



State of Ohio Environmental Protection Agency

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P.O. Box 1049
Columbus, OH 43216-1049

CERTIFIED MAIL

RE: FINAL PERMIT TO INSTALL

LUCAS COUNTY

Application No: 04-01495

Fac ID: 0448011240

DATE: 5/22/2008

Cenveo Inc
John Peters
1635 Coining Drive
Toledo, OH 43612

	TOXIC REVIEW
	PSD
	SYNTHETIC MINOR
	CEMS
	MACT
	NSPS
	NESHAPS
	NETTING
	MAJOR NON-ATTAINMENT
	MODELING SUBMITTED
	GASOLINE DISPENSING FACILITY

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 of the Director is final and may be appealed to the Environmental Review Appeals Commission pursuant to Section 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. The appeal must be filed with the Commission within thirty (30) days after notice of the Director's action. The appeal must be accompanied by a filing fee of \$70.00 which the Commission, in its discretion, may reduce if by affidavit you demonstrate that payment of the full amount of the fee would cause extreme hardship. Notice of the filing of the appeal shall be filed with the Director within three (3) days of filing with the Commission. Ohio EPA requests that a copy of the appeal be served upon the Ohio Attorney General's Office, Environmental Enforcement Section. An appeal may be filed with the Environmental Review Appeals Commission at the following address:

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

Sincerely,

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

CC: USEPA

TDES



**Permit To Install
Terms and Conditions**

**Issue Date: 5/22/2008
Effective Date: 5/22/2008**

FINAL PERMIT TO INSTALL 04-01495

Application Number: 04-01495
Facility ID: 0448011240
Permit Fee: **\$600**
Name of Facility: Cenvéo Inc
Person to Contact: John Peters
Address: 1635 Coining Drive
Toledo, OH 43612

Location of proposed air contaminant source(s) [emissions unit(s)]:
**1635 Coining Drive
Toledo, Ohio**

Description of proposed emissions unit(s):
Modification of Harris Webpress Heatset w/ incinerator (K002) and new KBA Rapida 162 Sheetfed Press (K009).

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

Chris Korleski
Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

The Director of the Ohio EPA, or an authorized representative of the Director, may, subject to the safety requirements of the permittee and without undue delay, enter upon the premises of this source at any reasonable time for purposes of making inspections, conducting tests, examining records or reports pertaining to any emission of air contaminants, and determining compliance with any applicable State air pollution laws and

regulations and the terms and conditions of this permit. The permittee shall furnish to the Director of the Ohio EPA, or an authorized representative of the Director, upon receipt of a written request and within a reasonable time, any information that may be requested to determine whether cause exists for modifying, reopening or revoking this permit or to determine compliance with this permit. Upon verbal or written request, the permittee shall also furnish to the Director of the Ohio EPA, or an authorized representative of the Director, copies of records required to be kept by this permit.

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Termination of Permit to Install

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

9. Construction of New Sources(s)

The proposed emissions unit(s) shall be constructed in strict accordance with the plans and application submitted for this permit to the Director of the Ohio Environmental Protection Agency. There may be no deviation from the approved plans without the express, written approval of the Agency. Any deviations from the approved plans or the above conditions

may lead to such sanctions and penalties as provided under Ohio law. Approval of these plans does not constitute an assurance that the proposed facilities will operate in compliance with all Ohio laws and regulations. Additional facilities shall be installed upon orders of the Ohio Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

10. Public Disclosure

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

11. Applicability

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

12. Best Available Technology

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

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

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this

permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

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

15. Fees

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

B. Permit to Install Summary of Allowable Emissions

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

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

<u>Pollutant</u>	<u>Tons Per Year</u>
VOC	12.00
PM	0.12
SO ₂	0.01
NO _x	2.26
CO	1.35

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 - (K002) - Harris heatset offset web printing press with ovens and catalytic thermal oxidizer-modification

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Volatile Organic Compound (VOC) emissions shall not exceed 4.73 tons per rolling, 12-month period. See Section A.2.a.
OAC rule 3745-31-05(A)(3)(b)	See Section A.2.b.
OAC rule 3745-17-07(A)(1)	Visible Emissions from the stack serving this emissions unit shall not exceed 20% opacity as a 6-minute average, unless otherwise specified by this rule. See Section A.2.c.
OAC rule 3745-17-11(B)	Particulate Emissions (PE) shall not exceed 0.551 pounds per hour. See Section A.2.d.
OAC rule 3745-18-06(E)	See Section A.2.e.

