink per year) x (35% added pigment) x (0.1% AP-42 emission factor) x {(80% capture efficiency) x (99.9% control efficiency)} + (9,960,159 pounds of ink per year) x (35% added pigment) x (0.1% AP-42 emission factor) x {1-(80% capture efficiency)}]/(2000) for

emissions units P022, P023, P024, P026, P027, P031 and P032 combined.

d. Emission Limitation:

38.4 TPY OC from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined

Applicable Compliance Method:

Compliance with the annual organic compound emission limitations in term A.1. shall be based upon the record keeping requirements as specified in term C.1.

e. Emission Limitation:

9.9 TPY for any single HAP and 24.9 TPY for combined HAPs

Applicable Compliance Method:

Compliance with the HAP emission limitations in term A.2.b. shall be demonstrated by the record keeping requirements specified in term C.2.

f. Usage Limitation:

16,126,240 pounds of ink per year

Applicable Compliance Method:

Compliance with the production rate limitation in term B.1. shall be based upon the record keeping requirements as specified in term C.3.

g. Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

h. Emission Limitation:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(3).

**The 80% equipment usage is based on the maximum mixing capacity of the mixer.

F. Miscellaneous Requirements

1. The terms and conditions in this permit supersede Permit to Install 14-4638, as issued on May 12, 1999, Permit to Install 14-1080, as issued on September 17, 1986 and Permit to Install 14-05691, as issued on June 21, 2005.

2. The following terms and conditions of this permit are federally enforceable: A., B., C., D. and E.

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	permitting requirements)
		OAC rule 3745-21-07(G)(2)
P029 - 0.5 HP air ink mixer with cover - modification	OAC rule 3745-31-05(A)(3)	
	OAC rule 3745-31-05(C) (to avoid being a major stationary source for purposes of non attainment review).	
	OAC rule 3745-35-07(B) (to avoid being subject to Title V permitting requirements)	
	OAC rule 3745-35-07(B) (to avoid being subject to Title V	

Applicable Emissions Limitations/Control Measures
Organic compound (OC) emissions from the mixer shall not exceed 0.46 pounds per hour. See term and condition A.2.a. and B.2. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C) and 3745-35-07(B). . Organic compound (OC) emissions from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 , combined shall not exceed 38.4 tons per year (TPY) OC, based on a rolling, 12-month summation. The permittee has existing records to demonstrate compliance with this limit upon permit issuance. See term and condition B.1. See terms and conditions A.2.b. Exempt due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held July 18, 2002.

2. Additional Terms and Conditions

2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the usage and emissions limitations and use of a cover .

2.b The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), , P026 (Liquid Ink Mixer 5), P027 (Liquid Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit 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.

The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2.c The hourly OC emissions limitation outlined are based upon the emissions unit's Potential To Emit (PTE). Therefore, no records are required to demonstrate compliance with this limit.

B. Operational Restrictions

1. The maximum annual production rate for emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined shall not exceed 16,126,240 pounds of ink per year, based upon a rolling, 12-month summation of the production rates. The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2. The OC content of the inks mixed in this emissions unit shall not exceed 35% by weight.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall collect and record the following information each month for all organic compounds used in the formulation of finished inks for emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 :

a. The name and identification of each batch of ink produced.

b. The amount of each organic material used in the formulation of inks, in pounds.

c. The total combined monthly OC emissions, in tons per month. This calculation shall be based on the following equation:

The summation of [(b) x (0.0136 pound OC emitted/pound OC processed*)/2000] for each liquid organic material used in the formulation of inks.

* Emission factor derived from the testing of similar sources by Sun Chemical.

d. The rolling, 12-month summation of OC emissions (the summation of the current month's emission total and the previous eleven calendar months emission totals).

e. The OC content, in percent by weight, for each batch.

2. The permittee shall collect and record the following information each month for emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), P026 (Liquid Ink Mixer 5), P027 (Liquid Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit:

a. The name and identification number of each batch of ink produced containing a HAP(s).

b. The number of pounds of each batch of ink produced.

c. The individual Hazardous Air Pollutant (HAP) content for each HAP per pound of ink produced in pounds of individual HAP per pound of ink.

d. The total combined HAP content of each ink in pounds of combined HAPs per pound of ink [sum all the individual HAP contents from (c)].

e. The total individual HAP emissions for each HAP from all inks employed in pounds or tons per month [for each individual HAP, the summation of (b) x 1.36 percent x (c)].

f. The total combined HAP emissions from all inks employed in pounds or tons per month [the summation of (b) x 1.36 percent x (d)].

g. The updated rolling, 12-month summation for individual HAP emissions for each HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

h. The updated rolling, 12-month summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

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

3. The permittee shall maintain monthly record of the following information:

a. The production rate for each month, in pounds of ink.

b. The rolling, 12-month summation of the production rates, in pounds of ink.

