OhioEPA

State of Ohio Environmental Protection Agency

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Columbus, OH 43215

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

CERTIFIED MAIL

RE: FINAL PERMIT TO INSTALL MODIFICATION
HARRISON COUNTY
Application No: 06-08125
Fac ID: 0634000058

DATE: 1/30/2007

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

Freeport Press Inc
David Pilcher
121 Main St.
Freeport, OH 43973

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

You are hereby notified that this action 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

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

CC: **USEPA** **SEDO**

FINAL ADMINISTRATIVE MODIFICATION OF PERMIT TO INSTALL 06-08125

Application Number: 06-08125

Facility ID: 0634000058

Permit Fee: **$0**

Name of Facility: Freeport Press Inc

Person to Contact: David Pilcher

Address: 121 Main St.
Freeport, OH 43973

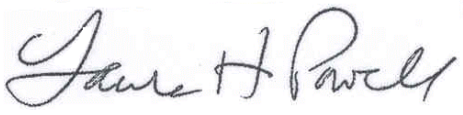
Location of proposed air contaminant source(s) [emissions unit(s)]:
121 Main St
Freeport, **Ohio**

Description of proposed emissions unit(s):
Administrative modification to PTI 06 08125 issued on November 2 2006.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency



Laura Powell
Acting 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

Pollutant	Tons Per Year
PE	0.82
NO_x	10.87
CO	9.14
OC	20.63

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 - (K001) - Diddie - 1 (20000 Iph) Heatset Web Offset Lithographic printing Press with a 1.24 MMBtu drying oven vented to a 4.3 MMBtu Regenerative Thermal Oxidizer (RTO). Administrative modification to PTI 06-08125 issued on November 2, 2006 which was a Chapter 31 modification to increase allowable emission rates and make monitoring and record keeping requirements consistent. The terms of this permit supercede those identified in PTI No. 17-555 issued February 10, 1988.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 0.04 lb/hour and 0.18 TPY. Visible particulate emissions from the RTO exhaust stack shall not exceed 0 % opacity , as a six minute average. Emissions of nitrogen oxides (NO_x) shall not exceed 0.55 lb/hour, 2.42 TPY. Emissions of carbon monoxide (CO) shall not exceed 0.46 lb/hour, 2.04 TPY. Emissions of organic compounds (OC) shall not exceed 0.58 lb/hour and 2.54 TPY. The requirements of this rule also include compliance with the requirements of OAC 3745-21-07(G)(2). See Section A.2.a and A.2.b below.
OAC rule 3745-17-11(B)	The uncontrolled mass rate of particulate emissions (PE) from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply since the facility is located in Harrison County, which is identified as a 'P-2' county.

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Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)	This emissions unit is not subject to the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.
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 3745-23-06	See Section A.2.c below.
OAC rule 3745-21-08 (B)	See Section A.2.d below.

2. Additional Terms and Conditions

2.a The OC emission limitation of 0.58 lb/hour for emissions unit K001 is based on the following information:

i. The percentage of the ink solvent retained on the web after the dryer is 20 percent*;

ii. The percentage of the fountain solution solvent available for capture in the dryer is 70 percent*;

iii. The percentage of the auto blanket wash (clean up) solvent available for capture in the dryer is 40 percent*; and,

iv. The percentage of the hand blanket wash (clean up) solvent retained on the cloths is 50 percent**.

* This is based on the draft Control Techniques Guideline (Control of Volatile Organic Compound Emissions from Offset Lithographic Printing, dated September 1993) and the Alternative Control Techniques document, dated November 8, 1993.

** This is based on information supplied by the permittee.

2.b The permittee shall employ best available technology (BAT) on this emissions unit. BAT has been determined to be the use of a control system for OC emissions, meeting the following requirements:

i. The control system shall consist of a collection system for the dryer. The collection system shall achieve a capture efficiency of 100 percent of the press dryer exhaust; and,

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ii. The control system shall be equipped with a regenerative thermal oxidizer with a destruction efficiency of at least 95 percent.

2.c The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

On February 15, 2005, OAC rule 3745-23-06 was rescinded and is no longer part of State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to the SIP, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

B. Operational Restrictions

1. The average temperature within the regenerative thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1,450 degrees Fahrenheit. A lower average temperature requirement may be established if compliance with the minimum destruction efficiency in A.2.b is demonstrated during emissions testing.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records which list the following information for each graphic arts material (ink, fountain solution, cleanup material, and blanket wash) employed in emissions unit K001:

   a. The name and identification number of each graphic arts material employed;

   b. Documentation on whether or not each material employed is a photochemically reactive material;

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c. The OC content of each graphic arts material, in lbs/gallon or pounds/pound for inks, as received;

d. The quantity of each graphic arts material employed, in gallons or lbs of each material per month;

e. The OC emissions for each graphic arts material employed, in tons/month, calculated as follows:

$E_n = [U_n \times V_n \times (1-R_n/100) \times \{1-(C_n/100) \times (K/100)\}]$

where:

E_n= OC emissions from an individual material (pounds of OC emitted/month);
U_n= total usage of the individual material - typically ink, fountain solution, and cleaning solvents (lbs or gallons of material/month);
V_n= average OC content of material as determined by Method 24 (lb OC/lb or gallon of material);
R_n= percent of OC retained on the web or on cloths:

R_n = 20 for inks
R_n = 0 for fountain solutions
R_n = 0 for auto blanket wash (cleanup) solvent
R_n = 50 for hand blanket wash (cleanup) solvent

C_n= capture efficiency for individual material emitted:

C_n = 100 for inks
C_n = 70 for fountain solutions
C_n = 40 for auto blanket wash (cleanup) solvent
C_n = 0 for hand blanket wash (cleanup) solvent; and

K = destruction efficiency as determined during the performance test as specified in condition E.2.

f. The total OC emission rate of all graphic arts materials employed, in tons/month, calculated as follows:

$E_M = E_1 + E_2 + E_3 + ... + E_n$

where:

E_M = Monthly OC emissions, in lbs/month; and,
E_1 through E_n = OC emissions from each individual graphic arts material (condition C.1.e).

