

Synthetic Minor Determination and/or Netting Determination

Permit To Install 14-05444

A. Source Description

Emissions unit K001, Fischer and Krecke 8-color station flexographic printing press with drying oven and emissions unit K002, Bobst/Martin 4-color station flexographic printing press with dye cutter. Both units are used to print food packaging containers and labels utilizing water-based inks.

B. Facility Emissions and Attainment Status

The Potential to Emit VOC and HAPs emissions from the presses exceed the Major Source Thresholds for non attainment review (OAC rule 3745-31-21 thru 27 - - 100 TPY of VOC), Title V (100 TPY of VOC), and the Major Source Thresholds for MACT (10 TPY of HAPs, 25 TPY of HAPs). The new facility will be located in Warren County which is an ozone non-attainment area.

C. Source Emissions

Based on the Synthetic Minor requirements in this permit, Burrows Paper's new facility will be classified as a Synthetic Minor Source for VOC and HAPs emissions. Total Synthetic Minor PTE emissions from K001 will be 25.0 TPY of VOC based on a rolling, 12-month summation. Total Synthetic Minor PTE emissions from K002 will be 12.5 TPY of VOC based on a rolling, 12-month summation. Total Synthetic Minor PTE of HAPs emissions from K001 and K002 will be 9.9 TPY of any single HAP and 24.9 TPY of total HAPs, based on rolling, 12-month summations.

D. Conclusion

Based on the Synthetic Minor requirements in this permit, Burrows Paper's new facility will be classified as a Synthetic Minor Source for VOC and HAPs emissions. This will allow the facility to avoid non attainment review (OAC rule 3745-31-21 thru 27), Title V Major Source, and case by case MACT requirements. Also, the facility will be classified as an "Area Source" with respect to Subpart KK. Subpart KK requires area sources to comply with the Initial Notification requirement and monthly record keeping of actual HAP emissions, which is part of the Synthetic Minor requirements. The permittee will maintain monthly records and submit reports to demonstrate compliance with the permit limits.



State of Ohio Environmental Protection Agency

Street Address:

Mailing Address:

Lazarus Gov. Center TELE: (614) 644-3020 FAX: (614) 644-2329

Lazarus Gov.

Center

P.O. Box 1049

122 S. Front Street

RE: DRAFT PERMIT TO INSTALL CERTIFIED MAIL
WARREN COUNTY
Application No: 14-05444
DATE: 9/4/2003

Burrows Paper Corporation
Peter Burkdorf
P.O. Box 987 501 West Main Street
Little Falls, Ny 13365-0987

You are hereby notified that the Ohio Environmental Protection Agency has made a draft action recommending that the Director issue a Permit to Install for the air contaminant source(s) [emissions unit(s)] shown on the enclosed draft permit. This draft action is not an authorization to begin construction or modification of your emissions unit(s). The purpose of this draft is to solicit public comments on the proposed installation. A public notice concerning the draft permit will appear in the Ohio EPA Weekly Review and the newspaper in the county where the facility will be located. Public comments will be accepted by the field office within 30 days of the date of publication in the newspaper. Any comments you have on the draft permit should be directed to the appropriate field office within the comment period. A copy of your comments should also be mailed to Robert Hodanbosi, Division of Air Pollution Control, Ohio EPA, P.O. Box 1049, Columbus, OH, 43266-0149.

A Permit to Install may be issued in proposed or final form based on the draft action, any written public comments received within 30 days of the public notice, or record of a public meeting if one is held. You will be notified in writing of a scheduled public meeting. Upon issuance of a final Permit to Install a fee of \$600 will be due. Please do not submit any payment now.

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. If you have any questions about this draft permit, please contact the field office where you submitted your application, or Mike Ahern, Field Operations & Permit Section at (614) 644-3631.

Very truly yours,

Michael W. Ahern, Supervisor
Field Operations and Permit Section
Division of Air Pollution Control

CC: USEPA

HCDES

OH-KY-IN Regional Council of Gov.

KY

IN

WARREN COUNTY

PUBLIC NOTICE

**ISSUANCE OF DRAFT PERMIT TO INSTALL 14-05444 FOR AN AIR CONTAMINANT SOURCE FOR
BURROWS PAPER CORPORATION**

On 9/4/2003 the Director of the Ohio Environmental Protection Agency issued a draft action of a Permit To Install an air contaminant source for **Burrows Paper Corporation**, located at **2000 Commerce Center Drive, Franklin, Ohio**.

Installation of the air contaminant source identified below may proceed upon final issuance of Permit To Install 14-05444:

Installation of two new printing presses and one package boiler at a new facility location.

Comments concerning this draft action, or a request for a public meeting, must be sent in writing to the address identified below no later than thirty (30) days from the date this notice is published. All inquiries concerning this draft action may be directed to the contact identified below.

Harry Schweitering, Hamilton County Department of Environmental Services, 250 William Howard Taft Pkwy, Cincinnati, OH 45219-2660 [(513)946-7777]



**Permit To Install
Terms and Conditions**

**Issue Date: To be entered upon final issuance
Effective Date: To be entered upon final issuance**

DRAFT PERMIT TO INSTALL 14-05444

Application Number: 14-05444
APS Premise Number: 1483040446
Permit Fee: **To be entered upon final issuance**
Name of Facility: Burrows Paper Corporation
Person to Contact: Peter Burkdorf
Address: P.O. Box 987 501 West Main Street
Little Falls, NY 13365-0987

Location of proposed air contaminant source(s) [emissions unit(s)]:

**2000 Commerce Center Drive
Franklin, Ohio**

Description of proposed emissions unit(s):

Installation of two new printing presses and one package boiler at a new facility location.