D. Reporting Requirements

1. The permittee shall submit annual reports to Hamilton County Department of Environmental Services which specify the total organic compound emissions from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 . These reports shall be submitted by January 30 of each year and cover the previous calendar year.

2. The permittee shall submit deviation (excursion) reports for any exceedance of the emission limitations listed in Term and condition A.1 and B.2.

3. The permittee shall submit quarterly deviation reports which identify any exceedance of the HAP emission limitations set forth in term A.2.b. If no exceedances occurred during the reporting period then a report is required stating so.

4. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation.

5. 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. Compliance with the emission limitations in Term and condition A.1. of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.46 lbs/hr OC

Applicable Compliance Method:

The hourly OC emission rate is based on the emission units potential to emit. The potential to emit was calculated by: (maximum production rate of 120 pounds per hour) x (35% percent by weight OC content, in pounds of OC processed) x (80% equipment usage**) x (0.0136 pound OC emitted/ pound OC processed*).

b. Emission Limitation:

38.4 TPY OC from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined

Applicable Compliance Method:

Compliance with the annual organic compound emission limitations in term A.1. shall be based upon the record keeping requirements as specified in term C.1.

c. Emission Limitation:

9.9 TPY for any single HAP and 24.9 TPY for combined HAPs

Applicable Compliance Method:

Compliance with the HAP emission limitations in term A.2.b. shall be demonstrated by the record keeping requirements specified in term C.2.

d. Usage Limitation:

16,126,240 pounds of ink per year

Applicable Compliance Method:

Compliance with the production rate limitation in term B.1. shall be based upon the record keeping requirements as specified in term C.3.

**The 80% equipment usage is based on the maximum mixing capacity of the mixer.

F. Miscellaneous Requirements

1. The terms and conditions in this permit supersede Permit to Install 14-4638, as issued on May 12, 1999, Permit to Install 14-1080, as issued on September 17, 1986 and Permit to Install 14-05691, as issued on June 21, 2005.

2. The following terms and conditions of this permit are federally enforceable: A., B., C., D. and E.

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	OAC rule 3745-35-07(B) (to avoid being subject to Title V permitting requirements)
P030 - 0.5 HP air ink mixer with cover - modification	OAC rule 3745-31-05(A)(3)	OAC rule 3745-21-07(G)(2)
	OAC rule 3745-31-05(C) (to avoid being a major stationary source for purposes of non attainment review). OAC rule 3745-35-07(B) (to avoid being subject to Title V permitting requirements)	

Applicable Emissions Limitations/Control Measures	
Organic compound (OC) emissions from the mixer shall not exceed 0.46 pounds per hour.	call held July 18, 2002.
See term and condition A.2.a. and B.2.	
The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C) and 3745-35-07(B). .	
Organic compound (OC) emissions from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 , combined shall not exceed 38.4 tons per year (TPY) OC, based on a rolling, 12-month summation. The permittee has existing records to demonstrate compliance with this limit upon permit issuance.	
See term and condition B.1.	
See terms and conditions A.2.b.	
Exempt due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting	

2. Additional Terms and Conditions

2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the usage and emissions limitations and use of a cover .

2.b The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), , P026 (Liquid Ink Mixer 5), P027 (Liquid Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit 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.

The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2.c The hourly OC emissions limitation outlined are based upon the emissions unit's Potential To Emit (PTE). Therefore, no records are required to demonstrate compliance with this limit.

B. Operational Restrictions

1. The maximum annual production rate for emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined shall not exceed 16,126,240 pounds of ink per year, based upon a rolling, 12-month summation of the production rates. The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2. The OC content of the inks mixed in this emissions unit shall not exceed 35% by weight.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall collect and record the following information each month for all organic compounds used in the formulation of finished inks for emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 :

a. The name and identification of each batch of ink produced.

b. The amount of each organic material used in the formulation of inks, in pounds.

c. The total combined monthly OC emissions, in tons per month. This calculation shall be based on the following equation:

The summation of [(b) x (0.0136 pound OC emitted/pound OC processed*)/2000] for each liquid organic material used in the formulation of inks.

* Emission factor derived from the testing of similar sources by Sun Chemical.

d. The rolling, 12-month summation of OC emissions (the summation of the current month's emission total and the previous eleven calendar months emission totals).

e. The OC content, in percent by weight, for each batch.