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g. The number of hours this emissions unit was in operation, when graphic arts materials were being applied or employed (hours/month);

h. The average hourly OC emission rate, i.e.,"f" divided by "g", above;

2. The permittee shall operate and maintain continuous temperature monitor(s)* and a temperature recorder which measures and records the average temperature within the regenerative thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor(s) and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

*If the temperature monitoring system consists of several temperature monitors from which an average temperature is obtained.

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

a. All 3-hour blocks of time during which the average temperature within the regenerative thermal oxidizer, when the emissions unit was in operation, was less than the temperature limitation specified in condition B. 1 of this permit; and,

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

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify exceedances of any of the following:

a. the hourly emission limitation (as a monthly average), as determined in condition C.1.

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2. The permittee shall submit quarterly deviation (excursion) reports which identify all 3-hour blocks of time during which the average temperature within the regenerative thermal oxidizer does not comply with the temperature limitation specified in condition B.1 of this permit.

3. The permittee shall submit quarterly deviation (excursion) reports that include a log of the downtime for the capture (collection) system and/or the regenerative thermal oxidizer when the emissions unit was in operation.

4. The permittee shall submit quarterly written reports that:

   a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, and

   b. describe any corrective actions taken to eliminate the visible particulate emissions.

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

E. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitations in condition A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emissions Limitation:
   PE shall not exceed 0.04 lb/hour, 0.18 TPY.

   Applicable Compliance Method:
   Compliance may be demonstrated using the following equations based on the emission factor in AP-42, Table 1.4-2 (7/98):

   $[4.3\ \text{MMBtu/hr}_{ox} + 1.24\ \text{MMBtu/hr}_{press}]\ (7.6\ \text{lb/MCF}) / (1000\ \text{BTU/CF}) = 0.042\ \text{lb/hr PE}$
   ,
   $(0.042\ \text{lb/hr})(8760\ \text{hrs/hr})(0.0005\ \text{lb/ton}) = 0.18\ \text{TPY}$

   Annual emissions shall be determined by multiplying the hourly PE emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

   If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

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b. Emissions Limitation:

Visible particulate emissions from the RTO exhaust stack shall not exceed 0 % opacity , as a six minute average.

Compliance Method:

If required, visible particulate emissions shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources".

c. Emissions Limitation:
Emissions of NO_x shall not exceed 0.55 lb/hour, 2.42 TPY.

Compliance Method:
Compliance may be demonstrated using the following equations based on the emission factor in AP-42, Table 1.4-1 (7/98):

[4.3 MMBtu/hr_{ox} + 1.24 MMBtu/hr_{press}] (100 lb/MCF) / (1000 BTU/CF) = 0.55 lb/hr NO_x ,
(0.55 lb/hr)(8760 hrs/hr)(0.0005 lb/ton) = 2.42 TPY

Annual emissions shall be determined by multiplying the hourly NO_x emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

If required, nitrogen oxides emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

d. Emissions Limitation:
Emissions of CO shall not exceed 0.46 lb/hour, 2.04 TPY.

Compliance Method:
Compliance may be demonstrated using the following equations based on the emission factor in AP-42, Table 1.4-1 (7/98):

[4.3 MMBtu/hr_{ox} + 1.24 MMBtu/hr_{press}] (84 lb/MCF) / (1000 BTU/CF) = 0.46 lb/hr CO,
(0.46 lb/hr)(8760 hrs/hr)(0.0005 lb/ton) = 2.04 TPY

Annual emissions shall be determined by multiplying the hourly CO emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

If required, carbon monoxide emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR,

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Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

e. Emissions Limitation:
Emissions of OC shall not exceed 0.58 lb/hour, and 2.54 TPY.

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly OC emission limitation from this emissions unit through the record keeping required in condition C.1 of this permit. Compliance may be demonstrated using the following equations based on the emission factor in AP-42, Table 1.4-2 (7/98) and recordkeeping in this permit:

[4.3 MMBtu/hr_{ox} + 1.24 MMBtu/hr_{press}] (5.5 lb/MCF) / (1000 BTU/CF) plus actual emissions as calculated in C.1 from press inks = 0.58 lb/hr OC ,
(0.58 lb/hr)(8760 hrs/hr)(0.0005 lb/ton) = 2.54 TPY

Annual emissions shall be determined by multiplying the hourly OC emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

If required, organic compound emissions shall be determined according to test Methods 1 - 4, and 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

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

a. The emissions testing shall be conducted within 180 days after the startup of the RTO unit.

b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency (see E.2.c.i) and destruction efficiency (see E.2.c.ii) for OC.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate:

i. In accordance with Ohio EPA's Engineering Guide #56, the capture efficiency may be assumed to be 100 percent for organic compounds not retained in the substrate or emitted uncontrolled, provided that the press dryer maintains a negative pressure within the press dryer and the dryer exhausts to a control device (the RTO). Therefore, during testing of the RTO, the permittee shall verify that a negative pressure is maintained within the press dryer.

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ii. The destruction efficiency shall be conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and shall measure the percent reduction in mass emissions of organic compounds between the inlet and outlet of the thermal oxidizer. The test method selected shall be based on a consideration of the diversity of organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

d. As part of the performance test, the permittee shall collect and record the average temperature within the regenerative thermal oxidizer, in degrees Fahrenheit, and include this information with the results of the emissions report specified below.

3. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office.

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

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

F. Miscellaneous Requirements

None

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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 N800 (36000 lph) Heatset Web Offset Lithographic printing Press with a 6.54 MMBtu drying oven vented to a 4.3 MMBtu Regenerative Thermal Oxidizer (RTO). Chapter 31 modification to increase allowable emission rates and make monitoring and record keeping requirements consistent. The terms of this permit supercede those identified in PTI No. 06-91681 issued March 22, 2000. Administrative modification to PTI 06-08125 issued on November 2, 2006.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 0.08 lb/hour and 0.36 TPY. Visible particulate emissions from the RTO exhaust stack shall not exceed 0 % opacity , as a six minute average. Emissions of nitrogen oxides (NO_x) shall not exceed 1.08 lbs/hour, 4.74 TPY. Emissions of carbon monoxide (CO) shall not exceed 0.91 lb/hour, 3.99 TPY. Emissions of organic compounds (OC) shall not exceed 1.41 lbs/hour and 6.19 TPY. The requirements of this rule also include compliance with the requirements of OAC 3745-21-07(G)(2). See Section A.2.a and A.2.b below.
OAC rule 3745-17-11(B)	The uncontrolled mass rate of particulate emissions (PE) from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply since the facility is located in Harrison County, which is identified as a 'P-2' county.

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Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)	This emissions unit is not subject to the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.
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 3745-23-06	See Section A.2.c below.
OAC rule 3745-21-08 (B)	See Section A.2.d below.

2. Additional Terms and Conditions

2.a The OC emission limitation of 1.41 lbs/hour for emissions unit K002 is based on the following information:

i. The percentage of the ink solvent retained on the web after the dryer is 20 percent*;

ii. The percentage of the fountain solution solvent available for capture in the dryer is 70 percent*;

iii. The percentage of the auto blanket wash (clean up) solvent available for capture in the dryer is 40 percent*; and,

iv. The percentage of the hand blanket wash (clean up) solvent retained on the cloths is 50 percent**.

* This is based on the draft Control Techniques Guideline (Control of Volatile Organic Compound Emissions from Offset Lithographic Printing, dated September 1993) and the Alternative Control Techniques document, dated November 8, 1993.

** This is based on information supplied by the permittee.

2.b The permittee shall employ best available technology (BAT) on this emissions unit. BAT has been determined to be the use of a control system for OC emissions, meeting the following requirements:

i. The control system shall consist of a collection system for the dryer. The collection system shall achieve a capture efficiency of 100 percent of the press dryer exhaust; and,

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ii. The control system shall be equipped with a regenerative thermal oxidizer with a destruction efficiency of at least 95 percent.

2.c The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

On February 15, 2005, OAC rule 3745-23-06 was rescinded and is no longer part of State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to the SIP, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

B. Operational Restrictions

1. The average temperature within the regenerative thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1,450 degrees Fahrenheit. A lower average temperature requirement may be established if compliance with the minimum destruction efficiency in A.2.b is demonstrated during emissions testing.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records which list the following information for each graphic arts material (ink, fountain solution, cleanup material, and blanket wash) employed in emissions unit K002:

   a. The name and identification number of each graphic arts material employed;

   b. Documentation on whether or not each material employed is a photochemically reactive material;

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c. The OC content of each graphic arts material, in lbs/gallon or pounds/pound for inks, as received;

d. The quantity of each graphic arts material employed, in gallons or lbs of each material per month;

e. The OC emissions for each graphic arts material employed, in tons/month, calculated as follows:

$E_n = [U_n \times V_n \times (1-R_n/100) \times \{1-(C_n/100) \times (K/100)\}]$

where:

E_n= OC emissions from an individual material (pounds of OC emitted/month);
U_n= total usage of the individual material - typically ink, fountain solution, and cleaning solvents (lbs or gallons of material/month);
V_n= average OC content of material as determined by Method 24 (lb OC/lb or gallon of material);
R_n= percent of OC retained on the web or on cloths:

R_n = 20 for inks
R_n = 0 for fountain solutions
R_n = 0 for auto blanket wash (cleanup) solvent
R_n = 50 for hand blanket wash (cleanup) solvent

C_n= capture efficiency for individual material emitted:

C_n = 100 for inks
C_n = 70 for fountain solutions
C_n = 40 for auto blanket wash (cleanup) solvent
C_n = 0 for hand blanket wash (cleanup) solvent; and

K = destruction efficiency as determined during the performance test as specified in condition E.2.

f. The total OC emission rate of all graphic arts materials employed, in tons/month, calculated as follows:

$E_M = E_1 + E_2 + E_3 + ... + E_n$

where:

E_M = Monthly OC emissions, in lbs/month; and,
E_1 through E_n = OC emissions from each individual graphic arts material (condition C.1.e).

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g. The number of hours this emissions unit was in operation, when graphic arts materials were being applied or employed (hours/month);

h. The average hourly OC emission rate, i.e.,"f" divided by "g", above;

2. The permittee shall operate and maintain continuous temperature monitor(s)* and a temperature recorder which measures and records the average temperature within the regenerative thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor(s) and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

*If the temperature monitoring system consists of several temperature monitors from which an average temperature is obtained.

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

a. All 3-hour blocks of time during which the average temperature within the regenerative thermal oxidizer, when the emissions unit was in operation, was less than the temperature limitation specified in condition B.1 of this permit; and,

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

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify exceedances of any of the following:

a. the hourly emission limitation (as a monthly average), as determined in condition C.1.

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2. The permittee shall submit quarterly deviation (excursion) reports which identify all 3-hour blocks of time during which the average temperature within the regenerative thermal oxidizer does not comply with the temperature limitation specified in condition B.1 of this permit.