2. Additional Terms and Conditions

- 2.a Permit to Install 04-01495 for this air contaminant source takes into account the following voluntary restrictions (including the use of any applicable air pollution control equipment) as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3):
 - i. catalytic thermal oxidizer, whenever this air contaminant source is in operation, with a minimum control efficiency of 95% by weight of VOC
 - ii. material usage in this emissions unit shall not exceed the following levels based upon a rolling, 12-month summation of the usage rates: 80,000 pounds per rolling 12-months of printing inks with a maximum of 49.5% VOC by weight, 2,200 gallons per rolling 12-months of fountain solution with a maximum VOC content of 1.97 pounds/gallon, and 2,000 gallons per rolling 12-months of cleanup solvents with a maximum VOC content of 3.35 pounds/gallon.

- iii. All clean-up solvent in this emission unit shall have a vapor pressure less than 10 mmHg at a temperature of 68° F and all used clean-up rags and cleaning materials shall be stored in closed containers.

- 2.b** The Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3) does not apply to the PM, SO₂, NO_x, and CO emissions from this air contaminant source since the uncontrolled potential to emit for PM, SO₂, NO_x, and CO emissions is less than ten tons per year.

- 2.c** This emissions unit is controlled by a catalytic thermal oxidizer. As long as the emissions from this emissions unit are discharged through the oxidizer and the oxidizer is working properly, this shall satisfy the requirement of this rule.

- 2.d** The uncontrolled mass rate of particulate emissions (PE) from this emissions unit should be less than 10 pounds per hour per 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.

- 2.e** This emission unit is not subject to this limitation per OAC rule 3745-18-06(A) since natural gas is the only fuel burned.

B. Operational Restrictions

- 1. The permittee shall only burn natural gas in the dryers and oxidizer associated with this emission unit.

- 2. All oven emissions from this emissions unit shall be vented to a catalytic incinerator when the emissions unit is in operation.

- 3. Material usage shall not exceed the following levels based upon a rolling, 12-month summation of the usage rates:

Printing Inks: 80,000 pounds per rolling 12-month period;
Fountain Solution: 2,200 gallons per rolling 12-month period;
Clean-up solvent: 2,000 gallons per rolling 12-month period.

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

Maximum Allowable Cumulative Usage Rates

Month	Printing Inks pounds	Fountain Solution gallons	Clean-Up Solvent gallons
1	6,700	185	170
1-2	13,400	370	340
1-3	20,100	555	510
1-4	26,800	740	680
1-5	33,500	925	850
1-6	40,200	1,110	1,020
1-7	46,900	1,295	1,190
1-8	53,600	1,480	1,360
1-9	60,300	1,665	1,530
1-10	67,000	1,850	1,700
1-11	73,700	2,035	1,870
1-12	80,000	2,200	2,000

After the first 12 calendar months of operation following issuance of this permit, compliance with the annual usage limitations shall be based upon a rolling, 12-month summation of the usage rates.

C. Monitoring and/or Recordkeeping Requirements

- For each day during which the permittee burns a fuel other than natural gas in the ovens and oxidizer associated with this emissions unit, the permittee shall maintain a record of the type and quantity of fuel burned in the respective oven.
- In order to maintain compliance with the applicable emission limitation(s) contained in this permit, the acceptable average temperature of the exhaust gases immediately before the catalyst bed, for any 3-hour block of time the emissions unit controlled by the catalytic incinerator is in operation, shall not be more than 50 degrees Fahrenheit below the average temperature measured during the most recent emissions test that demonstrated the emissions unit was in compliance. The acceptable average temperature difference across the catalyst bed, for any 3-hour block of time (when the emissions unit is in operation), shall not be less than 80 percent of the average temperature difference measured during the most recent emissions test that demonstrated the emissions unit was in compliance.