2. The permittee shall collect and record the following information each month for emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), P026 (Liquid Ink Mixer 5), P027 (Liquid Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit:

a. The name and identification number of each batch of ink produced containing a HAP(s).

b. The number of pounds of each batch of ink produced.

c. The individual Hazardous Air Pollutant (HAP) content for each HAP per pound of ink produced in pounds of individual HAP per pound of ink.

d. The total combined HAP content of each ink in pounds of combined HAPs per pound of ink [sum all the individual HAP contents from (c)].

e. The total individual HAP emissions for each HAP from all inks employed in pounds or tons per month [for each individual HAP, the summation of (b) x 1.36 percent x (c)].

f. The total combined HAP emissions from all inks employed in pounds or tons per month [the summation of (b) x 1.36 percent x (d)].

g. The updated rolling, 12-month summation for individual HAP emissions for each HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

h. The updated rolling, 12-month summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

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

3. The permittee shall maintain monthly record of the following information:

a. The production rate for each month, in pounds of ink.

b. The rolling, 12-month summation of the production rates, in pounds of ink.

D. Reporting Requirements

1. The permittee shall submit annual reports to Hamilton County Department of Environmental Services which specify the total organic compound emissions from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 . These reports shall be submitted by January 30 of each year and cover the previous calendar year.

2. The permittee shall submit deviation (excursion) reports for any exceedance of the emission limitations listed in Term and condition A.1 and B.2.

3. The permittee shall submit quarterly deviation reports which identify any exceedance of the HAP emission limitations set forth in term A.2.b. If no exceedances occurred during the reporting period then a report is required stating so.

4. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation.

5. 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. Compliance with the emission limitations in Term and condition A.1. of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

0.46 lbs/hr OC

Applicable Compliance Method:

The hourly OC emission rate is based on the emission units potential to emit. The potential to emit was calculated by: (maximum production rate of 120 pounds per hour) x (35% percent by weight OC content, in pounds of OC processed) x (80% equipment usage**) x (0.0136 pound OC emitted/ pound OC processed*).

b. Emission Limitation:

38.4 TPY OC from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined

Applicable Compliance Method:

Compliance with the annual organic compound emission limitations in term A.1. shall be based upon the record keeping requirements as specified in term C.1.

c. Emission Limitation:

9.9 TPY for any single HAP and 24.9 TPY for combined HAPs

Applicable Compliance Method:

Compliance with the HAP emission limitations in term A.2.b. shall be demonstrated by the record keeping requirements specified in term C.2.

d. Usage Limitation:

16,126,240 pounds of ink per year

Applicable Compliance Method:

Compliance with the production rate limitation in term B.1. shall be based upon the record keeping requirements as specified in term C.3.

**The 80% equipment usage is based on the maximum mixing capacity of the mixer.

F. Miscellaneous Requirements

1. The terms and conditions in this permit supersede Permit to Install 14-4638, as issued on May 12, 1999, Permit to Install 14-1080, as issued on September 17, 1986 and Permit to Install 14-05691, as issued on June 21, 2005.

2. The following terms and conditions of this permit are federally enforceable: A., B., C., D. and E.

Emissions Unit ID: **P031**

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	
P031 - Liquid ink mixer 10 with cover and baghouse - modification	OAC rule 3745-31-05(A)(3)	OAC rule 3745-31-05(C) (to avoid being a major stationary source for purposes of non attainment review).
		OAC rule 3745-35-07(B) (to avoid being subject to Title V permitting requirements)
		OAC rule 3745-35-07(B) (to avoid being subject to OAC rule 3845-31-28 and Title V permitting requirements)
		OAC rule 3745-21-07(G)(2)
		OAC rule 3745-17-11

	Applicable Emissions Limitations/Control Measures	
		P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 , combined shall not exceed 38.4 TPY OC, based on a rolling, 12-month summation. The permittee has existing records to demonstrate compliance with this limit upon permit issuance.
OAC rule 3745-17-07(A)(1) OAC rule 3745-17-07(B)(1)	Organic compound (OC) emissions from this emission unit shall not exceed 4.14 pounds per hour.	
	Particulate emissions (PE) from the mixer shall not exceed 0.02 pound per hour and 0.35 tons per year (TPY) for emissions units P022, P023, P024, P026, P027, P031 and P032, combined.	See term and condition B.1 See term and condition A.2.b.
	Particulate matter 10 microns and less in diameter (PM10) emissions from this emissions unit shall not exceed 0.02 pound per hour and 0.35 TPY for emissions units P022, P023, P024, P026, P027, P031 and P032, combined. PE = PM10	Exempt due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held July 18, 2002. The emission limitation specified by this rule is less stringent than the requirements of OAC rule 3745-31-05(A)(3).
	See terms and conditions B.1 - B.3.	See term and condition A.2.d.
	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-35-07(B) , 3745-17-07(A)(1) and 3745-17-07(B)(1).	See term and condition A.2.e.
	Organic compound (OC) emissions from emissions units	

2. Additional Terms and Conditions

2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the usage and emissions limitations.