3. The permittee shall submit quarterly deviation (excursion) reports that include a log of the downtime for the capture (collection) system and/or the regenerative thermal oxidizer when the emissions unit was in operation.

4. The permittee shall submit quarterly written reports that:

   a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, and

   b. describe any corrective actions taken to eliminate the visible particulate emissions.

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

E. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitations in condition A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emissions Limitation:
   PE shall not exceed 0.08 lb/hour, 0.36 TPY.

   Applicable Compliance Method:
   Compliance may be demonstrated using the following equations based on the emission factor in AP-42, Table 1.4-2 (7/98):

   $[4.3\ MMBtu/hr_{ox} + 6.54\ MMBtu/hr_{press}]\ (7.6\ lb/MCF) / (1000\ BTU/CF) = 0.08\ lb/hr\ PE$
   ,
   (0.08 lb/hr)(8760 hrs/hr)(0.0005 lb/ton) = 0.36 TPY

   Annual emissions shall be determined by multiplying the hourly PE emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

   If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

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b. Emissions Limitation:

Visible particulate emissions from the RTO exhaust stack shall not exceed 0 % opacity , as a six minute average.

Compliance Method:

If required, visible particulate emissions shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources".

c. Emissions Limitation:
Emissions of NO_x shall not exceed 1.08 lbs/hour, 4.74 TPY.

Compliance Method:
Compliance may be demonstrated using the following equations based on the emission factor in AP-42, Table 1.4-1 (7/98):

[4.3 MMBtu/hr_{ox} + 6.54 MMBtu/hr_{press}] (100 lb/MCF) / (1000 BTU/CF) = 1.08 lbs/hr NO_x ,
(1.08 lbs/hr)(8760 hrs/hr)(0.0005 lb/ton) = 4.74 TPY

Annual emissions shall be determined by multiplying the hourly NO_x emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

If required, nitrogen oxides emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

d. Emissions Limitation:
Emissions of CO shall not exceed 0.91 lb/hour, 3.99 TPY.

Compliance Method:
Compliance may be demonstrated using the following equations based on the emission factor in AP-42, Table 1.4-1 (7/98):

[4.3 MMBtu/hr_{ox} + 6.54 MMBtu/hr_{press}] (84 lb/MCF) / (1000 BTU/CF) = 0.91 lb/hr CO,
(0.91 lb/hr)(8760 hrs/hr)(0.0005 lb/ton) = 3.99 TPY

Annual emissions shall be determined by multiplying the hourly CO emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

If required, carbon monoxide emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR,

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Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

e. Emissions Limitation:
Emissions of OC shall not exceed 1.41 lbs/hour and 6.19 TPY.

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly OC emission limitation from this emissions unit through the record keeping required in condition C.1 of this permit. Compliance may be demonstrated using the following equations based on the emission factor in AP-42, Table 1.4-2 (7/98) and recordkeeping in this permit:

[4.3 MMBtu/hr_{ox} + 6.54 MMBtu/hr_{press}] (5.5 lb/MCF) / (1000 BTU/CF) plus actual emissions as calculated in C.1 from press inks = 1.41 lbs/hr OC ,
(1.41 lbs/hr)(8760 hrs/hr)(0.0005 lb/ton) = 6.19 TPY

Annual emissions shall be determined by multiplying the hourly OC emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

If required, organic compound emissions shall be determined according to test Methods 1 - 4, and 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

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

a. The emissions testing shall be conducted within 180 days after the startup of the RTO unit.

b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency (see E.2.c.i) and destruction efficiency (see E.2.c.ii) for OC.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate:

i. In accordance with Ohio EPA's Engineering Guide #56, the capture efficiency may be assumed to be 100 percent for organic compounds not retained in the substrate or emitted uncontrolled, provided that the press dryer maintains a negative pressure within the press dryer and the dryer exhausts to a control device (the RTO). Therefore, during testing of the RTO, the permittee shall verify that a negative pressure is maintained within the press dryer.

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ii. The destruction efficiency shall be conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and shall measure the percent reduction in mass emissions of organic compounds between the inlet and outlet of the thermal oxidizer. The test method selected shall be based on a consideration of the diversity of organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

d. As part of the performance test, the permittee shall collect and record the average temperature within the regenerative thermal oxidizer, in degrees Fahrenheit, and include this information with the results of the emissions report specified below.

3. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office.

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

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

F. Miscellaneous Requirements

None

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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 - (K003) - Diddie -2 (20000 Iph) Heatset Web Offset Press Lithographic printing Press with a 0.95 MMBtu drying oven vented to a 4.3 MMBtu Regenerative Thermal Oxidizer (RTO). Chapter 31 modification to increase allowable emission rates and make monitoring and record keeping requirements consistent. The terms of this permit supercede those identified in PTI No. 06-06600 issued September 20, 2001. Administrative modification to PTI 06-08125 issued on November 2, 2006.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 0.04 lb/hour and 0.17 TPY. Visible particulate emissions from the RTO exhaust stack shall not exceed 0 % opacity , as a six minute average. Emissions of nitrogen oxides (NO_x) shall not exceed 0.53 lb/hour, 2.3 TPY. Emissions of carbon monoxide (CO) shall not exceed 0.44 lb/hour, 1.93 TPY. Emissions of organic compounds (OC) shall not exceed 0.58 lb/hour and 2.53 TPY. The requirements of this rule also include compliance with the requirements of OAC 3745-21-07(G)(2). See Section A.2.a and A.2.b below.
OAC rule 3745-17-11(B)	The uncontrolled mass rate of particulate emissions (PE) from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply since the facility is located in Harrison County, which is identified as a 'P-2' county.

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Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)	This emissions unit is not subject to the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.
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 3745-23-06	See Section A.2.c below.
OAC rule 3745-21-08 (B)	See Section A.2.d below.