3. The permittee shall collect and record the following information monthly for this emissions unit:
 - a. the name and identification number of each material employed (i.e., printing inks, fountain solution, clean-up material);
 - b. the percent of VOC employed in either percent by weight or pounds/gallon as specified in II.A.2.a.ii for each material employed; and
 - c. the amount of each material employed in either pounds or gallons, as specified in II.A.2.a.ii for each material employed.
 - d. during the first 12 calendar months of the operation following issuance of this permit, the permittee shall record the cumulative pounds or gallons for each material employed; and
 - e. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling 12-month summation of the pounds or gallons for each material employed.

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

4. The permittee shall operate and maintain continuous temperature monitors and recorder(s) to measure and record the temperature immediately upstream and downstream of the incinerator's catalyst bed when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The accuracy for each thermocouple, monitor, and recorder shall be guaranteed by the manufacturer to be within ± 1 percent of the temperature being measured or ± 5 degrees Fahrenheit, whichever is greater. The temperature monitors and recorder(s) shall be installed, calibrated, operated, and maintained in accordance with the manufacturer's recommendations, instructions, and the operating manuals. Following compliance testing, the permittee shall collect and record the following information each day the emissions unit is in operation:
 - a. all 3-hour blocks of time, when the emissions unit controlled by the catalytic incinerator was in operation, during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature measured during the most recent emissions test that demonstrated the emissions unit was in compliance;
 - b. all 3-hour blocks of time, when the emissions unit controlled by the catalytic incinerator was in operation, during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference measured during the most recent emissions test that demonstrated the emissions unit was in compliance; and

- c. a log or record of the operating time for the capture (collection) system, catalytic incinerator, monitoring equipment, and the associated emissions unit.

The permittee may use a temperature chart recorder or equivalent recording device as the log that documents the temperature differential across the catalyst bed.

- 5. Whenever the monitored average temperature of the exhaust gases immediately before the catalyst bed and/or the average temperature difference across the catalyst bed deviates from the range specified in this permit, the permittee shall promptly investigate the cause of the deviation. The permittee shall maintain records of the following information for each investigation:
 - a. the date and time the deviation began;
 - b. the magnitude of the deviation at that time;
 - c. the date the investigation was conducted;
 - d. the name(s) of the personnel who conducted the investigation; and
 - e. the findings and recommendations.

In response to each required investigation to determine the cause of a deviation, the permittee shall take prompt corrective action to bring the operation of the control equipment within the acceptable range specified in this permit, unless the permittee determines that corrective action is not necessary and documents the reasons for that determination and the date and time the deviation ended. The permittee shall maintain records of the following information for each corrective action taken:

- f. a description of the corrective action;
- g. the date corrective action was completed;
- h. the date and time the deviation ended;
- i. the total period of time (in minutes) during which there was a deviation;
- j. the temperature readings immediately after the corrective action was implemented; and
- k. the name(s) of the personnel who performed the work.

Investigation and records required by this paragraph do not eliminate the need to comply with the requirements of OAC rule 3745-15-06 if it is determined that a malfunction has occurred.

The temperature ranges are effective for the duration of this permit, unless revisions are requested by the permittee and approved in writing by the appropriate Ohio EPA District Office or local air agency. The permittee may request revisions to the permitted temperature range(s) based upon information obtained during future emission tests that demonstrate compliance with the allowable VOC emission rate for the controlled emissions unit(s). In addition, approved revisions to the temperature range(s) will not constitute a relaxation of the monitoring requirements of this permit and may be incorporated into this permit by means of a administrative modification.

