State of Ohio Environmental Protection Agency

Street Address:
Lazarus Gov. Center
122 S. Front Street
Columbus, OH 43215

TELE: (614) 644-3020 **FAX:** (614) 644-2329

Mailing Address:
Lazarus Gov. Center
P.O. Box 1049
Columbus, OH 43216-1049

RE: FINAL PERMIT TO INSTALL
MEDINA COUNTY
Application No: 16-02191

CERTIFIED MAIL

	TOXIC REVIEW
	PSD
Y	**SYNTHETIC MINOR**
	CEMS
40 CFR Part 63 Subpart KK	**MACT**
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
Y	**MODELING SUBMITTED**
	GASOLINE DISPENSING FACILITY

DATE: 7/2/2002

American Color Graphics Medina
Dan Transue
620 East Smith Rd
Medina, OH 44256-2695

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

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

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

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

Very truly yours,

Thomas G. Rigo

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

CC: USEPA **ARAQMD**

FINAL PERMIT TO INSTALL 16-02191

Application Number:	16-02191
APS Premise Number:	1652050075
Permit Fee:	**$2800**
Name of Facility:	American Color Graphics Medina
Person to Contact:	Dan Transue
Address:	620 East Smith Rd Medina, OH 44256-2695

Location of proposed air contaminant source(s) [emissions unit(s)]:
620 East Smith Rd
Medina, **Ohio**

Description of proposed emissions unit(s):
Three (3) Heatset Web-Offset Printing Presses.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements Related to Monitoring and Recordkeeping Requirements

The permittee shall submit required reports in the following manner:

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

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

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

be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Termination of Permit to Install

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

9. Construction of New Sources(s)

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

12. Best Available Technology

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

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

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

14. Construction Compliance Certification

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

15. Fees

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

B. Permit to Install Summary of Allowable Emissions

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

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

Pollutant	Tons Per Year
VOC	99.00
Individual HAP	9.9
Combined HAP	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	Applicable Emissions Limitations/Control Measures
K002: 8-unit Goss C-500 Printing Press - heatset web offset lithographic printing line, 8 unit, equipped with an ink setting oven and a thermal incinerator shared with K005	OAC rule 3745-31-05(A)(3)	VOC emissions from the incinerator stack shall not exceed 4.51 lbs/hr from the K002 printing operations and 9.02 lbs/hr from K002 and K005 together. Fugitive VOC emissions from printing operations on K002 shall not exceed 2.25 lbs/hr. All VOC emissions entering the dryer from emissions units K002 and K005 shall be vented to a common direct flame (thermal) incinerator that must, at a minimum, oxidize or convert 90% by weight or more of the carbon in the organic material being incinerated to carbon dioxide. See A.2.a below. There shall be no visible emissions of particulates from any building ventilation (i.e., doors, windows, vents, etc.). Hand rags and any other articles used for cleanup shall be placed in a closed/sealed container, when not in use or for proper disposal, to reduce fugitive VOC emissions. Also, the operational restrictions in Section B. below satisfy OAC rule 3745-31-05 requirements.

OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-35-07(B)	See A.2.b, A.2.c, A.2.d, and A.2.e below.
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed twenty per cent opacity, as a six-minute average, except as provided by rule.
OAC rule 3745-17-11(B)(1)	Particulate emissions shall not exceed 0.65 lb/hr.

2. Additional Terms and Conditions

2.a During the compliance testing performed on June 27, 1997, the Thermo-Electron thermal incinerator demonstrated an average destruction efficiency of 96.20% controlling the VOC emissions from emissions units K001 through K003 combined. This unit will now control the VOC emissions from emissions units K002 and K005.

During the compliance testing performed June 27, 1997, the CVM thermal incinerator that controls the VOC emissions from emissions units K004 demonstrated an average destruction efficiency of 93.93%. This unit will now control the VOC emissions from emissions unit K003.

Until testing is conducted as required in this permit, the permittee may use 93.93% destruction to determine facility-wide emissions of VOC (resulting from heatset printing ink, fountain solution, and blanket wash) to simplify recordkeeping. If compliance is questionable, then the permittee reserves the right to use both tested incinerator destruction efficiencies.

2.b Facility-wide VOC emissions and emissions of hazardous air pollutants (HAPs) shall be calculated for all emissions units as follows:

i. 20% (by weight) of the solvent in the heatset inks is retained in the web after the dryer. Assuming 100% capture, the remaining 80% (by weight) of the VOC and HAPs in the ink are vented to the thermal incinerator.

ii. 95% (by weight) of the solvent in the non-heatset inks is retained in the web, and the remaining 5% (by weight) of the solvent is fugitive emissions.

iii. For heatset printing lines, 20% of the fountain solution emissions are fugitive and the remaining 80% of the fountain solution emissions are vented to the thermal incinerator.

iv. For automatic blanket wash systems, 60% of the solvent is fugitive and 40% is vented to the thermal incinerator. For manual blanket wash systems (i.e., hand-washing with rags), 50% of the solvent is fugitive and 50% is retained in the properly disposed of rags.

v. A destruction efficiency of 93.93% shall be assumed for each of the two incinerators, per A.2.a above.

2.c The maximum annual facility-wide VOC emissions shall not exceed 99.0 TPY, based upon a 12-month rolling sum of the monthly emissions.

2.d The maximum annual facility-wide emissions of any individual HAP shall not exceed 9.9 TPY, based upon a 12-month rolling sum of the monthly emissions.

2.e The maximum annual facility-wide emissions of combined HAPs shall not exceed 24.9 TPY, based upon a 12-month rolling sum of the monthly emissions.

2.f The hourly VOC emission limit for this emissions unit was established to reflect its potential to emit. This limit is based on the maximum printing rate, highest VOC contents, lowest requirements for control, and the maximum usage of ink, fountain solution, blanket-wash, cleanup material, and thinning solvent in any hour. Therefore, it was not necessary to develop daily record keeping and/or reporting requirements to ensure compliance with the hourly VOC emission limit.

B. Operational Restrictions

1. The permittee shall not employ any photochemically reactive material, as defined by OAC Rule 3745-21-01 (C)(5), in this emissions unit. This determination shall be made based on the actual formulation of the materials after any final in-plant reducing or thinning and prior to application of the materials.

2. The maximum annual operating hours for this emissions unit shall not exceed 7700, based upon a rolling, 12-month summation of the operating hours.

   To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table:

month(s)	**Maximum Allowable Cumulative Operating Hours**

1	850
1-2	1,700
1-3	2,300
1-4	2,900
1-5	3,500
1-6	4,100
1-7	4,700
1-8	5,300
1-9	5,900
1-10	6,500
1-11	7,100
1-12	7,700

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours. If hours of operation for one or more emission units exceed 7700 hours, the permittee may demonstrate compliance by showing that calculated emissions are below the emission limits shown above.

3. The dryer(s) for this emissions unit shall only employ natural gas.

4. The permittee shall operate and maintain the thermal incinerator so that during any 3-hour block of time the average combustion temperature within the thermal incinerator is a minimum of 1350 degrees Fahrenheit.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor/recorder, which measures and records the combustion temperature within the thermal incinerator, when the emissions units are in operation. Units shall be in degrees Fahrenheit. The monitoring/recording device shall be capable of accurately measuring the desired parameter. The temperature monitor/recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

   a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the incinerator was in operation, was below 1350 degrees

Fahrenheit; and

b. a log of the downtime for the capture (collection) system, control device, and monitoring/recording equipment, when the associated emissions units were in operation.

2. The permittee shall collect and record monthly the following information for all emissions units (including de minimis emissions units) to determine facility-wide VOC emissions, facility-wide emissions of individual HAPs, and facility-wide emissions of combined HAPs:

a. the company identification for each printing ink (heatset, non-heatset, and flexographic), fountain solution, blanket-wash, cleanup materials, and thinning solvents employed;

b. the number of pounds of each ink employed;

c. the number of gallons of each fountain solution employed;

d. the number of gallons of each blanket-wash, cleanup material, and thinning solvent employed;

e. the density of each ink, fountain solution, blanket-wash, cleanup materials, and thinning solvents employed;

f. the VOC and HAP content of each ink employed, in percent by weight;

g. the VOC and HAP content of each fountain solution employed, in pounds per gallon of fountain solution or percent by weight;

h. the VOC and HAP content of each blanket-wash, cleanup material, and thinning solvent employed, in pounds per gallon of material or percent by weight;

i. the total VOC emissions, stack and fugitive, calculated using the records above and emission factors from guidance provided in Ohio Engineering Guides #56 and #68, "Compilation of Air Pollutant Emission Factors"AP-42, and "Control of Volatile Organic Compound Emissions for Offset Lithographic Printing", US EPA, 9/93;

j. the individual HAP emissions from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed, for each individual HAP, as calculated using the records maintained in this section;

k. the combined HAPs emissions from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed, for each individual HAP, as calculated using the records maintained in this section, in tons;

l. the rolling 12-month facility emissions of VOC from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed in all emission units, in tons;

m. the rolling 12-month facility emissions of each individual HAP, from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed in all emission units, in tons or pounds; and

n. the rolling 12-month facility emissions of combined HAPs, from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed in all emission units, in tons.

3. The permittee shall maintain monthly records as to whether or not each ink, fountain solution, blanket-wash, cleanup material, and thinning solvent employed is a photochemically reactive material.

4. The permittee shall maintain monthly records of the following information:

a. the operating hours for each month;

b. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month; and

c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the operating hours.

5. The permit to install for this emissions unit (K002) was evaluated based on the actual materials (inks, fountain solutions, blanket wash, and cleaning solutions) 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the “worst case” pollutant(s):

Pollutant: ethylene glycol (CAS 107-21-1)

TLV (mg/m3): 100 (based on STEL)

Maximum Hourly Emission Rate (lbs/hr): 0.91

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 124

MAGLC (ug/m3): 2,381

Pollutant: ethylene glycol monobutyl ether (CAS 111-76-2)

TLV (mg/m3): 96.6 (based on TWA)

Maximum Hourly Emission Rate (lbs/hr): 1.77

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 241.51

MAGLC (ug/m3): 2,300

6. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

7. 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 Toxics Policy:"

   a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

   b. documentation of its evaluation and determination that the changed emissions unit still satisfies the “Air Toxic Policy”; and

   c. where 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 deviation (excursion) reports that identify each month during which the rolling, 12-month HAP emissions exceed 9.9 tons for any single HAP and 24.9 tons for combined HAPs, based on a rolling, 12-month summation of emissions from all materials applied facility wide;

2. The permittee shall submit deviation (excursion) reports that identify each month during which the rolling, 12-month VOC emissions exceed 99.0 tons, based on a rolling, 12-month summation of emissions from all materials applied facility wide;

3. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time during which the combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.