2. Additional Terms and Conditions

2.a The OC emission limitation of 0.58 lb/hour for emissions unit K003 is based on the following information:

i. The percentage of the ink solvent retained on the web after the dryer is 20 percent*;

ii. The percentage of the fountain solution solvent available for capture in the dryer is 70 percent*;

iii. The percentage of the auto blanket wash (clean up) solvent available for capture in the dryer is 40 percent*; and,

iv. The percentage of the hand blanket wash (clean up) solvent retained on the cloths is 50 percent**.

* This is based on the draft Control Techniques Guideline (Control of Volatile Organic Compound Emissions from Offset Lithographic Printing, dated September 1993) and the Alternative Control Techniques document, dated November 8, 1993.

** This is based on information supplied by the permittee.

2.b The permittee shall employ best available technology (BAT) on this emissions unit. BAT has been determined to be the use of a control system for OC emissions, meeting the following requirements:

i. The control system shall consist of a collection system for the dryer. The collection system shall achieve a capture efficiency of 100 percent of the press dryer exhaust; and,

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ii. The control system shall be equipped with a regenerative thermal oxidizer with a destruction efficiency of at least 95 percent.

2.c The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

On February 15, 2005, OAC rule 3745-23-06 was rescinded and is no longer part of State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to the SIP, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

B. Operational Restrictions

1. The average temperature within the regenerative thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1,450 degrees Fahrenheit. A lower average temperature requirement may be established if compliance with the minimum destruction efficiency in A.2.b is demonstrated during emissions testing.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records which list the following information for each graphic arts material (ink, fountain solution, cleanup material, and blanket wash) employed in emissions unit K003:

   a. The name and identification number of each graphic arts material employed;

   b. Documentation on whether or not each material employed is a photochemically reactive material;

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c. The OC content of each graphic arts material, in lbs/gallon or pounds/pound for inks, as received;

d. The quantity of each graphic arts material employed, in gallons or lbs of each material per month;

e. The OC emissions for each graphic arts material employed, in tons/month, calculated as follows:

$E_n = [U_n \times V_n \times (1-R_n/100) \times \{1-(C_n/100) \times (K/100)\}]$

where:

E_n= OC emissions from an individual material (pounds of OC emitted/month);
U_n= total usage of the individual material - typically ink, fountain solution, and cleaning solvents (lbs or gallons of material/month);
V_n= average OC content of material as determined by Method 24 (lb OC/lb or gallon of material);
R_n= percent of OC retained on the web or on cloths:

R_n = 20 for inks
R_n = 0 for fountain solutions
R_n = 0 for auto blanket wash (cleanup) solvent
R_n = 50 for hand blanket wash (cleanup) solvent

C_n= capture efficiency for individual material emitted:

C_n = 100 for inks
C_n = 70 for fountain solutions
C_n = 40 for auto blanket wash (cleanup) solvent
C_n = 0 for hand blanket wash (cleanup) solvent; and

K = destruction efficiency as determined during the performance test as specified in condition E.2.

f. The total OC emission rate of all graphic arts materials employed, in tons/month, calculated as follows:

$E_M = E_1 + E_2 + E_3 + ... + E_n$

where:

E_M = Monthly OC emissions, in lbs/month; and,
E_1 through E_n = OC emissions from each individual graphic arts material (condition C.1.e).

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g. The number of hours this emissions unit was in operation, when graphic arts materials were being applied or employed (hours/month);

h. The average hourly OC emission rate, i.e.,"f" divided by "g", above;

2. The permittee shall operate and maintain continuous temperature monitor(s)* and a temperature recorder which measures and records the average temperature within the regenerative thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor(s) and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

*If the temperature monitoring system consists of several temperature monitors from which an average temperature is obtained.

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

a. All 3-hour blocks of time during which the average temperature within the regenerative thermal oxidizer, when the emissions unit was in operation, was less than the temperature limitation specified in condition B.1. of this permit; and,

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

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify exceedances of any of the following:

a. the hourly emission limitation (as a monthly average), as determined in condition C.1.

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2. The permittee shall submit quarterly deviation (excursion) reports which identify all 3-hour blocks of time during which the average temperature within the regenerative thermal oxidizer does not comply with the temperature limitation specified in condition B.1. of this permit.

3. The permittee shall submit quarterly deviation (excursion) reports that include a log of the downtime for the capture (collection) system and/or the regenerative thermal oxidizer when the emissions unit was in operation.

4. The permittee shall submit quarterly written reports that:

   a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, and

   b. describe any corrective actions taken to eliminate the visible particulate emissions.

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

E. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitations in condition A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emissions Limitation:
   PE shall not exceed 0.04 lb/hour, 0.17 TPY.

   Applicable Compliance Method:
   Compliance may be demonstrated using the following equations based on the emission factor in AP-42, Table 1.4-2 (7/98):

   $[4.3\ MMBtu/hr_{ox} + 0.95\ MMBtu/hr_{press}]\ (7.6\ lb/MCF) / (1000\ BTU/CF) = 0.04\ lb/hr\ PE$

   ,

   $(0.04\ lb/hr)(8760\ hrs/hr)(0.0005\ lb/ton) = 0.17\ TPY$

   Annual emissions shall be determined by multiplying the hourly PE emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

   If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

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b. Emissions Limitation:

Visible particulate emissions from the RTO exhaust stack shall not exceed 0 % opacity , as a six minute average.

Compliance Method:

If required, visible particulate emissions shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources".

c. Emissions Limitation:
Emissions of NO_x shall not exceed 0.53 lb/hour, 2.3 TPY.