2.b The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), P026 (Liquid Ink Mixer 5), P027 (Liquid Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit 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.

The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2.c The hourly OC and PM-PM10 emissions limitation outlined is based upon the emissions unit's Potential To Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.

2.d Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average.

2.e Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

B. Operational Restrictions

1. The maximum annual production rate for emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined shall not exceed 16,126,240 pounds of ink per year, based upon a rolling, 12-month summation of the production

rates. The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2. The OC content of the inks mixed in this emissions unit shall not exceed 95% by weight.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall collect and record the following information each month for all organic compounds used in the formulation of finished inks for emissions units P031 - P033:

a. The name and identification of each batch of ink produced.

b. The amount of each organic material used in the formulation of inks, in pounds.

c. The total combined monthly OC emissions, in tons per month. This calculation shall be based on the following equation:

The summation of [(b) x (0.0136 pound OC emitted/pound OC processed*)/2000] for each liquid organic material used in the formulation of inks.

* Emission factor derived from the testing of similar sources by Sun Chemical.

d. The rolling, 12-month summation of OC emissions (the summation of the current month's emission total and the previous eleven calendar months emission totals).

e. The OC content, in percent by weight, for each batch.

2. The permittee shall collect and record the following information each month for emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), P026 (Liquid Ink Mixer 5), P027 (Liquid

Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit:

a. The name and identification number of each batch of ink produced containing a HAP(s).

b. The number of pounds of each batch of ink produced.

c. The individual Hazardous Air Pollutant (HAP) content for each HAP per pound of ink produced in pounds of individual HAP per pound of ink.

d. The total combined HAP content of each ink in pounds of combined HAPs per pound of ink [sum all the individual HAP contents from (c)].

e. The total individual HAP emissions for each HAP from all inks employed in pounds or tons per month [for each individual HAP, the summation of (b) x 1.36 percent x (c)].

f. The total combined HAP emissions from all inks employed in pounds or tons per month [the summation of (b) x 1.36 percent x (d)].

g. The updated rolling, 12-month summation for individual HAP emissions for each

HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

h. The updated rolling, 12-month summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

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

3. The permittee shall maintain monthly record of the following information:

a. The production rate for each month, in pounds of ink.

b. The rolling, 12-month summation of the production rates, in pounds of ink.

4. The permit to install for this emissions unit P031 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: 2-butoxyethanol

TLV (ug/m^3): 96,660

Maximum Hourly Emission Rate (lbs/hr): 9.11

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m^3): 2080

MAGLC (ug/m^3): 2302

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 for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, 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 submit annual reports to Hamilton County Department of Environmental Services which specify the total organic compound emissions from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 . These reports shall be submitted by January 30 of each year and cover the previous calendar year.

2. The permittee shall submit deviation (excursion) reports for any exceedance of the emission limitations listed in Section A.1 and B.3.

3. The permittee shall submit quarterly deviation reports which identify any exceedance of the HAP emission limitations set forth in term A.2.b. If no exceedances occurred during the reporting period then a report is required stating so.

4. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation.

5. 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. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

4.14 lbs/hr OC

Applicable Compliance Method:

The hourly OC emission rate is based on the emission units potential to emit. The potential to emit was calculated by: (maximum production rate of 400 pounds per hour) x (95% percent by weight OC content, in pounds of OC processed) x (80% equipment usage**) x (0.0136 pound OC emitted/pound of OC processed*), as submitted in Permit to Install application 14-05691, received on March 3, 2005.