4. The permittee shall submit deviation (excursion) reports that identify the days during which any photochemically reactive materials were employed in this emissions unit. Each report shall identify the cause for the use of the photochemically reactive material(s) and the estimated total quantity of material(s) emitted during each such day, in pounds.

5. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative operating hours levels. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

6. Deviation (excursion) reports, as mentioned above, shall be submitted in accordance with the procedures required in Part I: General Terms and Conditions Section A.2.b.

7. The permittee shall submit in writing annual reports to the Director (appropriate District Office or local air agency) which specify the total VOC emissions, in tons, the total individual HAP emissions, in tons, and the total combined HAP emissions, in tons, from this facility for the previous calendar year. Each report shall be submitted by January 31 of each year.

E. Testing Requirements

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

1. Formulation data or USEPA Methods 24/24A shall be used to determine the VOC and HAP contents of the inks, fountain solutions, blanket washes, cleanup materials, and thinning solvents employed.

   a. Formulation data shall be used to evaluate if changes in the materials applied or the use of new materials results in:

      i. 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 TLV specified in Section F of this part;

      ii. emission of an air contaminant not previously permitted; and

      iii. increase in emissions of any pollutant that has a TLV listed in Section F of this part.

2. Control requirement:

   The thermal incinerator shall have a destruction efficiency of not less than 90%, by weight.

   Applicable Compliance Method:

   Compliance shall be demonstrated through the stack testing requirements found in Section E.12.

3. Emission Limitation:

   VOC emissions shall not exceed 4.51 pounds per hour from the stack associated with this emissions unit.

   Applicable Compliance Method:

   Until compliance is determined through testing in accordance with Section E.12 of these terms and conditions, compliance shall be demonstrated by using the following equation from Engineering Guide #56 for stack emissions:

   $S = (1 - DRE) \times [0.8(P) + A_d(FS) + B_d(BW)]$

   Where:

   S = stack emissions;

DRE = destruction efficiency of the thermal incinerator, expressed as a decimal or percent, which was determined during the most recent performance test which demonstrated compliance with the pound per hour emission limitation from the stack (a 90% destruction efficiency shall be used until testing has been completed);

0.8 = 20% of VOC's in heatset inks retained by substrate, 80% emitted per Engineering Guide #56;

P = (ink usage rate, lbs/hr) x (ink VOC content, % by wt.);

A_d = mass fraction of fountain solution VOC routed to dryer and control device;

FS = (fountain solution usage rate, lbs/hr) x (fountain solution VOC content, % by wt.);

B_d = mass fraction of cleanup solvent routed to dryer and control device (40% for automatic blanket wash); and

BW = (blanket wash usage rate, lbs/hr) x (blanket wash VOC content, % by wt.).

Worst case emissions shall be documented by substituting the maximum material usage and VOC content into this calculation as follows:

$S = (1 - DRE) \times [0.8(P) + A_d(FS) + B_d(BW)]$

S = (1 - 0.9) x [0.8(12.96 gal/hr)(8.2 lbs/gal)(50%VOC) + 0.8(2.01 gal/hr)(9.1 lb/gal)(15%VOC) +0.4(0.38 gal/hr)(7.3 lbs/gal)(35%VOC)]

S = 4.51 lbs/hr

4. Emission Limitation:

Fugitive VOC emissions shall not exceed 2.25 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by the following worst-case calculation for fugitive emissions, using the equation obtained from Engineering Guide #56 with the addition of manual blanket wash which is fugitive according to the facility's permit application:

$F = [A_f(FS) + B_f(BW) + MBW]$

Where:

F = fugitive emissions from emissions unit K002,

A_f = mass fraction of fountain solution VOC emitted as fugitive;

FS = (fountain solution usage rate, lbs/hr) x (fountain solution VOC content, % by wt.);

B_f = mass fraction of cleanup solvent emitted as fugitive = 0.6 for automatic blanket wash;

BW = (blanket wash usage rate, lbs/hr) x (blanket wash VOC content, % by wt.); and

MBW = (manual blanket usage rate, lbs/hr) x (manual blanket VOC content, % by wt.).

Substituting for the maximum material usage and VOC content:

$F = [A_f(FS) + B_f(BW) + MBW]$

F = (0.2)(2.01 gal/hr)(9.1 lb/gal)(15%VOC) + 0.6(0.38 gal/hr)(7.3 lbs/gal)(35%VOC) + (0.34 gal/hr)(6.6 lbs/gal)(100% VOC)(50% solvent retained in rag)

F = 2.25 lbs/hr

5. Emission Limitation:

The maximum allowable 12-month rolling sum of facility-wide VOC emissions shall not exceed 99.0 TPY.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

6. Emission Limitation:

The maximum allowable 12-month rolling sum of facility-wide individual HAP emissions shall not exceed 9.9 TPY.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

7. Emission Limitation:

The maximum allowable 12-month rolling sum of facility-wide combined HAPs emissions shall not exceed 24.9 TPY.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

8. Emission Limitation:

Visible particulate emissions from the incinerator stack shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Method 9, from 40 CFR Part 60, Appendix A.

9. Emission Limitation:

No visible particulate emissions from building ventilation.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(4) using the methods and procedures specified in USEPA Method 22, 40 CFR Part 60, Appendix A.

10. Emission Limitation:

0.65 lb/hr particulates.

Applicable Compliance Method:

The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour according to Engineering Guide #56. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. The maximum process weight rate for this emissions unit in accordance with Engineering Guide #56 is129.3 pounds per hour based on the maximum quantities of ink, fountain solution, and blanket wash employed hourly. Therefore, in accordance with Table I of OAC rule 3745-17-11, the allowable rate of particulate emissions is 0.65 pound per hour. If required, compliance shall be determined through stack testing in accordance with 40 CFR Part 60, Appendix A, Method 5. Per the Ohio EPA Engineering Guide #56, no particulate testing should be necessary since this emissions unit is controlled by a thermal oxidizer.

11. Operational Restriction:

The maximum allowable 12-month rolling total operating hours shall not exceed 7700 hours. If hours of operation for one or more emission units exceed 7700 hours, the permittee may demonstrate compliance by showing that calculated emissions are below the emission limits shown above.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

12. Emission Limitation/Control Requirement

9.02 lbs VOC/hr stack emissions from K002 and K005 together with 90% control efficiency of VOC exhausted from the dryer

Applicable Compliance Method:

The permittee shall conduct, or have conducted, emission testing for emissions units K002 and K005, operating simultaneously, in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months of the installation of emission unit K005.

b. The emission testing shall be conducted to demonstrate compliance with the destruction efficiency limitation for VOC emissions and the hourly allowable stack VOC emission rate.

c. Method 25 or 25A of 40 CFR Part 60, Appendix A, shall be employed to demonstrate compliance with the allowable mass emission rate and the destruction efficiency.

d. The testing shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. The destruction efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and U.S. EPA Methods 25 or 25A of 40 CFR Part 60, Appendix A. Formulation data from the manufacturer, or if required Method 24A, shall be used to determine OC contents of the inks, fountain solutions, and blanket washes. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases;

f. During emission compliance testing of the emissions unit(s)/control system, the negative pressure into the dryer shall be demonstrated by means of a differential pressure gauge, smoke tube(s), paper or plastic flow indicator strips, or other flow indicating devices approved by the appropriate Ohio EPA District Office or local air agency. The pressure monitoring shall be conducted to demonstrate that air flows into the press dryer at all openings in the dryer (excluding the exhaust stack), by demonstrating that sufficient continuous negative pressure is maintained within the dryers to prevent fugitive emissions.

This demonstration can be made in the presence of the personnel from the Ohio EPA office witnessing the test, or a description of the method used to determine 100% capture efficiency and the results of the determination, at each dryer opening, shall be summarized in the final compliance test report prepared by the testing company. If all openings to the dryer show negative pressure, then a statement to that effect will be sufficient to demonstrate compliance with this requirement.

g. Combustion temperatures within the thermal incinerator shall be monitored and recorded during emission compliance testing of the emissions units/control system. The combustion temperature within the thermal incinerator, along with the destruction efficiency of the control device, mass emission rates of VOC, and other relevant test data, for each test run completed, shall be published in the final test report.

h. In accordance with Engineering Guide #56, the results of the performance test shall be converted to pounds of OC per hour by multiplying the reported pounds of organic carbon per hour (from Method 25 or 25A) by a ratio of 1.2 pounds of organic material per pound of carbon. The 1.2 ratio is derived from consideration of the average molecular weight of the predominant chemical species in ink oil, compared to the average molecular weight of carbon in the same chemical species. The ratio is relatively common to the majority of chemicals in ink oil, which consist mainly of normal paraffin hydrocarbons in the C12 through C16 range.

i. Not later than 30 days prior to the proposed test date(s), this facility shall submit an "Intent to Test" notification. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

j. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information regarding the emissions unit operating parameters.

A comprehensive written report on the results of the emissions tests shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

F. Miscellaneous Requirements

1. The permittee shall comply with any applicable State and federal requirements governing the storage, treatment, transport, and disposal of any waste material generated by the operation of the emissions unit.

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

3. The following terms and conditions of this permit are federally enforceable pursuant to OAC rule 3745-35-07: A.1, A.2, B.1, B.2, B.3, B.4, C.1, C.2, C.3, C.4, D.1, D.2, D.3, D.4, D.5, D.6, D.7, E.1, E.2, E.3, E.4, E.5, E.6, E.7, E.8, E.9, E.10, E.11, E.12, F.1, and F.2.

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K003 - 8 - unit Goss C-150 Printing Press - heatset web offset lithographic printing line; with 4 units heatset, 4 units non-heatset; equipped with an ink setting oven and a thermal incinerator	OAC rule 3745-31-05(A)(3)	VOC emissions from the incinerator stack shall not exceed 1.16 lbs/hr from the K003 printing operations. Fugitive VOC emissions from printing operations on K003 shall not exceed 1.62 lbs/hr. All VOC emissions entering the dryer from emissions units K003 shall be vented to a common direct flame (thermal) incinerator that must, at a minimum, oxidize or convert 90% by weight or more of the carbon in the organic material being incinerated to carbon dioxide. See A.2.a below. There shall be no visible emissions of particulates from any building ventilation (i.e., doors, windows, vents, etc.). Hand rags and any other articles used for cleanup shall be placed in a closed/sealed container, when not in use or for proper disposal, to reduce fugitive VOC emissions.
	OAC rule 3745-21-07(G)(2)	Also, the operational restrictions in Section B. below satisfy OAC rule 3745-31-05 requirements.