Compliance Method:
Compliance may be demonstrated using the following equations based on the emission factor in AP-42, Table 1.4-1 (7/98):

[4.3 $MMBtu/hr_{ox}$ + 0.95 $MMBtu/hr_{press}$] (100 lb/MCF) / (1000 BTU/CF) = 0.53 lb/hr NO_x ,
(0.53 lb/hr)(8760 hrs/hr)(0.0005 lb/ton) = 2.3 TPY

Annual emissions shall be determined by multiplying the hourly NO_x emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

If required, nitrogen oxides emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

d. Emissions Limitation:
Emissions of CO shall not exceed 0.44 lb/hour, 1.93 TPY.

Compliance Method:
Compliance may be demonstrated using the following equations based on the emission factor in AP-42, Table 1.4-1 (7/98):

[4.3 $MMBtu/hr_{ox}$ + 0.95 $MMBtu/hr_{press}$] (84 lb/MCF) / (1000 BTU/CF) = 0.44 lb/hr CO,
(0.44 lb/hr)(8760 hrs/hr)(0.0005 lb/ton) = 1.93 TPY

Annual emissions shall be determined by multiplying the hourly CO emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

If required, carbon monoxide emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR,

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Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

e. Emissions Limitation:
Emissions of OC shall not exceed 0.58 lb/hour and 2.53 TPY.

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly OC emission limitation from this emissions unit through the record keeping required in condition C.1 of this permit. Compliance may be demonstrated using the following equations based on the emission factor in AP-42, Table 1.4-2 (7/98) and recordkeeping in this permit:

[4.3 MMBtu/hr_{ox} + 0.95 MMBtu/hr_{press}] (5.5 lb/MCF) / (1000 BTU/CF) plus actual emissions as calculated in C.1 from press inks = 0.58 lb/hr OC ,
(0.58 lb/hr)(8760 hrs/hr)(0.0005 lb/ton) = 2.53 TPY

Annual emissions shall be determined by multiplying the hourly OC emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

If required, organic compound emissions shall be determined according to test Methods 1 - 4, and 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

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

a. The emissions testing shall be conducted within 180 days after the startup of the RTO unit.

b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency (see E.2.c.i) and destruction efficiency (see E.2.c.ii) for OC.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate:

i. In accordance with Ohio EPA's Engineering Guide #56, the capture efficiency may be assumed to be 100 percent for organic compounds not retained in the substrate or emitted uncontrolled, provided that the press dryer maintains a negative pressure within the press dryer and the dryer exhausts to a control device (the RTO). Therefore, during testing of the RTO, the permittee shall verify that a negative pressure is maintained within the press dryer.

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ii. The destruction efficiency shall be conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and shall measure the percent reduction in mass emissions of organic compounds between the inlet and outlet of the thermal oxidizer. The test method selected shall be based on a consideration of the diversity of organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

d. As part of the performance test, the permittee shall collect and record the average temperature within the regenerative thermal oxidizer, in degrees Fahrenheit, and include this information with the results of the emissions report specified below.

3. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office.

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

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

F. Miscellaneous Requirements

None

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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 - (K004) - Mitsubishi L750XL (45000 Iph) Heatset Web Offset Lithographic printing Press with a 11.8 MMBtu drying oven vented to a 4.3 MMBtu Regenerative Thermal Oxidizer (RTO). Chapter 31 modification to increase allowable emission rates and make monitoring and record keeping requirements consistent. The terms of this permit supercede those identified in PTI No. 06-07404 issued February 19, 2004. Administrative modification to PTI 06-08125 issued on November 2, 2006.

Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-31-05(A)(3)	Particulate emissions (PE) shall not exceed 0.12 lb/hr and 0.53 TPY. Visible particulate emissions from the RTO exhaust stack shall not exceed 0 % opacity , as a six minute average. Emissions of nitrogen oxides (NO_x) shall not exceed 1.61 lbs/hour, 7.05 TPY. Emissions of carbon monoxide (CO) shall not exceed 1.35 lbs/hour, 5.92 TPY. Emissions of organic compounds (OC) shall not exceed 2.2 lbs/hour and 9.67 TPY. The requirements of this rule also include compliance with the requirements of OAC rules 3745-17-07(A)(1), 3745-21-07(G)(2), 3745-31-05(C). See Section A.2.a and A.2.b below.
OAC rule 3745-17-11(B)	The uncontrolled mass rate of particulate emissions (PE) from this emissions unit is less than 10 pounds/hour. Therefore, pursuant to OAC rule 3745-17-11(A)(2)(a)(ii), Figure II of OAC rule 3745-17-11 does not apply. In addition, Table I of OAC rule 3745-17-11 does not apply since the facility is located in Harrison County, which is identified as a P-3 county.

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Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
OAC rule 3745-17-07(A)	This emissions unit is not subject to the visible PE limitations specified in OAC rule 3745-17-07(A) pursuant to OAC rule 3745-17-07(A)(3)(h) because OAC rule 3745-17-11 is not applicable.
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 3745-23-06	See Section A.2.c below.
OAC rule 3745-21-08 (B)	See Section A.2.d below.

2. Additional Terms and Conditions

2.a The OC emission limitation of 2.2 lbs/hour for emissions unit K004 is based on the following information:

i. The percentage of the ink solvent retained on the web after the dryer is 20 percent*;

ii. The percentage of the fountain solution solvent available for capture in the dryer is 70 percent*;

iii. The percentage of the auto blanket wash (clean up) solvent available for capture in the dryer is 40 percent*; and,

iv. The percentage of the hand blanket wash (clean up) solvent retained on the cloths is 50 percent**.

* This is based on the draft Control Techniques Guideline (Control of Volatile Organic Compound Emissions from Offset Lithographic Printing, dated September 1993) and the Alternative Control Techniques document, dated November 8, 1993.