D. Reporting Requirements

1. The permittee shall submit deviation (excursion) reports that identify each day when a fuel other than natural gas was burned in any oven or the oxidizer comprising this emissions unit, as fuel. Each report shall be submitted to the Toledo Division of Environmental Services within 30 days after the deviation occurs.
2. The permittee shall submit quarterly deviation (excursion) reports to the Toledo Division of Environmental Services in writing which identify exceedances of any of the following:
 - a. material usage restriction on as stated in II.B.3 and documented in II.C.3.d or II.C.3.e; and
 - b. maximum VOC content restriction for materials used as stated in II.A.2.a.ii and documented in II.C.3.b.
3. The permittee shall submit quarterly summaries of the following records:
 - a. all 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average temperature of the exhaust gases immediately before the catalyst bed was more than 50 degrees Fahrenheit below the average temperature established during the most recent emissions test that demonstrated the emissions unit was in compliance;
 - b. all 3-hour blocks of time (when the emissions unit(s) was/were in operation) during which the average temperature difference across the catalyst bed was less than 80 percent of the average temperature difference established during the most recent emissions test that demonstrated the emissions unit(s) was/were in compliance;
 - c. any records of downtime (date and length of time) for the capture (collection) system, the catalytic incinerator, and/or the monitoring equipment when the emissions unit(s) was/were in operation; and
 - d. a log of the operating time for the capture system, catalytic incinerator, monitoring equipment, and the emissions unit(s).

These quarterly reports shall be submitted by April 30, July 31, October 31, and January 31, and shall cover the records for the previous calendar quarters.

4. All quarterly deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.

E. Testing Requirements

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

- a. Emission Limitation:

Volatile Organic Compound (VOC) emissions shall not exceed 4.73 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with this emission limitation may be demonstrated by multiplying the rolling, 12-month summation of each material employed in either pounds or gallons by the percent VOC content of each material, respectively. The ink emissions shall be multiplied by 0.80 due to the substrate retaining 20% of the VOC contents and by (1-0.95) due to the 95% destructive efficiency of the incinerator. The clean-up emissions shall be multiplied by 0.50 due to the low vapor pressure of the solvent and the clean-up practices as stated in II.A.2.b. These reductions in ink and clean-up solvent are per Engineering Guide #56. To these emissions, shall be added the emissions from the ovens and incinerator. The ovens burn a total of 1.66mmBTU/hr and use 3200 ft³/hr of natural gas, the incinerator burns 485,000 BTU/hr and uses 485.4 ft³/hr. They use a total of 32.3 x 10⁶ ft³ of natural gas per year. The emissions shall be determined by multiplying the natural gas usage by the AP-42 emissions factor. The emissions from the various materials and emissions from the ovens and incinerator shall be summed and divided by 2000 pounds per ton, as show below:

Printing Inks: (80,000 pounds in per rolling 12-month period) (0.495 pounds VOC/ pound ink) (0.80) (1-0.95) = 1584 pounds VOC per rolling 12-month period

Fountain Solution: (2200 gallons fountain solution per rolling 12-month period) (1.97 pounds VOC/ gallon fountain solution) = 4334 pounds VOC per rolling 12-month period

Clean-up solvent: (2000 gallons solvent per rolling 12-month period) (3.35 pounds VOC/ gallon solvent) (0.50) = 3350 pounds VOC per rolling, 12-month period

Ovens & Incinerator: (5.5 pounds VOC/ 10⁶ ft³ natural gas) (32.3 x 10⁶ ft³ natural gas per year) = 178 pounds VOC per rolling 12-month period

(1584+4334+3350+178) / 2000 = 4.73 tons VOC per rolling, 12-month period

b. Emission Limitation:

Printing inks shall have a maximum of 49.5% VOC by weight.

Applicable Compliance Method:

Formulation data or USEPA Method 24A shall be used to determine the organic compound contents of the inks.

c. Emission Limitation:

Fountain Solutions shall have a maximum VOC content of 1.97 pounds per gallon.

Applicable Compliance Method:

Formulation data or USEPA Method 24A shall be used to determine the organic compound contents of the fountain solution.

d. Emission Limitation:

Clean-up solvents shall have a maximum VOC content of 3.35 pounds per gallon.