OAC rule 3745-35-07(B)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-17-07(A)(1)	See A.2.b, A.2.c, A.2.d, and A.2.e below.
OAC rule 3745-17-11(B)(1)	Visible particulate emissions from any stack shall not exceed twenty per cent opacity, as a six-minute average, except as provided by rule. Particulate emissions shall not exceed 0.551 lb/hr.

2. Additional Terms and Conditions

2.a During the compliance testing performed on June 27, 1997, the Thermo-Electron thermal incinerator demonstrated an average destruction efficiency of 96.20% controlling the VOC emissions from emissions units K001 through K003 combined. This unit will now control the VOC emissions from emissions units K002 and K005.

During the compliance testing performed June 27, 1997, the CVM thermal incinerator that controls the VOC emissions from emissions units K004 demonstrated an average destruction efficiency of 93.93%. This unit will now control the VOC emissions from emissions unit K003.

Until testing is conducted as required in this permit, the permittee may use 93.93% destruction to determine facility-wide emissions of VOC (resulting from heatset printing ink, fountain solution, and blanket wash) to simplify recordkeeping. If compliance is questionable, then the permittee reserves the right to use both tested incinerator destruction efficiencies.

2.b Facility-wide VOC emissions and emissions of hazardous air pollutants (HAPs) shall be calculated for all emissions units as follows:

i. 20% (by weight) of the solvent in the heatset inks is retained in the web after the dryer. Assuming 100% capture, the remaining 80% (by weight) of the VOC and HAPs in the ink are vented to the thermal incinerator.

ii. 95% (by weight) of the solvent in the non-heatset inks is retained in the web, and the remaining 5% (by weight) of the solvent is fugitive emissions.

iii. For heatset printing lines, 20% of the fountain solution emissions are fugitive and the remaining 80% of the fountain solution emissions are vented to the thermal incinerator.

iv. For automatic blanket wash systems, 60% of the solvent is fugitive and 40% is vented to the thermal incinerator. For manual blanket wash systems (i.e., hand-washing with rags), 50% of the solvent is fugitive and 50% is retained in the properly disposed of rags.

v. A destruction efficiency of 93.93% shall be assumed for each of the two incinerators, per A.2.a above.

2.c The maximum annual facility-wide VOC emissions shall not exceed 99.0 TPY, based upon a 12-month rolling sum of the monthly emissions.

2.d The maximum annual facility-wide emissions of any individual HAP shall not exceed 9.9 TPY, based upon a 12-month rolling sum of the monthly emissions.

2.e The maximum annual facility-wide emissions of combined HAPs shall not exceed 24.9 TPY, based upon a 12-month rolling sum of the monthly emissions.

2.f The hourly VOC emission limit for this emissions unit was established to reflect its potential to emit. This limit is based on the maximum printing rate, highest VOC contents, lowest requirements for control, and the maximum usage of ink, fountain solution, blanket-wash, cleanup material, and thinning solvent in any hour. Therefore, it was not necessary to develop daily record keeping and/or reporting requirements to ensure compliance with the hourly VOC emission limit.

B. Operational Restrictions

1. The permittee shall not employ any photochemically reactive material, as defined by OAC Rule 3745-21-01 (C)(5), in this emissions unit. This determination shall be made based on the actual formulation of the materials after any final in-plant reducing or thinning and prior to application of the materials.

2. The maximum annual operating hours for this emissions unit shall not exceed 7700, based upon a rolling, 12-month summation of the operating hours.

   To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table:

month(s)	**Maximum Allowable Cumulative Operating Hours**
1	850
1-2	1700
1-3	2300
1-4	2900
1-5	3500
1-6	4100
1-7	4700
1-8	5300
1-9	5900
1-10	6500
1-11	7100
1-12	7700

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours. If hours of operation for one or more emission units exceed 7700 hours, the permittee may demonstrate compliance by showing that calculated emissions are below the emission limits shown above.

3. The dryer(s) for this emissions unit shall only employ natural gas.

4. The permittee shall operate and maintain the thermal incinerator so that during any 3-hour block of time the average combustion temperature within the thermal incinerator is a minimum of 1350 degrees Fahrenheit.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor/recorder, which measures and records the combustion temperature within the thermal incinerator, when the emissions units are in operation. Units shall be in degrees Fahrenheit. The monitoring/recording device shall be capable of accurately measuring the desired parameter. The temperature monitor/recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the incinerator was in operation, was below 1350 degrees Fahrenheit; and

b. a log of the downtime for the capture (collection) system, control device, and monitoring/recording equipment, when the associated emissions units were in operation.

2. The permittee shall collect and record monthly the following information for all emissions units (including de minimis emissions units) to determine facility-wide VOC emissions, facility-wide emissions of individual HAPs, and facility-wide emissions of combined HAPs:

a. the company identification for each printing ink (heatset, non-heatset, and flexographic), fountain solution, blanket-wash, cleanup materials, and thinning solvents employed;

b. the number of pounds of each ink employed;

c. the number of gallons of each fountain solution employed;

d. the number of gallons of each blanket-wash, cleanup material, and thinning solvent employed;

e. the density of each ink, fountain solution, blanket-wash, cleanup materials, and thinning solvents employed;

f. the VOC and HAP content of each ink employed, in percent by weight;

g. the VOC and HAP content of each fountain solution employed, in pounds per gallon of fountain solution or percent by weight;

h. the VOC and HAP content of each blanket-wash, cleanup material, and thinning solvent employed, in pounds per gallon of material or percent by weight;

i. the total VOC emissions, stack and fugitive, calculated using the records above and emission factors from guidance provided in Ohio Engineering Guides #56 and #68, "Compilation of Air Pollutant Emission Factors"AP-42, and "Control of Volatile Organic Compound Emissions for Offset Lithographic Printing", US EPA, 9/93;

j. the individual HAP emissions from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed, for each individual HAP, as calculated using the records maintained in this section;

k. the combined HAPs emissions from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed, for each individual HAP, as calculated using the records maintained in this section, in tons;

l. the rolling 12-month facility emissions of VOC from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed in all emission units, in tons;

m. the rolling 12-month facility emissions of each individual HAP, from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed in all emission units, in tons or pounds; and

n. the rolling 12-month facility emissions of combined HAPs, from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed in all emission units, in tons.

3. The permittee shall maintain monthly records as to whether or not each ink, fountain solution, blanket-wash, cleanup material, and thinning solvent employed is a photochemically reactive material.

4. The permittee shall maintain monthly records of the following information:

a. the operating hours for each month;

b. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month; and

c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the operating hours.

5. The permit to install for this emissions unit (K003) was evaluated based on the actual materials (inks, fountain solutions, blanket wash, and cleaning solutions) 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the “worst case” pollutant(s):

Pollutant: ethylene glycol (CAS 107-21-1)

TLV (mg/m3): 100 (based on STEL)

Maximum Hourly Emission Rate (lbs/hr): 0.91

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 124

MAGLC (ug/m3): 2,381

Pollutant: ethylene glycol monobutyl ether (CAS 111-76-2)

TLV (mg/m3): 96.6 (based on TWA)

Maximum Hourly Emission Rate (lbs/hr): 1.77

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 241.51

MAGLC (ug/m3): 2,300

6. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

7. 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 Toxics Policy:"

   a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

   b. documentation of its evaluation and determination that the changed emissions unit still satisfies the “Air Toxic Policy”; and

   c. where 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 deviation (excursion) reports that identify each month during which the rolling, 12-month HAP emissions exceed 9.9 tons for any single HAP and 24.9 tons for combined HAPs, based on a rolling, 12-month summation of emissions from all materials applied facility wide;

2. The permittee shall submit deviation (excursion) reports that identify each month during which the rolling, 12-month VOC emissions exceed 99.0 tons, based on a rolling, 12-month summation of emissions from all materials applied facility wide;

3. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time during which the combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.

4. The permittee shall submit deviation (excursion) reports that identify the days during which any photochemically reactive materials were employed in this emissions unit. Each report shall identify the cause for the use of the photochemically reactive material(s) and the estimated total quantity of material(s) emitted during each such day, in pounds.

5. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative operating hours levels. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

6. Deviation (excursion) reports, as mentioned above, shall be submitted in accordance with the procedures required in Part I: General Terms and Conditions Section A.2.b.

7. The permittee shall submit in writing annual reports to the Director (appropriate District Office or local air agency) which specify the total VOC emissions, in tons, the total individual HAP emissions, in tons, and the total combined HAP emissions, in tons, from this facility for the previous calendar year. Each report shall be submitted by January 31 of each year.

E. Testing Requirements

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

1. Formulation data or USEPA Methods 24/24A shall be used to determine the VOC and HAP contents of the inks, fountain solutions, blanket washes, cleanup materials, and thinning solvents employed.

   a. Formulation data shall be used to evaluate if changes in the materials applied or the use of new materials results in:

      i. 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 TLV specified in Section F of this part;

      ii. emission of an air contaminant not previously permitted; and

      iii. increase in emissions of any pollutant that has a TLV listed in Section F of this part.

2. Control requirement:

   The thermal incinerator shall have a destruction efficiency of not less than 90%, by weight.

   Applicable Compliance Method:

   Compliance shall be demonstrated through the stack testing requirements found in Section E.12.

3. Emission Limitation:

   VOC emissions shall not exceed 1.16 pounds per hour from the stack associated with this emissions unit.

   Applicable Compliance Method:

   Until compliance is determined through testing in accordance with Section E.12 of these terms and conditions, compliance shall be demonstrated by using the following equation from Engineering Guide #56 for stack emissions:

   $S = (1 - DRE) \times [0.8(P) + A_d(FS) + B_d(BW)]$

   Where:

   S = stack emissions;

DRE = destruction efficiency of the thermal incinerator, expressed as a decimal or percent, which was determined during the most recent performance test which demonstrated compliance with the pound per hour emission limitation from the stack (a 90% destruction efficiency shall be used until testing has been completed);

0.8 = 20% of VOC's in heatset inks retained by substrate, 80% emitted per Engineering Guide #56;

P = (ink usage rate, lbs/hr) x (ink VOC content, % by wt.);

A_d = mass fraction of fountain solution VOC routed to dryer and control device;

FS = (fountain solution usage rate, lbs/hr) x (fountain solution VOC content, % by wt.);

B_d = mass fraction of non-heat set ink VOC routed to dryer; and

BW = (non-heat set ink usage rate, lbs/hr) x (non-heat set ink VOC content, % by wt.).