** This is based on information supplied by the permittee.

2.b The permittee shall employ best available technology (BAT) on this emissions unit. BAT has been determined to be the use of a control system for OC emissions, meeting the following requirements:

i. The control system shall consist of a collection system for the dryer. The collection system shall achieve a capture efficiency of 100 percent of the press dryer exhaust; and,

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ii. The control system shall be equipped with a regenerative thermal oxidizer with a destruction efficiency of at least 95 percent.

2.c The permittee has satisfied the "latest available control techniques and operating practices" required pursuant to OAC rule 3745-23-06(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

On February 15, 2005, OAC rule 3745-23-06 was rescinded and is no longer part of State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revision to the SIP, the requirement to satisfy the "latest available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

2.d The permittee has satisfied the "best available control techniques and operating practices" required pursuant to OAC rule 3745-21-08(B) by committing to comply with the best available technology requirements established pursuant to OAC rule 3745-31-05(A)(3) in this Permit to Install.

On November 5, 2002, OAC rule 3745-21-08 was revised to delete paragraph (B); therefore, paragraph (B) is no longer part of the State regulations. However, that rule revision has not yet been submitted to the U.S. EPA as a revision to Ohio's State Implementation Plan (SIP). Therefore, until the SIP revision occurs and the U.S. EPA approves the revisions to OAC rule 3745-21-08, the requirement to satisfy the "best available control techniques and operating practices" still exists as part of the federally-approved SIP for Ohio.

B. Operational Restrictions

1. The average temperature within the regenerative thermal oxidizer, for any 3-hour block of time when the emissions unit is in operation, shall not be less than 1,450 degrees Fahrenheit. A lower average temperature requirement may be established if compliance with the minimum destruction efficiency in A.2.b is demonstrated during emissions testing.

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall maintain monthly records which list the following information for each graphic arts material (ink, fountain solution, cleanup material, and blanket wash) employed in emissions unit K004:

   a. The name and identification number of each graphic arts material employed;

   b. Documentation on whether or not each material employed is a photochemically reactive material;

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c. The OC content of each graphic arts material, in lbs/gallon or pounds/pound for inks, as received;

d. The quantity of each graphic arts material employed, in gallons or lbs of each material per month;

e. The OC emissions for each graphic arts material employed, in tons/month, calculated as follows:

$E_n = [U_n \times V_n \times (1-R_n/100) \times \{1-(C_n/100) \times (K/100)\}]$

where:

E_n= OC emissions from an individual material (pounds of OC emitted/month);
U_n= total usage of the individual material - typically ink, fountain solution, and cleaning solvents (lbs or gallons of material/month);
V_n= average OC content of material as determined by Method 24 (lb OC/lb or gallon of material);
R_n= percent of OC retained on the web or on cloths:

R_n = 20 for inks
R_n = 0 for fountain solutions
R_n = 0 for auto blanket wash (cleanup) solvent
R_n = 50 for hand blanket wash (cleanup) solvent

C_n= capture efficiency for individual material emitted:

C_n = 100 for inks
C_n = 70 for fountain solutions
C_n = 40 for auto blanket wash (cleanup) solvent
C_n = 0 for hand blanket wash (cleanup) solvent; and

K = destruction efficiency as determined during the performance test as specified in condition E.2.

f. The total OC emission rate of all graphic arts materials employed, in tons/month, calculated as follows:

$E_M = E_1 + E_2 + E_3 + ... + E_n$

where:

E_M = Monthly OC emissions, in lbs/month; and,
E_1 through E_n = OC emissions from each individual graphic arts material (condition C.1.e).

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g. The number of hours this emissions unit was in operation, when graphic arts materials were being applied or employed (hours/month);

h. The average hourly OC emission rate, i.e.,"f" divided by "g", above;

2. The permittee shall operate and maintain continuous temperature monitor(s)* and a temperature recorder which measures and records the average temperature within the regenerative thermal oxidizer when the emissions unit is in operation. Units shall be in degrees Fahrenheit. The monitoring and recording devices shall be capable of accurately measuring the desired parameter. The temperature monitor(s) and recorder shall be installed, calibrated, operated and maintained in accordance with the manufacturer's recommendations, with any modifications deemed necessary by the permittee.

*If the temperature monitoring system consists of several temperature monitors from which an average temperature is obtained.

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

a. All 3-hour blocks of time during which the average temperature within the regenerative thermal oxidizer, when the emissions unit was in operation, was less than the temperature limitation specified in condition B.1 of this permit; and,

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

3. The permittee shall perform daily checks, when the emissions unit is in operation and when the weather conditions allow, for any visible particulate emissions from the stack serving this emissions unit. The presence or absence of any visible emissions shall be noted in an operations log. If visible emissions are observed, the permittee shall also note the following in the operations log:

a. the color of the emissions;

b. the total duration of any visible emission incident; and

c. any corrective actions taken to eliminate the visible emissions.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports which identify exceedances of any of the following:

a. the hourly emission limitation (as a monthly average), as determined in condition C.1.

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2. The permittee shall submit quarterly deviation (excursion) reports which identify all 3-hour blocks of time during which the average temperature within the regenerative thermal oxidizer does not comply with the temperature limitation specified in condition B.1 of this permit.

3. The permittee shall submit quarterly deviation (excursion) reports that include a log of the downtime for the capture (collection) system and/or the regenerative thermal oxidizer when the emissions unit was in operation.

4. The permittee shall submit quarterly written reports that:

   a. identify all days during which any visible particulate emissions were observed from the stack serving this emissions unit, and

   b. describe any corrective actions taken to eliminate the visible particulate emissions.