** The 80% equipment usage is based on the maximum mixing capacity of the mixer.

b. Emission Limitation:

0.02 lb/hr PM-PM10

Applicable Compliance Method:

The hourly PM-PM10 emission rate is based on the emission units potential to emit. The potential to emit was calculated by: [(maximum production rate of 400 pounds per hour) x (35% added pigment) x (80% equipment usage**) x (0.1% AP-42 emission factor) x {(80% capture efficiency) x (99.9% control efficiency)} + (maximum production rate of 400 pounds per hour) x (35% added pigment) x (80% equipment usage*) x (0.1% AP-42 emission factor) x {1-(80% capture efficiency)}].

c. Emission Limitation:

0.35 TPY PM-PM10 for emissions units P022, P023, P024, P026, P027, P031 and P032, combined.

Applicable Compliance Limitation:

The annual PM-PM10 emission rate is based on the emission units potential to emit. The emissions unit is assumed to be in compliance as long as compliance with the hourly rate is maintained. The annual PM-PM10 emission rate was calculated by: [{(9,960,159 pounds of ink per year) x (35% added pigment) x (0.1% AP-42 emission factor) x {(80% capture efficiency) x (99.9% control efficiency)} + (9,960,159 pounds of ink per year) x (35% added pigment) x (0.1% AP-42 emission factor) x {1-(80% capture efficiency)}]/(2000) for emissions units P022, P023, P024, P026, P027, P031 and P032, combined.

d. Emission Limitation:

38.4 TPY OC from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined

Applicable Compliance Method:

Compliance with the annual organic compound emission limitations in term A.1. shall be based upon the record keeping requirements as specified in term C.1.

e. Emission Limitation:

9.9 TPY for any single HAP and 24.9 TPY for combined HAPs from the facility

Applicable Compliance Method:

Compliance with the HAP emission limitations in term A.2.b. shall be determined by the record keeping requirements specified in term C.2.

f. Usage Limitation:

16,126,240 pounds of ink per year

Applicable Compliance Method:

Compliance with the production rate limitation in term B.1. shall be based upon the record keeping requirements as specified in term C.3.

g. Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

h. Emission Limitation:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(3).

2. Compliance with the usage limitation in term B.2. shall be based upon the record keeping requirements as specified in term C.1.

F. Miscellaneous Requirements

1. The terms and conditions in this permit supersede Permit to Install 14-05691, as issued on June 21, 2005.

2. The following terms and conditions of this permit are federally enforceable: A., B., C.1 - C.3, D. and E.

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	(to avoid being a major stationary source for purposes of non attainment review).
P032 - Liquid ink mixer 11 with cover and baghouse - modification	OAC rule 3745-31-05(A)(3)	
		OAC rule 3745-35-07(B) (to avoid being subject to Title V permitting requirements)
		OAC rule 3745-35-07(B) (to avoid being subject to OAC rule 3845-31-28 and Title V permitting requirements)
		OAC rule 3745-21-07(G)(2)
		OAC rule 3745-17-11
	OAC rule 3745-31-05(C)	

	Applicable Emissions Limitations/Control Measures	
		P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 , combined shall not exceed 38.4 TPY OC, based on a rolling, 12-month summation. The permittee has existing records to demonstrate compliance with this limit upon permit issuance.
OAC rule 3745-17-07(A)(1) OAC rule 3745-17-07(B)(1)	Organic compound (OC) emissions from this emission unit shall not exceed 4.14 pounds per hour.	
	Particulate emissions (PE) from the mixer shall not exceed 0.02 pound per hour and 0.35 tons per year (TPY) for emissions units P022, P023, P024, P026, P027, P031 and P032, combined.	See term and condition B.1 See term and condition A.2.b.
	Particulate matter 10 microns and less in diameter (PM10) emissions from this emissions unit shall not exceed 0.02 pound per hour and 0.35 TPY for emissions units P022, P023, P024, P026, P027, P031 and P032, combined.	Exempt due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held July 18, 2002. The emission limitation specified by this rule is less stringent than the requirements of OAC rule 3745-31-05(A)(3).
	PE = PM10	See term and condition A.2.d.
	See terms and conditions B.1 - B.3.	See term and condition A.2.e.
	The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C), 3745-35-07(B) , 3745-17-07(A)(1) and 3745-17-07(B)(1).	
	Organic compound (OC) emissions from emissions units	

2. Additional Terms and Conditions

2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the usage and emissions limitations.

2.b The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010

(Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), P026 (Liquid Ink Mixer 5), P027 (Liquid Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit 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.

The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2.c The hourly OC and PM-PM10 emissions limitation outlined is based upon the emissions unit's Potential To Emit (PTE). Therefore, no records are required to demonstrate compliance with these limits.

2.d Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average.

2.e Visible particulate emissions from any stack shall not exceed 20 percent opacity, as a six-minute average, except as specified by rule.