Automatic blanket wash is not applied on K003. Worst case emissions shall be documented by substituting the maximum material usage and VOC content into this calculation as follows:

$S = (1 - DRE) \times [0.8(P) + A_d(FS) + B_d(BW)]$

S = {(1 - 0.9) x [0.8(2.88 gal/hr)(8.2 lbs/gal)(50%VOC) + 0.8(2.01 gal/hr)(9.1 lb/gal)(15%VOC)]} + 0.0

S = 1.16 lbs/hr

4. Emission Limitation:

Fugitive VOC emissions shall not exceed 1.62 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by the following worst-case calculation for fugitive emissions, using the equation obtained from Engineering Guide #56 with the addition of manual blanket wash which is fugitive according to the facility's permit application:

$F = [A_f(FS) + N_f(NH) + MBW]$

Where:

F = fugitive emissions from emissions unit K003,

A_f = mass fraction of fountain solution VOC emitted as fugitive;

FS = (fountain solution usage rate, lbs/hr) x (fountain solution VOC content, % by wt.);

N_f = mass fraction of non-heat set ink VOC emitted as fugitive (95% retained in substrate per engineering guide #68);

NH = (non-heat set ink usage rate, lbs/hr) x (non-heat set ink VOC content, % by wt.); and

MBW = (manual blanket usage rate, lbs/hr) x (manual blanket VOC content, % by wt.).

Substituting for the maximum material usage and VOC content:

$F = [A_f(FS) + N_f(NH) + MBW]$

F = (0.2)(2.01 gal/hr)(9.1 lb/gal)(15%VOC) + 0.05(3.69 gal/hr)(8.2 lbs/gal)(38%VOC) + (0.15 gal/hr)(6.6 lbs/gal)(100% VOC)(50% solvent retained in rag)

F = 1.62 lbs/hr

5. Emission Limitation:

The maximum allowable 12-month rolling sum of facility-wide VOC emissions shall not exceed 99.0 TPY.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

6. Emission Limitation:

The maximum allowable 12-month rolling sum of facility-wide individual HAP emissions shall not exceed 9.9 TPY.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

7. Emission Limitation:

The maximum allowable 12-month rolling sum of facility-wide combined HAPs emissions shall not exceed 24.9 TPY.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

8. Emission Limitation:

Visible particulate emissions from the incinerator stack shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Method 9, from 40 CFR Part 60, Appendix A.

9. Emission Limitation:

No visible particulate emissions from building ventilation.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(4) using the methods and procedures specified in USEPA Method 22, 40 CFR Part 60, Appendix A.

10. Emission Limitation:

0.551 lb/hr particulates.

Applicable Compliance Method:

The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour according to Engineering Guide #56. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. The maximum process weight rate for this emissions unit in accordance with Engineering Guide #56 is73.14 pounds per hour based on the maximum quantities of ink, fountain solution, and blanket wash employed hourly. Therefore, in accordance with Table I of OAC rule 3745-17-11, the allowable rate of particulate emissions is 0.551 pound per hour. If required, compliance shall be determined through stack testing in accordance with 40 CFR Part 60, Appendix A, Method 5. Per the Ohio EPA Engineering Guide #56, no particulate testing should be necessary since this emissions unit is controlled by a thermal oxidizer.

11. Operational Restriction:

The maximum allowable 12-month rolling total operating hours shall not exceed 7700 hours. If hours of operation for one or more emission units exceed 7700 hours, the permittee may demonstrate compliance by showing that calculated emissions are below the emission limits shown above.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

12. Emission Limitation/Control Requirement

1.16 lbs VOC/hr stack emissions with 90% control efficiency of VOC exhausted from the dryer

Applicable Compliance Method:

The permittee shall conduct, or have conducted, emission testing for emissions unit K003 in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months of the installation of emission unit K005.

b. The emission testing shall be conducted to demonstrate compliance with the destruction efficiency limitation for VOC emissions and the hourly allowable stack VOC emission rate.

c. Method 25 or 25A of 40 CFR Part 60, Appendix A, shall be employed to demonstrate compliance with the allowable mass emission rate and the destruction efficiency.

d. The testing shall be conducted while the emissions unit is operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. The destruction efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and U.S. EPA Methods 25 or 25A of 40 CFR Part 60, Appendix A. Formulation data from the manufacturer, or if required Method 24A, shall be used to determine OC contents of the inks, fountain solutions, and blanket washes. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases;

f. During emission compliance testing of the emissions unit/control system, the negative pressure into the dryer shall be demonstrated by means of a differential pressure gauge, smoke tube(s), paper or plastic flow indicator strips, or other flow indicating devices approved by the appropriate Ohio EPA District Office or local air agency. The pressure monitoring shall be conducted to demonstrate that air flows into the press dryer at all openings in the dryer (excluding the exhaust stack), by demonstrating that sufficient continuous negative pressure is maintained within the dryers to prevent fugitive emissions.

This demonstration can be made in the presence of the personnel from the Ohio EPA office witnessing the test, or a description of the method used to determine 100% capture efficiency and the results of the determination, at each dryer opening, shall be summarized in the final compliance test report prepared by the testing company. If all openings to the dryer show negative pressure, then a statement to that effect will be sufficient to demonstrate compliance with this requirement.

g. Combustion temperatures within the thermal incinerator shall be monitored and recorded during emission compliance testing of the emissions units/control system. The combustion temperature within the thermal incinerator, along with the destruction efficiency of the control device, mass emission rate of VOC, and other relevant test data, for each test run completed, shall be published in the final test report.

h. In accordance with Engineering Guide #56, the results of the performance test shall be converted to pounds of OC per hour by multiplying the reported pounds of organic carbon per hour (from Method 25 or 25A) by a ratio of 1.2 pounds of organic material per pound of carbon. The 1.2 ratio is derived from consideration of the average molecular weight of the predominant chemical species in ink oil, compared to the average molecular weight of carbon in the same chemical species. The ratio is relatively common to the majority of chemicals in ink oil, which consist mainly of normal paraffin hydrocarbons in the C12 through C16 range.

i. Not later than 30 days prior to the proposed test date(s), this facility shall submit an "Intent to Test" notification. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

j. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information regarding the emissions unit operating parameters.

A comprehensive written report on the results of the emissions tests shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

F. Miscellaneous Requirements

1. The permittee shall comply with any applicable State and federal requirements governing the storage, treatment, transport, and disposal of any waste material generated by the operation of the emissions unit.

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

3. The following terms and conditions of this permit are federally enforceable pursuant to OAC rule 3745-35-07: A.1, A.2, B.1, B.2, B.3, B.4, C.1, C.2, C.3, C.4, D.1, D.2, D.3, D.4, D.5, D.6, D.7, E.1, E.2, E.3, E.4, E.5, E.6, E.7, E.8, E.9, E.10, E.11, E.12, F.1, and F.2.

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K005: Baker - Perkins Goss G-14 Printing Press - heatset web offset lithographic printing line, 8 unit, with automatic blanket washers; equipped with an ink setting oven and a thermal incinerator shared with K002	OAC rule 3745-31-05(A)(3)	VOC emissions from the incinerator stack shall not exceed 4.51 lbs/hr from the K005 printing operations and 9.02 lbs/hr from K002 and K005 together. Fugitive VOC emissions from printing operations on K002 shall not exceed 2.25 lbs/hr. All VOC emissions entering the dryer from emissions units K002 and K005 shall be vented to a common direct flame (thermal) incinerator that must, at a minimum, oxidize or convert 90% by weight or more of the carbon in the organic material being incinerated to carbon dioxide. See A.2.a below. There shall be no visible emissions of particulates from any building ventilation (i.e., doors, windows, vents, etc.). Hand rags and any other articles used for cleanup shall be placed in a closed/sealed container, when not in use or for proper disposal, to reduce fugitive VOC emissions. Also, the operational restrictions in Section B. below satisfy OAC rule 3745-31-05 requirements.

OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
OAC rule 3745-35-07(B)	See A.2.b, A.2.c, A.2.d, and A.2.e below.
OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed twenty per cent opacity, as a six-minute average, except as provided by rule.
OAC rule 3745-17-11(B)(1)	Particulate emissions shall not exceed 0.65 lb/hr.

2. Additional Terms and Conditions

2.a During the compliance testing performed on June 27, 1997, the Thermo-Electron thermal incinerator demonstrated an average destruction efficiency of 96.20% controlling the VOC emissions from emissions units K001 through K003 combined. This unit will now control the VOC emissions from emissions units K002 and K005.

During the compliance testing performed June 27, 1997, the CVM thermal incinerator that controls the VOC emissions from emissions units K004 demonstrated an average destruction efficiency of 93.93%. This unit will now control the VOC emissions from emissions unit K003.

Until testing is conducted as required in this permit, the permittee may use 93.93% destruction to determine facility-wide emissions of VOC (resulting from heatset printing ink, fountain solution, and blanket wash) to simplify recordkeeping. If compliance is questionable, then the permittee reserves the right to use both tested incinerator destruction efficiencies.

2.b Facility-wide VOC emissions and emissions of hazardous air pollutants (HAPs) shall be calculated for all emissions units as follows:

i. 20% (by weight) of the solvent in the heatset inks is retained in the web after the dryer. Assuming 100% capture, the remaining 80% (by weight) of the VOC and HAPs in the ink are vented to the thermal incinerator.

ii. 95% (by weight) of the solvent in the non-heatset inks is retained in the web, and the remaining 5% (by weight) of the solvent is fugitive emissions.

iii. For heatset printing lines, 20% of the fountain solution emissions are fugitive and the remaining 80% of the fountain solution emissions are vented to the thermal incinerator.

iv. For automatic blanket wash systems, 60% of the solvent is fugitive and 40% is vented to the thermal incinerator. For manual blanket wash systems (i.e., hand-washing with rags), 50% of the solvent is fugitive and 50% is retained in the properly disposed of rags.

v. A destruction efficiency of 93.93% shall be assumed for each of the two incinerators, per A.2.a above.

2.c The maximum annual facility-wide VOC emissions shall not exceed 99.0 TPY, based upon a 12-month rolling sum of the monthly emissions.

2.d The maximum annual facility-wide emissions of any individual HAP shall not exceed 9.9 TPY, based upon a 12-month rolling sum of the monthly emissions.

2.e The maximum annual facility-wide emissions of combined HAPs shall not exceed 24.9 TPY, based upon a 12-month rolling sum of the monthly emissions.

2.f The hourly VOC emission limit for this emissions unit was established to reflect its potential to emit. This limit is based on the maximum printing rate, highest VOC contents, lowest requirements for control, and the maximum usage of ink, fountain solution, blanket-wash, cleanup material, and thinning solvent in any hour. Therefore, it was not necessary to develop daily record keeping and/or reporting requirements to ensure compliance with the hourly VOC emission limit.

B. Operational Restrictions

1. The permittee shall not employ any photochemically reactive material, as defined by OAC Rule 3745-21-01 (C)(5), in this emissions unit. This determination shall be made based on the actual formulation of the materials after any final in-plant reducing or thinning and prior to application of the materials.

2. The maximum annual operating hours for this emissions unit shall not exceed 7700, based upon a rolling, 12-month summation of the operating hours.