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

E. Testing Requirements

1. Compliance Methods Requirements: Compliance with the emission limitations in condition A.1 of the terms and conditions of this permit shall be determined in accordance with the following methods:

   a. Emissions Limitation:
   PE shall not exceed 0.12 lb/hour, 0.53 TPY.

   Applicable Compliance Method:
   Compliance may be demonstrated using the following equations based on the emission factor in AP-42, Table 1.4-2 (7/98):

   $[4.3\ MMBtu/hr_{ox} + 11.8\ MMBtu/hr_{press}]\ (7.6\ lb/MCF) / (1000\ BTU/CF) = 0.12\ lb/hr\ PE$

   ,

   (0.12 lb/hr)(8760 hrs/hr)(0.0005 lb/ton) = 0.53 TPY

   Annual emissions shall be determined by multiplying the hourly PE emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

   If required, particulate emissions shall be determined according to test Methods 1 - 5, as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

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b. Emissions Limitation:

Visible particulate emissions from the RTO exhaust stack shall not exceed 0 % opacity , as a six minute average.

Compliance Method:

If required, visible particulate emissions shall be determined according to test Method 9 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources".

c. Emissions Limitation:
Emissions of NO_x shall not exceed 1.61 lbs/hour, 7.05 TPY.

Compliance Method:
Compliance may be demonstrated using the following equations based on the emission factor in AP-42, Table 1.4-1 (7/98):

[4.3 MMBtu/hr_{ox} + 11.8 MMBtu/hr_{press}] (100 lb/MCF) / (1000 BTU/CF) = 1.61 lbs/hr NO_x ,
(1.61 lbs/hr)(8760 hrs/hr)(0.0005 lb/ton) = 7.05 TPY

Annual emissions shall be determined by multiplying the hourly NO_x emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

If required, nitrogen oxides emissions shall be determined according to test Methods 1 - 4, and 7 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

d. Emissions Limitation:
Emissions of CO shall not exceed 1.35 lbs/hour, 5.92 TPY.

Compliance Method:
Compliance may be demonstrated using the following equations based on the emission factor in AP-42, Table 1.4-1 (7/98):

[4.3 MMBtu/hr_{ox} + 11.8 MMBtu/hr_{press}] (84 lb/MCF) / (1000 BTU/CF) = 1.35 lbs/hr CO,
(1.35 lbs/hr)(8760 hrs/hr)(0.0005 lb/ton) = 5.92 TPY

Annual emissions shall be determined by multiplying the hourly CO emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

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If required, carbon monoxide emissions shall be determined according to test Methods 1 - 4, and 10 as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

e. Emissions Limitation:
Emissions of OC shall not exceed 2.2 lbs/hour and 9.67 TPY.

Applicable Compliance Method:
The permittee shall demonstrate compliance with the hourly OC emission limitation from this emissions unit through the record keeping required in condition C.1 of this permit. Compliance may be demonstrated using the following equations based on the emission factor in AP-42, Table 1.4-2 (7/98) and recordkeeping in this permit:

[4.3 MMBtu/hr_{ox} + 11.8 MMBtu/hr_{press}] (5.5 lb/MCF) / (1000 BTU/CF) plus actual emissions as calculated in C.1 from press inks = 2.2 lbs/hr OC ,
(2.2 lbs/hr)(8760 hrs/hr)(0.0005 lb/ton) = 9.67 TPY

Annual emissions shall be determined by multiplying the hourly OC emission rate by 8760 hours per year and dividing by 2000 lbs/ton.

If required, organic compound emissions shall be determined according to test Methods 1 - 4, and 18, 25, or 25A as set forth in the "Appendix on Test Methods" in 40 CFR, Part 60 "Standards of Performance for New Stationary Sources". Alternative U.S. EPA-approved test methods may be used with prior approval from Ohio EPA, Southeast District Office.

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

a. The emissions testing shall be conducted within 180 days after the startup of the RTO unit.

b. The emission testing shall be conducted to demonstrate compliance with the capture efficiency (see E.2.c.i) and destruction efficiency (see E.2.c.ii) for OC.

c. The following test method(s) shall be employed to demonstrate compliance with the allowable mass emission rate:

i. In accordance with Ohio EPA's Engineering Guide #56, the capture efficiency may be assumed to be 100 percent for organic compounds not retained in the substrate or emitted uncontrolled, provided that the press dryer maintains a negative pressure within the press dryer and the dryer exhausts to a control device (the RTO). Therefore, during testing of the RTO, the permittee shall verify that a negative pressure is maintained within the press dryer.

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ii. The destruction efficiency shall be conducted in accordance with the test methods and procedures specified in OAC rule 3745-21-10 and shall measure the percent reduction in mass emissions of organic compounds between the inlet and outlet of the thermal oxidizer. The test method selected shall be based on a consideration of the diversity of organic species present and their total concentration, and on a consideration of the potential presence of interfering gases.

d. As part of the performance test, the permittee shall collect and record the average temperature within the regenerative thermal oxidizer, in degrees Fahrenheit, and include this information with the results of the emissions report specified below.

3. The test(s) shall be conducted while the emissions unit is operating at its maximum capacity, unless otherwise specified or approved by the Ohio EPA Southeast District Office.

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

Personnel from the Ohio EPA Southeast District Office shall be permitted to witness the test(s), examine the testing equipment, and acquire data and information necessary to ensure that the operation of the emissions unit and the testing procedures provide a valid characterization of the emissions from the emissions unit and/or the performance of the control equipment.

A comprehensive written report on the results of the emissions test(s) shall be signed by the person or persons responsible for the tests and submitted to the Ohio EPA Southeast District Office within 30 days following completion of the test(s). The permittee may request additional time for the submittal of the written report, where warranted, with prior approval from the Ohio EPA Southeast District Office.

F. Miscellaneous Requirements

None

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