B. Operational Restrictions

1. The maximum annual production rate for emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined shall not exceed 16,126,240 pounds of ink per year, based upon a rolling, 12-month summation of the production rates. The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2. The OC content of the inks mixed in this emissions unit shall not exceed 95% by weight.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall collect and record the following information each month for all organic compounds used in the formulation of finished inks for emissions units P031 - P033:

a. The name and identification of each batch of ink produced.

b. The amount of each organic material used in the formulation of inks, in pounds.

c. The total combined monthly OC emissions, in tons per month. This calculation shall be based on the following equation:

The summation of [(b) x (0.0136 pound OC emitted/pound OC processed*)/2000] for each liquid organic material used in the formulation of inks.

* Emission factor derived from the testing of similar sources by Sun Chemical.

d. The rolling, 12-month summation of OC emissions (the summation of the current month's emission total and the previous eleven calendar months emission totals).

e. The OC content, in percent by weight, for each batch.

2. The permittee shall collect and record the following information each month for emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill

2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), P026 (Liquid Ink Mixer 5), P027 (Liquid Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit:

a. The name and identification number of each batch of ink produced containing a HAP(s).

b. The number of pounds of each batch of ink produced.

c. The individual Hazardous Air Pollutant (HAP) content for each HAP per pound of ink produced in pounds of individual HAP per pound of ink.

d. The total combined HAP content of each ink in pounds of combined HAPs per pound of ink [sum all the individual HAP contents from (c)].

e. The total individual HAP emissions for each HAP from all inks employed in pounds or tons per month [for each individual HAP, the summation of (b) x 1.36 percent x (c)].

f. The total combined HAP emissions from all inks employed in pounds or tons per month [the summation of (b) x 1.36 percent x (d)].

g. The updated rolling, 12-month summation for individual HAP emissions for each

HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

h. The updated rolling, 12-month summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

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

3. The permittee shall maintain monthly record of the following information:

a. The production rate for each month, in pounds of ink.

b. The rolling, 12-month summation of the production rates, in pounds of ink.

4. The permit to install for this emissions unit P031 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: 2-butoxyethanol

TLV (ug/m^3): 96,660

Maximum Hourly Emission Rate (lbs/hr): 9.11

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m^3): 2080

MAGLC (ug/m^3): 2302

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 for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, 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 submit annual reports to Hamilton County Department of Environmental Services which specify the total organic compound emissions from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 . These reports shall be submitted by January 30 of each year and cover the previous calendar year.

2. The permittee shall submit deviation (excursion) reports for any exceedance of the emission limitations listed in Section A.1 and B.3.

3. The permittee shall submit quarterly deviation reports which identify any exceedance of the HAP emission limitations set forth in term A.2.b. If no exceedances occurred during the reporting period then a report is required stating so.

4. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation.

5. 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. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

4.14 lbs/hr OC

Applicable Compliance Method:

The hourly OC emission rate is based on the emission units potential to emit. The potential to emit was calculated by: (maximum production rate of 400 pounds per hour) x (95% percent by weight OC content, in pounds of OC processed) x (80% equipment usage**) x (0.0136 pound OC emitted/pound of OC processed*), as submitted in Permit to Install application 14-05691, received on March 3, 2005.

** The 80% equipment usage is based on the maximum mixing capacity of the mixer.

b. Emission Limitation:

0.02 lb/hr PM-PM10

Applicable Compliance Method:

The hourly PM-PM10 emission rate is based on the emission units potential to emit. The potential to emit was calculated by: [(maximum production rate of 400 pounds per hour) x (35% added pigment) x (80% equipment usage**) x (0.1% AP-42 emission factor) x {(80% capture efficiency) x (99.9% control efficiency)} + (maximum production rate of 400 pounds per hour) x (35% added pigment) x (80% equipment usage*) x (0.1% AP-42 emission factor) x {1-(80% capture efficiency)}].

c. Emission Limitation:

0.35 TPY PM-PM10 for emissions units P022, P023, P024, P026, P027, P031 and P032, combined.

Applicable Compliance Limitation:

The annual PM-PM10 emission rate is based on the emission units potential to emit. The emissions unit is assumed to be in compliance as long as compliance with the hourly rate is maintained. The annual PM-PM10 emission rate was calculated by: [{(9,960,159 pounds of ink per year) x (35% added pigment) x (0.1% AP-42 emission factor) x {(80% capture efficiency) x (99.9% control efficiency)} + (9,960,159 pounds of ink per year) x (35% added pigment) x (0.1% AP-42 emission factor) x {1-(80% capture efficiency)}]/(2000) for emissions units P022, P023, P024, P026, P027, P031 and P032, combined.

d. Emission Limitation:

38.4 TPY OC from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined

Applicable Compliance Method:

Compliance with the annual organic compound emission limitations in term A.1. shall be based upon the record keeping requirements as specified in term C.1.

e. Emission Limitation:

9.9 TPY for any single HAP and 24.9 TPY for combined HAPs from the facility

Applicable Compliance Method:

Compliance with the HAP emission limitations in term A.2.b. shall be determined by the record keeping requirements specified in term C.2.

f. Usage Limitation:

16,126,240 pounds of ink per year

Applicable Compliance Method:

Compliance with the production rate limitation in term B.1. shall be based upon the record keeping requirements as specified in term C.3.

g. Emission Limitation:

Visible particulate emissions shall not exceed 20 percent opacity, as a six-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, Method 9, and the procedures specified in OAC rule 3745-17-03(B)(1).

h. Emission Limitation:

Fugitive visible particulate emissions shall not exceed 20 percent opacity, as a three-minute average, except as provided by the rule.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with 40 CFR Part 60, Appendix A, and the procedures specified in OAC rule 3745-17-03(B)(3).

2. Compliance with the usage limitation in term B.2. shall be based upon the record keeping requirements as specified in term C.1.

F. Miscellaneous Requirements

1. The terms and conditions in this permit supersede Permit to Install 14-05691, as issued on June 21, 2005.

2. The following terms and conditions of this permit are federally enforceable: A., B., C.1 - C.3, D. and E.

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	
		(to avoid being subject to Title V permitting requirements)
P033 - Liquid ink dispenser	OAC rule 3745-31-05(A)(3)	OAC rule 3745-35-07(B) (to avoid being subject to OAC rule 3845-31-28 and Title V permitting requirements)
		OAC rule 3745-21-07(G)(2)
	OAC rule 3745-31-05(C) (to avoid being a major stationary source for purposes of non attainment review).	
	OAC rule 3745-35-07(B)	

Applicable Emissions Limitations/Control Measures	
Organic compound (OC) emissions from this emission unit shall not exceed 8.27 pounds per hour. See terms and conditions A.2.a and B.2. The requirements of this rule also include compliance with the requirements of OAC rules 3745-31-05(C) and 3745-35-07(B). Organic compound (OC) emissions from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 , combined shall not exceed 38.4 tons per year (TPY) OC, based on a rolling, 12-month summation. The permittee has existing records to demonstrate compliance with this limit upon permit issuance. See term and condition B.1. See term and condition A.2.b.	Exempt due to Ohio Supreme Court decision of July 11, 2001 and the Ohio EPA permitting call held July 18, 2002.

2. Additional Terms and Conditions

2.a Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the usage and emissions limitations.

2.b The actual emissions of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act from emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), P026 (Liquid Ink Mixer 5), P027 (Liquid Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit 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.

The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2.c The hourly OC emission limitation outlined is based upon the emissions unit's Potential To Emit (PTE). Therefore, no records are required to demonstrate compliance with this limit.

B. Operational Restrictions

1. The maximum annual production rate for emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined shall not exceed 16,126,240 pounds of ink per year, based upon a rolling, 12-month summation of the production rates. The permittee has existing records to demonstrate compliance with this limit upon permit issuance.

2. The OC content of the inks mixed in this emissions unit shall not exceed 95% by weight.

C. Monitoring and/or Record keeping Requirements

1. The permittee shall collect and record the following information each month for all organic compounds used in the formulation of finished inks for emissions units P031 - P033:

a. The name and identification of each batch of ink produced.

b. The amount of each organic material used in the formulation of inks, in pounds.

c. The total combined monthly OC emissions, in tons per month. This calculation shall be based on the following equation:

The summation of [(b) x (0.0136 pound OC emitted/pound OC processed*)/2000] for each liquid organic material used in the formulation of inks.

* Emission factor derived from the testing of similar sources by Sun Chemical.

d. The rolling, 12-month summation of OC emissions (the summation of the current month's emission total and the previous eleven calendar months emission totals).

e. The OC content, in percent by weight, for each batch.