   To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table:

month(s)	**Maximum Allowable Cumulative Operating Hours**
1	850
1-2	1700
1-3	2300
1-4	2900
1-5	3500
1-6	4100
1-7	4700
1-8	5300
1-9	5900
1-10	6500
1-11	7100
1-12	7700

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours. If hours of operation for one or more emission units exceed 7700 hours, the permittee may demonstrate compliance by showing that calculated emissions are below the emission limits shown above.

3. The dryer(s) for this emissions unit shall only employ natural gas.

4. The permittee shall operate and maintain the thermal incinerator so that during any 3-hour block of time the average combustion temperature within the thermal incinerator is a minimum of 1350 degrees Fahrenheit.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall operate and maintain a continuous temperature monitor/recorder, which measures and records the combustion temperature within the thermal incinerator, when the emissions units are in operation. Units shall be in degrees Fahrenheit. The monitoring/recording device shall be capable of accurately measuring the desired parameter. The temperature monitor/recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

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

a. all 3-hour blocks of time during which the average combustion temperature within the thermal incinerator, when the incinerator was in operation, was below 1350 degrees Fahrenheit; and

b. a log of the downtime for the capture (collection) system, control device, and monitoring/recording equipment, when the associated emissions units were in operation.

2. The permittee shall collect and record monthly the following information for all emissions units (including de minimis emissions units) to determine facility-wide VOC emissions, facility-wide emissions of individual HAPs, and facility-wide emissions of combined HAPs:

a. the company identification for each printing ink (heatset, non-heatset, and flexographic), fountain solution, blanket-wash, cleanup materials, and thinning solvents employed;

b. the number of pounds of each ink employed;

c. the number of gallons of each fountain solution employed;

d. the number of gallons of each blanket-wash, cleanup material, and thinning solvent employed;

e. the density of each ink, fountain solution, blanket-wash, cleanup materials, and thinning solvents employed;

f. the VOC and HAP content of each ink employed, in percent by weight;

g. the VOC and HAP content of each fountain solution employed, in pounds per gallon of fountain solution or percent by weight;

h. the VOC and HAP content of each blanket-wash, cleanup material, and thinning solvent employed, in pounds per gallon of material or percent by weight;

i. the total VOC emissions, stack and fugitive, calculated using the records above and emission factors from guidance provided in Ohio Engineering Guides #56 and #68, "Compilation of Air Pollutant Emission Factors"AP-42, and "Control of Volatile Organic Compound Emissions for Offset Lithographic Printing", US EPA, 9/93;

j. the individual HAP emissions from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed, for each individual HAP, as calculated using the records maintained in this section;

k. the combined HAPs emissions from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed, for each individual HAP, as calculated using the records maintained in this section, in tons;

l. the rolling 12-month facility emissions of VOC from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed in all emission units, in tons;

m. the rolling 12-month facility emissions of each individual HAP, from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed in all emission units, in tons or pounds; and

n. the rolling 12-month facility emissions of combined HAPs, from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed in all emission units, in tons.

3. The permittee shall maintain monthly records as to whether or not each ink, fountain solution, blanket-wash, cleanup material, and thinning solvent employed is a photochemically reactive material.

4. The permittee shall maintain monthly records of the following information:

a. the operating hours for each month;

b. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month; and

c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the operating hours.

5. The permit to install for this emissions unit (K005) was evaluated based on the actual materials (inks, fountain solutions, blanket wash, and cleaning solutions) 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the “worst case” pollutant(s):

Pollutant: ethylene glycol (CAS 107-21-1)

TLV (mg/m3): 100 (based on STEL)

Maximum Hourly Emission Rate (lbs/hr): 0.91

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 124

MAGLC (ug/m3): 2,381

Pollutant: ethylene glycol monobutyl ether (CAS 111-76-2)

TLV (mg/m3): 96.6 (based on TWA)

Maximum Hourly Emission Rate (lbs/hr): 1.77

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 241.51

MAGLC (ug/m3): 2,300

6. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

7. 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 Toxics Policy:"

   a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

   b. documentation of its evaluation and determination that the changed emissions unit still satisfies the “Air Toxic Policy”; and

   c. where 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 deviation (excursion) reports that identify each month during which the rolling, 12-month HAP emissions exceed 9.9 tons for any single HAP and 24.9 tons for combined HAPs, based on a rolling, 12-month summation of emissions from all materials applied facility wide;

2. The permittee shall submit deviation (excursion) reports that identify each month during which the rolling, 12-month VOC emissions exceed 99.0 tons, based on a rolling, 12-month summation of emissions from all materials applied facility wide;

3. The permittee shall submit deviation (excursion) reports that identify all 3-hour blocks of time during which the combustion temperature within the thermal incinerator does not comply with the temperature limitation specified above.

4. The permittee shall submit deviation (excursion) reports that identify the days during which any photochemically reactive materials were employed in this emissions unit. Each report shall identify the cause for the use of the photochemically reactive material(s) and the estimated total quantity of material(s) emitted during each such day, in pounds.

5. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative operating hours levels. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

6. Deviation (excursion) reports, as mentioned above, shall be submitted in accordance with the procedures required in Part I: General Terms and Conditions Section A.2.b.

7. The permittee shall submit in writing annual reports to the Director (appropriate District Office or local air agency) which specify the total VOC emissions, in tons, the total individual HAP emissions, in tons, and the total combined HAP emissions, in tons, from this facility for the previous calendar year. Each report shall be submitted by January 31 of each year.

8. The permittee shall submit written notification to the Director (appropriate District Office or local

air agency) of actual dates of the following milestones:

a. startup of operations of emissions unit K005; and

b. permanent shutdown of operations of emissions unit K001.

9. If the actual date(s) of the permanent shutdown of emissions unit K001 does not meet expected dates as outlined in F.4 below, the permittee shall notify the Director (appropriate District Office or local air agency) within 30 days after the expected date with a written report including the following:

a. the cause of the delay;

b. any corrective actions which have or will be taken to complete the milestone in a timely manner; and

c. the actual date the milestone was completed or the estimated date the milestone will be completed.

E. Testing Requirements

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

1. Formulation data or USEPA Methods 24/24A shall be used to determine the VOC and HAP contents of the inks, fountain solutions, blanket washes, cleanup materials, and thinning solvents employed.

a. Formulation data shall be used to evaluate if changes in the materials applied or the use of new materials results in:

i. 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 TLV specified in Section F of this part;

ii. emission of an air contaminant not previously permitted; and

iii. increase in emissions of any pollutant that has a TLV listed in Section F of this part.

2. Control requirement:

The thermal incinerator shall have a destruction efficiency of not less than 90%, by weight.

Applicable Compliance Method:

Compliance shall be demonstrated through the stack testing requirements found in Section E.12.

3. Emission Limitation:

VOC emissions shall not exceed 4.51 pounds per hour from the stack associated with this emissions unit.

Applicable Compliance Method:

Until compliance is determined through testing in accordance with Section E.12 of these terms and conditions, compliance shall be demonstrated by using the following equation from Engineering Guide #56 for stack emissions:

$S = (1 - DRE) \times [0.8(P) + A_d(FS) + B_d(BW)]$

Where:

S = stack emissions;

DRE = destruction efficiency of the thermal incinerator, expressed as a decimal or percent, which was determined during the most recent performance test which demonstrated compliance with the pound per hour emission limitation from the stack (a 90% destruction efficiency shall be used until testing has been completed);

0.8 = 20% of VOC's in heatset inks retained by substrate, 80% emitted per Engineering Guide #56;

P = (ink usage rate, lbs/hr) x (ink VOC content, % by wt.);

A_d = mass fraction of fountain solution VOC routed to dryer and control device;

FS = (fountain solution usage rate, lbs/hr) x (fountain solution VOC content, % by wt.);

B_d = mass fraction of cleanup solvent routed to dryer and control device (40% for automatic blanket wash); and

BW = (blanket wash usage rate, lbs/hr) x (blanket wash VOC content, % by wt.).

Worst case emissions shall be documented by substituting the maximum material usage and VOC content into this calculation as follows:

$S = (1 - DRE) \times [0.8(P) + A_d(FS) + B_d(BW)]$

S = (1 - 0.9) x [0.8(12.96 gal/hr)(8.2 lbs/gal)(50%VOC) + 0.8(2.01 gal/hr)(9.1 lb/gal)(15%VOC)

+0.4(0.38 gal/hr)(7.3 lbs/gal)(35%VOC)]

S = 4.51 lbs/hr

4. Emission Limitation:

Fugitive VOC emissions shall not exceed 2.25 lbs/hr.

Applicable Compliance Method:

Compliance shall be demonstrated by the following worst-case calculation for fugitive emissions, using the equation obtained from Engineering Guide #56 with the addition of manual blanket wash which is fugitive according to the facility's permit application:

$F = [A_f(FS) + B_f(BW) + MBW]$

Where:

F = fugitive emissions from emissions unit K002,

A_f = mass fraction of fountain solution VOC emitted as fugitive;

FS = (fountain solution usage rate, lbs/hr) x (fountain solution VOC content, % by wt.);

B_f = mass fraction of cleanup solvent emitted as fugitive = 0.6 for automatic blanket wash;

BW = (blanket wash usage rate, lbs/hr) x (blanket wash VOC content, % by wt.); and

MBW = (manual blanket usage rate, lbs/hr) x (manual blanket VOC content, % by wt.).

Substituting for the maximum material usage and VOC content:

$F = [A_f(FS) + B_f(BW) + MBW]$

F = (0.2)(2.01 gal/hr)(9.1 lb/gal)(15%VOC) + 0.6(0.38 gal/hr)(7.3 lbs/gal)(35%VOC) + (0.34 gal/hr)(6.6 lbs/gal)(100%VOC)(50% solvent retained in rag)

F = 2.25 lbs/hr

5. Emission Limitation:

The maximum allowable 12-month rolling sum of facility-wide VOC emissions shall not exceed 99.0 TPY.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

6. Emission Limitation:

The maximum allowable 12-month rolling sum of facility-wide individual HAP emissions shall not exceed 9.9 TPY.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

7. Emission Limitation:

The maximum allowable 12-month rolling sum of facility-wide combined HAPs emissions shall not exceed 24.9 TPY.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

8. Emission Limitation:

Visible particulate emissions from the incinerator stack shall not exceed 20% opacity, as a six-minute average.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(1) using the methods and procedures specified in USEPA Method 9, from 40 CFR Part 60, Appendix A.

9. Emission Limitation:

No visible particulate emissions from building ventilation.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(4) using the methods and procedures specified in USEPA Method 22, 40 CFR Part 60, Appendix A.

10. Emission Limitation:

0.65 lb/hr particulates.