Applicable Compliance Method:

Formulation data or USEPA Method 24A shall be used to determine the organic compound contents of the inks.

e. Emission Limitation:

Visible emissions shall not exceed 20% opacity, as a six minute average.

Applicable Compliance Method:

If required, compliance shall be determined through visible emissions observations performed in accordance with Method 9 of 40 CFR Part 60, Appendix A.

f. Emission Limitation:

Particulate Emissions (PE) shall not exceed 0.551 pounds per hour.

Applicable Compliance Method:

Per Engineering Guide #56, this emissions unit should meet this standard without any additional control measures.

If required, the permittee shall demonstrate compliance using Methods 1 through 5 of 40 CFR Part 60, Appendix A. Alternative U.S. EPA-approved test methods can be used with prior approval from Ohio EPA.

g. Emission Limitation:

The catalytic thermal oxidizer shall operate with a minimum control efficiency of 95% by weight of VOC.

Applicable Compliance Method:

If required, the permittee shall confirm the voluntary destructive efficiency limitation of 95% according to the procedures outlined in OAC rule 3745-21-10(C).

F. Miscellaneous Requirements

1. The terms and conditions contained in this permit to install for emissions unit K002 shall supercede all requirements for emissions unit K002 contained in permit to install 04-1009 (issued 4/10/1996).
2. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittee to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.

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 - (K009) - KBA Rapida 162 Sheetfed Printer

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(C)	Volatile Organic Compound (VOC) emissions shall not exceed 7.27 tons per rolling, 12-month period. See Section A.2.a & A.2.b.

2. **Additional Terms and Conditions**

- 2.a Permit to Install 04-01495 for this air contaminant source takes into account the material usage in this emissions unit shall not exceed the following levels based upon a rolling, 12-month summation of the usage rates: 62,500 pounds of inks per rolling, 12-month period with a maximum of 13.64% VOC by weight, 900 gallons of fountain solution per rolling, 12-month period with a maximum of 1.88 pounds of VOC per gallon, 1,400 gallons of clean up solvent per rolling, 12-month period with a maximum of 3.35 pounds of VOC per gallon, and 9,900 gallons of coating per rolling, 12-month period with a maximum of 0.20 pounds of VOC per gallon as proposed by the permittee for the purpose of avoiding Best Available Technology (BAT) requirements under OAC rule 3745-31-05(A)(3).

- 2.b All clean-up solvent in this emission unit shall have a vapor pressure less than 10 mmHg at a temperature of 68° F and all used clean-up rags and cleaning materials shall be stored in closed containers.

B. Operational Restrictions

1. Material usage shall not exceed the following levels based upon a rolling, 12-month summation of the usage rates:

Printing Inks: 62,500 pounds per rolling 12-month period;
 Fountain Solution: 900 gallons per rolling 12-month period;
 Clean-up solvent: 1,400 gallons per rolling 12-month period;
 Coating: 9,900 gallons per rolling 12-month period.

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

Maximum Allowable Cumulative Usage Rates

Month	Printing Inks (pounds)	Fountain Solution (gallons)	Clean-Up Solvent (gallons)	Coating (gallons)
1	5,200	75	120	825
1-2	10,400	150	240	1,650
1-3	15,600	225	360	2,475
1-4	20,800	300	480	3,300
1-5	26,000	375	600	4,125
1-6	31,200	450	720	4,950
1-7	36,400	525	840	5,775
1-8	41,600	600	960	6,600
1-9	46,800	675	1,080	7,425
1-10	52,000	750	1,200	8,250
1-11	57,200	825	1,320	9,075
1-12	62,500	900	1,400	9,900

After the first 12 calendar months of operation following issuance of this permit, compliance with the annual usage limitations shall be based upon a rolling, 12-month summation of the usage rates.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information monthly for this emissions unit:
 - a. the name and identification number of each material employed (e.g., printing inks/varnishes, fountain solution, clean-up materials, coatings);
 - b. the percent of VOC employed in either percent by weight or pounds/gallon as specified in II.A.2.a for each material employed; and

- c. the amount of each material employed in either pounds or gallons, as specified in II.A.2.a for each material employed; and
- d. during the first 12 calendar months of the operation following issuance of this permit, the permittee shall record the cumulative pounds or gallons for each material employed; and
- e. beginning after the first 12 calendar months of operation following the issuance of this permit, the rolling 12-month summation of the pounds or gallons for each material employed.