2. The permittee shall collect and record the following information each month for emissions units P003 (Paste Ink Mixer 1), P004 (Paste Ink Mixer 2), P005 (Paste Ink Mixer 3), P006 (Paste Ink Mixer 4), P007 (Paste Ink Mixer 5), P008 (Paste Ink Mixer 6), P009 (Paste Ink Mixer 7), P010 (Paste Ink Mixer 8), P011 (Paste Ink Mixer 9), P012 (Paste Ink Mixer 10), P013 (Paste Ink Mixer 11), P014 (3-Roll Mill 1), P015 (3-Roll Mill 2), P016 (3-Roll Mill 3), P017 (3-Roll Mill 4), P018 (3-Roll Mill 5), P019 (3-Roll Mill 6), P020 (Paste Ink Mixer 12), P021 (Paste Ink Mixer 13), P022 (Liquid Ink Mixer 1), P023 (Liquid Ink Mixer 2), P024 (Liquid Ink Mixer 3), P026 (Liquid Ink Mixer 5), P027 (Liquid Ink Mixer 6), P029 (Liquid Ink Mixer 8), P030 (Liquid Ink Mixer 9), P031(Liquid Ink Mixer 10), P032 (Liquid Ink Mixer 11), P033 (Liquid Ink Dispenser), two 2 HP Paste Mixers (deminimis), five 0.5 HP Paste Mixers (deminimis), and other deminimis sources, as defined in OAC rule 3745-15-05, installed subsequent to the issuance of this permit:

a. The name and identification number of each batch of ink produced containing a HAP(s).

b. The number of pounds of each batch of ink produced.

c. The individual Hazardous Air Pollutant (HAP) content for each HAP per pound of ink produced in pounds of individual HAP per pound of ink.

d. The total combined HAP content of each ink in pounds of combined HAPs per pound of ink [sum all the individual HAP contents from (c)].

e. The total individual HAP emissions for each HAP from all inks employed in pounds or tons per month [for each individual HAP, the summation of (b) x 1.36 percent x (c)].

f. The total combined HAP emissions from all inks employed in pounds or tons per month [the summation of (b) x 1.36 percent x (d)].

g. The updated rolling, 12-month summation for individual HAP emissions for each HAP, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

h. The updated rolling, 12-month summation for total combined HAP emissions, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months.

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

3. The permittee shall maintain monthly record of the following information:

a. The production rate for each month, in pounds of ink.

b. The rolling, 12-month summation of the production rates, in pounds of ink.

4. The permit to install for this emissions unit P033 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: 2-butoxyethanol

TLV (ug/m^3): 96,660

Maximum Hourly Emission Rate (lbs/hr): 9.11

Predicted 1-Hour Maximum Ground-Level
Concentration (ug/m^3): 2080

MAGLC (ug/m^3): 2302

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 for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, 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 submit annual reports to Hamilton County Department of Environmental Services which specify the total organic compound emissions from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 . These reports shall be submitted by January 30 of each year and cover the previous calendar year.

2. The permittee shall submit deviation (excursion) reports for any exceedance of the emission limitations listed in Section A.1 and B.3.

3. The permittee shall submit quarterly deviation reports which identify any exceedance of the HAP emission limitations set forth in term A.2.b. If no exceedances occurred during the reporting period then a report is required stating so.

4. The permittee shall submit deviation (excursion) reports that identify all exceedances of the rolling, 12-month production rate limitation.

5. 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. Compliance with the emission limitations in Section A.1. of these terms and conditions shall be determined in accordance with the following methods:

a. Emission Limitation:

8.27 lbs/hr OC

Applicable Compliance Method:

The hourly OC emission rate is based on the emission units potential to emit. The potential to emit was calculated by: (maximum production rate of 800 pounds per hour) x (95% percent by weight OC content, in pounds of OC processed) x (80% equipment usage**) x (0.0136 pound OC emitted/pound OC processed*), as submitted in Permit to Install application 14-05691, received on March 3, 2005.

** The 80% equipment usage is based on the maximum mixing capacity of the mixer.

b. Emission Limitation:

38.4 TPY OC from emissions units P022, P023, P024, P026, P027, P029, P030, P031, P032 and P033 combined

Applicable Compliance Method:

Compliance with the annual organic compound emission limitations in term A.1. shall be based upon the record keeping requirements as specified in term C.1.

c. Emission Limitation:

9.9 TPY for any single HAP and 24.9 TPY for combined HAPs from the facility

Applicable Compliance Method:

Compliance with the HAP emission limitations in term A.2.b. shall be determined by the record keeping requirements specified in term C.2.

d. Usage Limitation:

16,126,240 pounds of ink per year

Applicable Compliance Method:

Compliance with the production rate limitation in term B.1. shall be based upon the record keeping requirements as specified in term C.3.

2. Compliance with the usage limitation in term B.2. shall be based upon the record keeping requirements as specified in term C.1.

F. Miscellaneous Requirements

1. The terms and conditions in this permit supersede Permit to Install 14-05691, as issued on June 21, 2005.

2. The following terms and conditions of this permit are federally enforceable: A., B., C.1 - C.3, D. and E.