Applicable Compliance Method:

The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour according to Engineering Guide #56. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. The maximum process weight rate for this emissions unit in accordance with Engineering Guide #56 is129.3 pounds per hour based on the maximum quantities of ink, fountain solution, and blanket wash employed hourly. Therefore, in accordance with Table I of OAC rule 3745-17-11, the allowable rate of particulate emissions is 0.65 pound per hour. If required, compliance shall be determined through stack testing in accordance with 40 CFR Part 60, Appendix A, Method 5. Per the Ohio EPA Engineering Guide #56, no particulate testing should be necessary since this emissions unit is controlled by a thermal oxidizer.

11. Operational Restriction:

The maximum allowable 12-month rolling total operating hours shall not exceed 7700 hours. If hours of operation for one or more emission units exceed 7700 hours, the permittee may demonstrate compliance by showing that calculated emissions are below the emission limits shown above.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements of these Terms & Conditions.

12. Emission Limitation/Control Requirement

9.02 lbs VOC/hr stack emissions from K002 and K005 together with 90% control efficiency of VOC exhausted from the dryer

Applicable Compliance Method:

The permittee shall conduct, or have conducted, emission testing for emissions units K002 and K005, operating simultaneously, in accordance with the following requirements:

a. The emission testing shall be conducted within 6 months of the installation of emission unit K005.

b. The emission testing shall be conducted to demonstrate compliance with the destruction efficiency limitation for VOC emissions and the hourly allowable stack VOC emission rate.

c. Method 25 or 25A of 40 CFR Part 60, Appendix A, shall be employed to demonstrate compliance with the allowable mass emission rate and the destruction efficiency.

d. The testing shall be conducted while the emissions units are operating at or near their maximum capacities, unless otherwise specified or approved by the appropriate Ohio EPA District Office or local air agency.

e. The destruction efficiency (i.e., the percent reduction in mass emissions between the inlet and outlet of the control system) shall be determined in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and U.S. EPA Methods 25 or 25A of 40 CFR Part 60, Appendix A. Formulation data from the manufacturer, or if required Method 24A, shall be used to determine OC contents of the inks, fountain solutions, and blanket washes. The test methods and procedures selected shall be based on a consideration of the diversity of the organic species present and their total concentration, and on a consideration of the potential presence of interfering gases;

f. During emission compliance testing of the emissions unit(s)/control system, the negative pressure into the dryer shall be demonstrated by means of a differential pressure gauge, smoke tube(s), paper or plastic flow indicator strips, or other flow indicating devices approved by the appropriate Ohio EPA District Office or local air agency. The pressure monitoring shall be conducted to demonstrate that air flows into the press dryer at all openings in the dryer (excluding the exhaust stack), by demonstrating that sufficient continuous negative pressure is maintained within the dryers to prevent fugitive emissions.

This demonstration can be made in the presence of the personnel from the Ohio EPA office witnessing the test, or a description of the method used to determine 100% capture efficiency and the results of the determination, at each dryer opening, shall be summarized in the final compliance test report prepared by the testing company. If all openings to the dryer show negative pressure, then a statement to that effect will be sufficient to demonstrate compliance with this requirement.

g. Combustion temperatures within the thermal incinerator shall be monitored and recorded during emission compliance testing of the emissions units/control system. The combustion temperature within the thermal incinerator, along with the destruction efficiency of the control device, mass emission rate of VOC, and other relevant test data, for each test run completed, shall be published in the final test report.

h. In accordance with Engineering Guide #56, the results of the performance test shall be converted to pounds of OC per hour by multiplying the reported pounds of organic carbon per hour (from Method 25 or 25A) by a ratio of 1.2 pounds of organic material per pound of carbon. The 1.2 ratio is derived from consideration of the average molecular weight of the predominant chemical species in ink oil, compared to the average molecular weight of carbon in the same chemical species. The ratio is relatively common to the majority of chemicals in ink oil, which consist mainly of normal paraffin hydrocarbons in the C12 through C16 range.

i. Not later than 30 days prior to the proposed test date(s), this facility shall submit an "Intent to Test" notification. The "Intent to Test" notification shall describe in detail the proposed test methods and procedures, the emissions unit operating parameters, the time(s) and date(s) of the tests, and the person(s) who will be conducting the tests. Failure to submit such notification for review and approval prior to the tests may result in the Ohio EPA District Office's or local air agency's refusal to accept the results of the emission tests.

j. Personnel from the appropriate Ohio EPA District Office or local air agency shall be permitted to witness the tests, examine the testing equipment, and acquire data and information regarding the emissions unit operating parameters.

A comprehensive written report on the results of the emissions tests shall be submitted to the appropriate Ohio EPA District Office or local air agency within 30 days following completion of the test(s).

F. Miscellaneous Requirements

1. The permittee shall install emissions unit K005 on a timely schedule in accordance with PTI 16-02191 to permanently replace emissions unit K001. After installation of K005, the permittee shall have a shakedown period ending December 1, 2002 to ensure proper operation of the new press. Existing emissions units K001 shall not remain in active operation beyond December 1, 2002. The permittee shall provide notifications as required in Section D above.

2. The permittee shall comply with any applicable State and federal requirements governing the storage, treatment, transport, and disposal of any waste material generated by the operation of the emissions unit.

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

4. The following terms and conditions of this permit are federally enforceable pursuant to OAC rule 3745-35-07: A.1, A.2, B.1, B.2, B.3, B.4, C.1, C.2, C.3, C.4, D.1, D.2, D.3, D.4, D.5, D.6, D.7, D.8, D.9, E.1, E.2, E.3, E.4, E.5, E.6, E.7, E.8, E.9, E.10, E.11, E.12, F.1, F.2, and F.3.

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K006: 5 - unit Motterflex CF-1 two web printing press (5th unit may be flexographic or nonheatset)	OAC rule 3745-31-05(A)(3)	VOC emissions shall not exceed 5.35 lbs/hr from the K006 printing operations. There shall be no visible emissions of particulates from any building ventilation (i.e., doors, windows, vents, etc.). Hand rags and any other articles used for cleanup shall be placed in a closed/sealed container, when not in use or for proper disposal, to reduce fugitive VOC emissions. Also, the operational restrictions in Section B. below satisfy OAC rule 3745-31-05 requirements.
	OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-35-07(B)	See A.2.b, A.2.c, A.2.d, and A.2.e below.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed twenty per cent opacity, as a six-minute average, except as provided by rule.

OAC rule 3745-17-11(B)(1)	Particulate emissions shall not exceed 0.551 lb/hr.
40 CFR 63.820(a)(2)	See A.2.a below.
40 CFR 63.820(b)(1)	The permittee provided initial notification that this source is subject to 40 CFR 63 Subpart KK with the permit to install application.
40 CFR 63.829(d)	See C.1 below.

2. Additional Terms and Conditions

2.a To establish and maintain the source as an area source per 40 CFR 63.820(a)(2), the facility shall:

i use less than 10 tons per each rolling 12-month period of each HAP at the facility, including materials used for source categories or purposes other than printing and publishing, and

ii. use less than 25 tons per each rolling 12-month period of any combination of HAPs at the facility, including materials used for source categories or purposes other than printing and publishing.

2.b Facility-wide VOC emissions and hazardous air pollutants (HAPs) from flexographic inks shall be calculated showing 4.5% (by weight) of the solvent retained in the finished product. This is the midrange of the solvent retention factors for flexographic inks from "Compilation of Air Pollutant Emission Factors", AP-42, Table 4.9.1-1 (1/95). The remaining 95.5% (by weight) of the VOC and HAPs in the ink are evaporated as fugitive emissions into the pressroom and vented through exhaust fans.

2.c The maximum annual facility-wide VOC emissions shall not exceed 99.0 TPY, based upon a 12-month rolling sum of the monthly emissions.

2.d The maximum annual facility-wide emissions of any individual HAP shall not exceed 9.9 TPY, based upon a 12-month rolling sum of the monthly emissions.

2.e The maximum annual facility-wide emissions of combined HAPs shall not exceed 24.9 TPY, based upon a 12-month rolling sum of the monthly emissions.

2.f The hourly VOC emission limit for this emissions unit was established to reflect its potential to emit. This limit is based on the maximum printing rate, highest VOC contents, lowest requirements for control, and the maximum usage of ink, fountain solution, blanket-wash, cleanup material, and thinning solvent in any hour. Therefore, it was not necessary to develop daily record keeping and/or reporting requirements to ensure compliance with the hourly VOC emission limit.

B. Operational Restrictions

1. The permittee shall not employ any photochemically reactive material, as defined by OAC Rule 3745-21-01 (C)(5), in this emissions unit. This determination shall be made based on the actual formulation of the materials after any final in-plant reducing or thinning and prior to application of the materials.

2. The maximum annual operating hours for this emissions unit shall not exceed 7700, based upon a rolling, 12-month summation of the operating hours.

   To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table:

month(s)	**Maximum Allowable Cumulative Operating Hours**
1	850
1-2	1700
1-3	2300
1-4	2900
1-5	3500
1-6	4100
1-7	4700
1-8	5300
1-9	5900
1-10	6500
1-11	7100
1-12	7700

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours. If hours of operation for one or more emission units exceed 7700 hours, the permittee may demonstrate compliance by showing that calculated emissions are below the emission limits shown above.

3. The VOC content of the coatings and inks employed in this printing line, as determined under Section E of this Part, shall not exceed the following:

   a. forty percent VOC by volume of the coating and ink, excluding water and exempt solvents; and

   b. twenty-five percent VOC by volume of the volatile matter in the coating and ink.

C. Monitoring and/or Recordkeeping Requirements

1. To demonstrate compliance with 40 CFR 63.829(d), the permittee shall maintain records of all required measurements and calculations needed to demonstrate compliance with Section A.2.a, including the mass of all HAP containing materials used and the mass fraction of HAP present in each material containing a HAP, on a monthly basis.

2. The permittee shall collect and record monthly the following information for all emissions units (including de minimis emissions units) to determine facility-wide VOC emissions, facility-wide emissions of individual HAPs, and facility-wide emissions of combined HAPs:

   a. the company identification for each printing ink (heatset, non-heatset, and flexographic), fountain solution, blanket-wash, cleanup materials, and thinning solvents employed;

   b. the number of pounds of each ink employed;

   c. the number of gallons of each fountain solution employed;

   d. the number of gallons of each blanket-wash, cleanup material, and thinning solvent employed;

   e. the density of each ink, fountain solution, blanket-wash, cleanup materials, and thinning solvents employed;

   f. the VOC and HAP content of each ink employed, in percent by weight;

   g. the VOC and HAP content of each fountain solution employed, in pounds per gallon of fountain solution or percent by weight;

   h. the VOC and HAP content of each blanket-wash, cleanup material, and thinning solvent employed, in pounds per gallon of material or percent by weight;

i. the total VOC emissions, stack and fugitive, calculated using the records above and emission factors from guidance provided in Ohio Engineering Guides #56 and #68, "Compilation of Air Pollutant Emission Factors"AP-42, and "Control of Volatile Organic Compound Emissions for Offset Lithographic Printing", US EPA, 9/93;

j. the individual HAP emissions from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed, for each individual HAP, as calculated using the records maintained in this section;

k. the combined HAPs emissions from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed, for each individual HAP, as calculated using the records maintained in this section, in tons;

l. the rolling 12-month facility emissions of VOC from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed in all emission units, in tons;

m. the rolling 12-month facility emissions of each individual HAP, from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed in all emission units, in tons or pounds; and

n. the rolling 12-month facility emissions of combined HAPs, from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed in all emission units, in tons.