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

D. Reporting Requirements

- 1. The permittee shall submit quarterly deviation (excursion) reports to the Toledo Division of Environmental Services in writing which identify exceedances of any of the following:
 - a. material usage restriction on as stated in II.B.1 and documented in II.C.1.d or II.C.1.e; and
 - b. maximum VOC content restriction for materials used as stated in II.A.2.a and documented in II.C.1.b.
- 2. All quarterly deviation reports shall be submitted in accordance with the General Terms and Conditions of this permit.

E. Testing Requirements

- 1. Compliance with the Section A.I.1 of these terms and conditions shall be determined in accordance with the following methods:
 - a. Emission Limitation:

Volatile Organic Compound (VOC) emissions shall not exceed 7.27 tons per rolling, 12-month period.

Applicable Compliance Method:

Compliance with this emission limitation may be demonstrated by multiplying the rolling, 12-month summation of each material employed in either pounds or gallons by the percent VOC content of each material, respectively. The clean-up emissions shall be multiplied by 0.50 due to the low vapor pressure of the solvent and the clean-up practices as stated in II.A.2.b. The emissions from the various materials shall be summed and divided by 2000 pounds per ton, as show below:

Printing Inks: (62,500 pounds in per rolling 12-month period) (0.1364 pounds VOC/ pound ink) (0.80) = 8525 pounds VOC per rolling 12-month period

Fountain Solution: (900 gallons fountain solution per rolling 12-month period) (1.88 pounds VOC/ gallon fountain solution) = 1692 pounds VOC per rolling 12-month period

Clean-up solvent: (1,400 gallons solvent per rolling 12-month period) (3.35 pounds VOC/ gallon solvent) (0.50) = 2345 pounds VOC per rolling, 12-month period

Coating: (9,900 gallons coating per rolling 12-month period) (0.20 pounds VOC / gallon coating) = 1980 pounds VOC per rolling 12-month period

$(8525+1692+2345+1980) / 2000 = 7.27$ tons VOC per rolling, 12-month period

b. Emission Limitation:

Printing inks shall have a maximum of 13.64% VOC by weight.

Applicable Compliance Method:

Formulation data or USEPA Method 24A shall be used to determine the organic compound contents of the inks.

c. Emission Limitation:

Fountain Solutions shall have a maximum VOC content of 1.88 pounds per gallon.

Applicable Compliance Method:

Formulation data or USEPA Method 24A shall be used to determine the organic compound contents of the fountain solution.

d. Emission Limitation:

Clean-up solvents shall have a maximum VOC content of 3.35 pounds per gallon.

Applicable Compliance Method:

Formulation data or USEPA Method 24A shall be used to determine the organic compound contents of the inks.

e. Emission Limitation:

Coatings shall have a maximum VOC content of 0.20 pounds per gallon.

Applicable Compliance Method:

Formulation data or USEPA Method 24A shall be used to determine the organic compound contents of the fountain solution.

F. Miscellaneous Requirements

1. Modeling to demonstrate compliance with the Ohio EPA's "Air Toxic Policy" was not necessary because the emissions unit's maximum annual emissions for each toxic compound will be less than 1.0 ton. OAC Chapter 3745-31 requires permittee to apply for and obtain a new or modified permit to install prior to making a "modification" as defined by OAC rule 3745-31-01. The permittee is hereby advised that changes in the composition of the materials, or use of new materials, that would cause the emissions of any pollutant that has a listed TLV to increase to above 1.0 ton per year may require the permittee to apply for and obtain a new permit to install.