3. The permittee shall maintain monthly records as to whether or not each ink, fountain solution, blanket-wash, cleanup material, and thinning solvent employed is a photochemically reactive material.

4. The permittee shall maintain monthly records of the following information:

a. the operating hours for each month;

b. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month; and

c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the operating hours.

5. The permit to install for this emissions unit (K006) was evaluated based on the actual materials (inks, fountain solutions, blanket wash, and cleaning solutions) and the design parameters of the emissions unit, 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

Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: ethylene glycol (CAS 107-21-1)

TLV (mg/m3): 100 (based on STEL)

Maximum Hourly Emission Rate (lbs/hr): 0.91

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 124

MAGLC (ug/m3): 2,381

Pollutant: ethylene glycol monobutyl ether (CAS 111-76-2)

TLV (mg/m3): 96.6 (based on TWA)

Maximum Hourly Emission Rate (lbs/hr): 1.77

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 241.51

MAGLC (ug/m3): 2,300

6. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

7. 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 Toxics Policy:"

   a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

   b. documentation of its evaluation and determination that the changed emissions unit still satisfies the “Air Toxic Policy”; and

   c. where 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 deviation (excursion) reports that identify each month during which the rolling, 12-month HAP emissions exceed 9.9 tons for any single HAP and 24.9 tons for combined HAPs, based on a rolling, 12-month summation of emissions from all materials applied facility wide;

2. The permittee shall submit deviation (excursion) reports that identify each month during which the rolling, 12-month VOC emissions exceed 99.0 tons, based on a rolling, 12-month summation of emissions from all materials applied facility wide;

3. The permittee shall submit deviation (excursion) reports that identify the days during which any photochemically reactive materials were employed in this emissions unit. Each report shall identify the cause for the use of the photochemically reactive material(s) and the estimated total quantity of material(s) emitted during each such day, in pounds.

4. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative operating hours levels. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

5. Deviation (excursion) reports, as mentioned above, shall be submitted in accordance with the procedures required in Part I: General Terms and Conditions Section A.2.b.

6. The permittee shall submit in writing annual reports to the Director (appropriate District Office or local air agency) which specify the total VOC emissions, in tons, the total individual HAP emissions, in tons, and the total combined HAP emissions, in tons, from this facility for the previous calendar year. Each report shall be submitted by January 31 of each year.

7. The permittee shall submit written notification to the Director (appropriate District Office or local air agency) of actual dates of the following milestones:

   a. startup of operations of emission units K006 and K007; and

   b. permanent shutdown of operations of emissions units Z001 and Z002.

8. If the actual date(s) of the permanent shutdown of Z001 or Z002 does not meet expected dates as outlined in F.4 below, the permittee shall notify the Director (appropriate District Office or local air agency) within 30 days after the expected date with a written report including the following:

   a. the cause of the delay;

   b. any corrective actions which have or will be taken to complete the milestone in a timely manner; and

   c. the actual date the milestone was completed or the estimated date the milestone will be completed.

9. As an area source under 40 CFR 63, Subpart KK, the permittee has satisfied the initial notification requirements of 40 CFR 63.9(b), with the submission of this permit to install application.

E. Testing Requirements

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

1. Formulation data or USEPA Methods 24/24A shall be used to determine the VOC and HAP contents of the inks, fountain solutions, blanket washes, cleanup materials, and thinning solvents employed.

   a. Formulation data shall be used to evaluate if changes in materials used, or the use of new materials, result in the:

      i. 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 TLV specified in Section F of this part;

      ii. emission of an air contaminant not previously permitted; and

      iii. increase in emissions of any pollutant that has a TLV listed in Section F of this part.

2. Emission Limitation:

VOC emissions shall not exceed 5.35 pounds per hour from this emissions unit.

Applicable Compliance Method:

Compliance shall be demonstrated by documenting the worst-case emissions by substituting the maximum material usage and VOC content into this calculation as follows:

Flexographic Inks (5 units, worst case)

34.6 lbs ink/hr x 3% VOC x (100% - 2% solvent retained in product*)5 units = 5.1 lbs VOC/hr

Fountain Solution

0.11 gal/hr x 9.1 lbs/gal x 15% VOC = 0.15 lb VOC/hr

Blanket Wash

0.015 gal/hr x 6.6 lbs/gal x 100% VOC = 0.10 lb VOC/hr

Total = 5.35 lbs VOC/hr

* lowest solvent retention factor from "Compilation of Air Pollutant Emission Factors", AP-42, Table 4.9.1-1 (1/95).

3. Emission Limitation:

The maximum allowable 12-month rolling sum of facility-wide VOC emissions shall not exceed 99.0 TPY.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

4. Emission Limitation:

The maximum allowable 12-month rolling sum of facility-wide individual HAP emissions shall not exceed 9.9 TPY.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

5. Emission Limitation:

The maximum allowable 12-month rolling sum of facility-wide combined HAPs emissions shall not exceed 24.9 TPY.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

6. Emission Limitation:

No visible particulate emissions from building ventilation

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(4) using the methods and procedures specified in USEPA Method 22, 40 CFR Part 60, Appendix A.

7. Emission Limitation:

0.551 lb/hr particulates

Applicable Compliance Method:

The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. The maximum process weight rate for this emissions unit is 41.9 pounds per hour based on the maximum quantities of ink, fountain solution, and blanket wash employed hourly. Therefore, in accordance with Table I of OAC rule 3745-17-11, the allowable rate of particulate emissions is 0.551 pound per hour. If required, compliance shall be determined through stack testing in accordance with 40 CFR Part 60, Appendix A, Method 5.

8. Operational Restriction:

The maximum allowable 12-month rolling total operating hours shall not exceed 7700 hours. If hours of operation for one or more emission units exceed 7700 hours, the permittee may demonstrate compliance by showing that calculated emissions are below the emission limits shown above.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

F. Miscellaneous Requirements

1. The permittee shall install emissions units K006 and K007 on a timely schedule in accordance with PTI 16-02191 to permanently replace existing presses, previously identified as emissions units Z001 and Z002. After installation of K006 and K007, the permittee shall have a shakedown period ending December 1, 2002 to ensure proper operation of the new presses. Existing emissions units Z001 and Z002 shall not remain in active operation beyond December 1, 2002. The permittee shall provide notifications as required in Section D above.

2. The permittee shall comply with any applicable State and federal requirements governing the storage, treatment, transport, and disposal of any waste material generated by the operation of the emissions unit.

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

4. The following terms and conditions of this permit are federally enforceable pursuant to OAC rule 3745-35-07: A.1, A.2, B.1, B.2, B.3, C.1, C.2, C.3, C.4, D.1, D.2, D.3, D.4, D.5, D.6, D.7, D.8, D.9, E.1, E.2, E.3, E.4, E.5, E.6, E.7, E.8, F.1, F.2, and F.3.

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K007: 5 - unit Motterflex CF-1 two web printing press (5th unit may be flexographic or nonheatset)	OAC rule 3745-31-05(A)(3)	VOC emissions shall not exceed 5.35 lbs/hr from the K007 printing operations. There shall be no visible emissions of particulates from any building ventilation (i.e., doors, windows, vents, etc.). Hand rags and any other articles used for cleanup shall be placed in a closed/sealed container, when not in use or for proper disposal, to reduce fugitive VOC emissions. Also, the operational restrictions in Section B. below satisfy OAC rule 3745-31-05 requirements.
	OAC rule 3745-21-07(G)(2)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	OAC rule 3745-35-07(B)	See A.2.b, A.2.c, A.2.d, and A.2.e below.
	OAC rule 3745-17-07(A)(1)	Visible particulate emissions from any stack shall not exceed twenty per cent

	opacity, as a six-minute average, except as provided by rule.
OAC rule 3745-17-11(B)(1)	Particulate emissions shall not exceed 0.551 lb/hr.
40 CFR 63.820(a)(2)	See A.2.a below.
40 CFR 63.820(b)(1)	The permittee provided initial notification that this source is subject to 40 CFR 63 Subpart KK with the permit to install application.
40 CFR 63.829(d)	See C.1 below.

2. Additional Terms and Conditions

2.a To establish and maintain the source as an area source per 40 CFR 63.820(a)(2), the facility shall:

i use less than 10 tons per each rolling 12-month period of each HAP at the facility, including materials used for source categories or purposes other than printing and publishing, and

ii. use less than 25 tons per each rolling 12-month period of any combination of HAPs at the facility, including materials used for source categories or purposes other than printing and publishing.

2.b Facility-wide VOC emissions and hazardous air pollutants (HAPs) from flexographic inks shall be calculated showing 4.5% (by weight) of the solvent retained in the finished product. This is the midrange of the solvent retention factors for flexographic inks from "Compilation of Air Pollutant Emission Factors", AP-42, Table 4.9.1-1 (1/95). The remaining 95.5% (by weight) of the VOC and HAPs in the ink are evaporated as fugitive emissions into the pressroom and vented through exhaust fans.

2.c The maximum annual facility-wide VOC emissions shall not exceed 99.0 TPY, based upon a 12-month rolling sum of the monthly emissions.

2.d The maximum annual facility-wide emissions of any individual HAP shall not exceed 9.9 TPY, based upon a 12-month rolling sum of the monthly emissions.

2.e The maximum annual facility-wide emissions of combined HAPs shall not exceed 24.9 TPY, based upon a 12-month rolling sum of the monthly emissions.

2.f The hourly VOC emission limit for this emissions unit was established to reflect its potential to emit. This limit is based on the maximum printing rate, highest VOC contents, lowest requirements for control, and the maximum usage of ink, fountain solution, blanket-wash, cleanup material, and thinning solvent in any hour. Therefore, it was not necessary to develop daily record keeping and/or reporting requirements to ensure compliance with the hourly VOC emission limit.

B. Operational Restrictions

1. The permittee shall not employ any photochemically reactive material, as defined by OAC Rule 3745-21-01 (C)(5), in this emissions unit. This determination shall be made based on the actual formulation of the materials after any final in-plant reducing or thinning and prior to application of the materials.

2. The maximum annual operating hours for this emissions unit shall not exceed 7700, based upon a rolling, 12-month summation of the operating hours.

   To ensure enforceability during the first 12 calendar months of operation following the issuance of this permit, the permittee shall not exceed the operating hours levels specified in the following table:

month(s)	**Maximum Allowable Cumulative Operating Hours**
1	850
1-2	1700
1-3	2300
1-4	2900
1-5	3500
1-6	4100
1-7	4700
1-8	5300
1-9	5900
1-10	6500
1-11	7100
1-12	7700

After the first 12 calendar months of operation following the issuance of this permit, compliance

with the annual operating hours limitation shall be based upon a rolling, 12-month summation of the operating hours. If hours of operation for one or more emission units exceed 7700 hours, the permittee may demonstrate compliance by showing that calculated emissions are below the emission limits shown above.

3. The VOC content of the coatings and inks employed in this printing line, as determined under Section E of this Part, shall not exceed the following:

   a. forty percent VOC by volume of the coating and ink, excluding water and exempt solvents; and

   b. twenty-five percent VOC by volume of the volatile matter in the coating and ink.

C. Monitoring and/or Recordkeeping Requirements

1. To demonstrate compliance with 40 CFR 63.829(d), the permittee shall maintain records of all required measurements and calculations needed to demonstrate compliance with A.2.a, including the mass of all HAP containing materials used and the mass fraction of HAP present in each HAP containing material used, on a monthly basis.

2. The permittee shall collect and record monthly the following information for all emissions units (including de minimis emissions units) to determine facility-wide VOC emissions, facility-wide emissions of individual HAPs, and facility-wide emissions of combined HAPs:

   a. the company identification for each printing ink (heatset, non-heatset, and flexographic), fountain solution, blanket-wash, cleanup materials, and thinning solvents employed;

   b. the number of pounds of each ink employed;

   c. the number of gallons of each fountain solution employed;

   d. the number of gallons of each blanket-wash, cleanup material, and thinning solvent employed;

   e. the density of each ink, fountain solution, blanket-wash, cleanup materials, and thinning solvents employed;

   f. the VOC and HAP content of each ink employed, in percent by weight;

   g. the VOC and HAP content of each fountain solution employed, in pounds per gallon of fountain solution or percent by weight;

h. the VOC and HAP content of each blanket-wash, cleanup material, and thinning solvent employed, in pounds per gallon of material or percent by weight;

i. the total VOC emissions, stack and fugitive, calculated using the records above and emission factors from guidance provided in Ohio Engineering Guides #56 and #68, "Compilation of Air Pollutant Emission Factors"AP-42, and "Control of Volatile Organic Compound Emissions for Offset Lithographic Printing", US EPA, 9/93;

j. the individual HAP emissions from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed, for each individual HAP, as calculated using the records maintained in this section;

k. the combined HAPs emissions from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed, for each individual HAP, as calculated using the records maintained in this section, in tons;

l. the rolling 12-month facility emissions of VOC from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed in all emission units, in tons;

m. the rolling 12-month facility emissions of each individual HAP, from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed in all emission units, in tons or pounds; and

n. the rolling 12-month facility emissions of combined HAPs, from all inks, fountain solutions, blanket-washes, cleanup materials, and thinning solvents employed in all emission units, in tons.

3. The permittee shall maintain monthly records as to whether or not each ink, fountain solution, blanket-wash, cleanup material, and thinning solvent employed is a photochemically reactive material.

4. The permittee shall maintain monthly records of the following information:

a. the operating hours for each month;

b. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative operating hours for each calendar month; and

c. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling, 12-month summation of the operating hours.

5. The permit to install for this emissions unit (K007) was evaluated based on the actual materials (inks, fountain solutions, blanket wash, and cleaning solutions) and the design parameters of the emissions unit, 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant(s):

   Pollutant: ethylene glycol (CAS 107-21-1)

   TLV (mg/m3): 100 (based on STEL)

   Maximum Hourly Emission Rate (lbs/hr): 0.91

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 124

   MAGLC (ug/m3): 2,381

   Pollutant: ethylene glycol monobutyl ether (CAS 111-76-2)

   TLV (mg/m3): 96.6 (based on TWA)

   Maximum Hourly Emission Rate (lbs/hr): 1.77

   Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 241.51

   MAGLC (ug/m3): 2,300

6. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying 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(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is (are) defined as a modification under other provisions of the modification definition (other than (VV)(1)(a)(ii)), then the permittee shall obtain a final permit to install prior to the change.

7. 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 Toxics Policy:"

a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and

c. where 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 deviation (excursion) reports that identify each month during which the rolling, 12-month HAP emissions exceed 9.9 tons for any single HAP and 24.9 tons for combined HAPs, based on a rolling, 12-month summation of emissions from all materials applied facility wide;

2. The permittee shall submit deviation (excursion) reports that identify each month during which the rolling, 12-month VOC emissions exceed 99.0 tons, based on a rolling, 12-month summation of emissions from all materials applied facility wide;

3. The permittee shall submit deviation (excursion) reports that identify the days during which any photochemically reactive materials were employed in this emissions unit. Each report shall identify the cause for the use of the photochemically reactive material(s) and the estimated total quantity of material(s) emitted during each such day, in pounds.

4. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month operating hours limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative operating hours levels. These reports are due by the date described in Part 1 - General Terms and Conditions of this permit under section (A)(1).

5. Deviation (excursion) reports, as mentioned above, shall be submitted in accordance with the procedures required in Part I: General Terms and Conditions Section A.2.b.

6. The permittee shall submit in writing annual reports to the Director (appropriate District Office or local air agency) which specify the total VOC emissions, in tons, the total individual HAP emissions, in tons, and the total combined HAP emissions, in tons, from this facility for the previous calendar year. Each report shall be submitted by January 31 of each year.

7. The permittee shall submit written notification to the Director (appropriate District Office or local air agency) of actual dates of the following milestones:

   a. startup of operations of emission units K006 and K007; and

   b. permanent shutdown of operations of emissions units Z001 and Z002.

8. If the actual date(s) of the permanent shutdown of Z001 or Z002 does not meet expected dates as outlined in F.4 below, the permittee shall notify the Director (appropriate District Office or local air agency) within 30 days after the expected date with a written report including the following:

   a. the cause of the delay;

   b. any corrective actions which have or will be taken to complete the milestone in a timely manner; and

   c. the actual date the milestone was completed or the estimated date the milestone will be completed.

9. As an area source under 40 CFR 63, Subpart KK, the permittee has satisfied the initial notification requirements of 40 CFR 63.9(b), with the submission of this permit to install application.

E. Testing Requirements

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

1. Formulation data or USEPA Methods 24/24A shall be used to determine the VOC and HAP contents of the inks, fountain solutions, blanket washes, cleanup materials, and thinning solvents employed.

   a. Formulation data shall be used to evaluate if changes in materials used, or the use of new materials, result in the:

      i. 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 TLV specified in Section F of this part;

ii. emission of an air contaminant not previously permitted; and

iii. increase in emissions of any pollutant that has a TLV listed in Section F of this part.

2. Emission Limitation:

VOC emissions shall not exceed 5.35 pounds per hour from this emissions unit.

Applicable Compliance Method:

Compliance shall be demonstrated by documenting the worst-case emissions by substituting the maximum material usage and VOC content into this calculation as follows:

Flexographic Inks (5 units, worst case)

34.6 lbs ink/hr x 3% VOC x (100% - 2% solvent retained in product*)5 units = 5.1 lbs VOC/hr

Fountain Solution

0.11 gal/hr x 9.1 lbs/gal x 15% VOC = 0.15 lb VOC/hr

Blanket Wash

0.015 gal/hr x 6.6 lbs/gal x 100% VOC = 0.10 lb VOC/hr

Total = 5.35 lbs VOC/hr

* lowest solvent retention factor from "Compilation of Air Pollutant Emission Factors", AP-42, Table 4.9.1-1 (1/95).

3. Emission Limitation:

The maximum allowable 12-month rolling sum of facility-wide VOC emissions shall not exceed 99.0 TPY.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

4. Emission Limitation:

The maximum allowable 12-month rolling sum of facility-wide individual HAP emissions shall not exceed 9.9 TPY.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

5. Emission Limitation:

The maximum allowable 12-month rolling sum of facility-wide combined HAPs emissions shall not exceed 24.9 TPY.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

6. Emission Limitation:

No visible particulate emissions from building ventilation.

Applicable Compliance Method:

If required, compliance shall be determined by visible emission evaluations performed in accordance with OAC rule 3745-17-03(B)(4) using the methods and procedures specified in USEPA Method 22, 40 CFR Part 60, Appendix A.

7. Emission Limitation:

0.551 lb/hr particulates.

Applicable Compliance Method:

The uncontrolled mass rate of particulate emissions from this emissions unit is less than 10 pounds per hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. The maximum process weight rate for this emissions unit is 41.9 pounds per hour based on the maximum quantities of ink, fountain solution, and blanket wash employed hourly. Therefore, in accordance with Table I of OAC rule 3745-17-11, the allowable rate of particulate emissions is 0.551 pound per hour. If required, compliance shall be determined through stack testing in accordance with 40 CFR Part 60, Appendix A, Method 5.

8. Operational Restriction:

The maximum allowable 12-month rolling total operating hours shall not exceed 7700 hours. If hours of operation for one or more emission units exceed 7700 hours, the permittee may demonstrate compliance by showing that calculated emissions are below the emission limits shown above.

Applicable Compliance Method:

The permittee shall demonstrate compliance with the above limitation based upon the recordkeeping requirements contained in the Terms & Conditions of this permit.

F. Miscellaneous Requirements

1. The permittee shall install emissions units K006 and K007 on a timely schedule in accordance with PTI 16-02191 to permanently replace existing presses, previously identified as emissions units Z001 and Z002. After installation of K006 and K007, the permittee shall have a shakedown period ending December 1, 2002 to ensure proper operation of the new presses. Existing emissions units Z001 and Z002 shall not remain in active operation beyond December 1, 2002. The permittee shall provide notifications as required in Section D above.

2. The permittee shall comply with any applicable State and federal requirements governing the storage, treatment, transport, and disposal of any waste material generated by the operation of the emissions unit.

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

4. The following terms and conditions of this permit are federally enforceable pursuant to OAC rule 3745-35-07: A.1, A.2, B.1, B.2, B.3, C.1, C.2, C.3, C.4, D.1, D.2, D.3, D.4, D.5, D.6, D.7, D.8, D.9, E.1, E.2, E.3, E.4, E.5, E.6, E.7, E.8, F.1, F.2, and F.3.