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

This permit is granted subject to the conditions attached hereto.

Ohio Environmental Protection Agency

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

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

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

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Termination of Permit to Install

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

9. Construction of New Sources(s)

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

Burrows Paper Corporation

Facility ID: 1483040446

PTI Application: 14-05444

Issued: To be entered upon final issuance

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

- a. If the permittee is required to apply for a Title V permit pursuant to OAC Chapter 3745-77, the permittee shall submit a complete Title V permit application or a complete

Title V permit modification application within twelve (12) months after commencing operation of the emissions units covered by this permit. However, if the proposed new or modified source(s) would be prohibited by the terms and conditions of an existing Title V permit, a Title V permit modification must be obtained before the operation of such new or modified source(s) pursuant to OAC rule 3745-77-04(D) and OAC rule 3745-77-08(C)(3)(d).

- b. If the permittee is required to apply for permit(s) pursuant to OAC Chapter 3745-35, the source(s) identified in this Permit To Install is (are) permitted to operate for a period of up to one year from the date the source(s) commenced operation. 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 source(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>
SO2	19.11
VOC	38.64

Burrows Paper Corporation

PTI Application: 14-05444

Issued: To be entered upon final issuance

Facility ID: 1483040446

NOx	31.2
CO	15.13
PM/PM10	2.06
Single HAP's	9.9
Combined HAP's	24.9

Burr

PTI

Emissions Unit ID: **B001**

Issued: To be entered upon final issuance

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property,
and/or Equipment

Applicable Rules/Requirements

B001 - 21.5 MMBtu/hr Vapor OAC rule 3745-31-05(A)(3)
Power natural gas and No. 2 fuel
oil boiler

OAC rule 3745-17-07(A)(1)

OAC rule 3745-17-10(B)(1)

Burr

PTI

Issued: To be entered upon final issuance

Emissions Unit ID: B001

	<u>Applicable Emissions Limitations/Control Measures</u>	
OAC rule 3745-18-06(D)	from the combustion of natural gas: 0.0006 lb of sulfur dioxide (SO ₂)/MMBtu of actual heat input	19.10 TPY SO ₂ 1.88 TPY PM/PM ₁₀ 28.78 TPY NO _x 13.1 TPY CO 1.01 TPY VOC See terms A.2.c and B.1.
40 CFR Part 60 Subpart Dc	0.0075 lb of PM ₁₀ /MMBtu of actual heat input	The requirements of this rule also include compliance with the requirements of OAC rule 3745-17-07(A)(1), OAC rule 3745-17-10(B)(1) and 40 CFR 60 Subpart Dc.
40 CFR Part 60.43c(c)	0.183 lb of nitrogen oxides (NO _x)/MMBtu of actual heat input	
	0.139 lb of carbon monoxide (CO)/MMBtu of actual heat input	Visible particulate emissions from any stack shall not exceed twenty percent (20%) opacity, as a six-minute average, except as specified by rule.
	0.011 lb of volatile organic compounds (VOC)/MMBtu of actual heat input	
	from the combustion of No. 2 fuel oil: 0.203 lb of SO ₂ /MMBtu of actual heat input	0.020 lb particulate emissions (PM)/MMBtu of actual heat input The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).
	0.020 lb of PM ₁₀ /MMBtu of actual heat input	
	0.31 lb of NO _x /MMBtu of actual heat input	See terms C.1. and C.2.
	0.139 lb of CO MMBtu of actual heat input	Exempt from standard based on maximum heat input capacity < 30 MMBtu/hr.
	0.004 lb of VOC/MMBtu of actual heat input	

Issued: To be entered upon final issuance

2. Additional Terms and Conditions

- 2.a** The application and enforcement of the provisions of the New Source Performance Standards (NSPS), as promulgated by the United States Environmental Protection Agency, 40 CFR Part 60, are delegated to the Ohio Environmental Protection Agency. The requirements of 40 CFR Part 60 are also federally enforceable.
- 2.b** The lb/MMBtu emissions limitations outlined in term A.1. are based upon the emissions unit's potential to emit. Therefore, no hourly records are required to demonstrate compliance with these limits.
- 2.c** In order to maintain compliance with the Ohio Acceptable Incremental Impact concentration for new sources of NOx emissions which exceed the Ohio Significant Emission rate, the permittee shall construct the exhaust stack of this emissions unit such that the release height is not less than 52 feet above the base elevation of the emissions unit.
- 2.d** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by the exclusive use of natural gas and No.2 fuel oil for combustion, compliance with the No. 2 fuel oil sulfur content limit, compliance with the visible particulate emissions limitation and compliance with the lb/MMBtu and TPY emissions limitations.

B. Operational Restrictions

- 1. The permittee shall not combust oil in emissions unit B001 which contains greater than 0.2 percent sulfur by weight. The fuel oil sulfur limit applies at all times, including periods of startup, shutdown and malfunction.

C. Monitoring and/or Recordkeeping Requirements

- 1. For each shipment of oil received for burning in this emissions unit, the permittee shall maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu).[The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).] A shipment may be comprised of multiple tank truck loads from the same supplier's batch, or may be represented by single or multiple pipeline deliveries from the same supplier's batch, and the quality of the oil for those loads or pipeline deliveries may be represented by a single batch analysis from the supplier.

The permittee shall perform or require the supplier to perform the analyses for sulfur content and heat content in accordance with 40 CFR Part 60, Appendix A, Method 19, or the appropriate

ASTM methods (such as, ASTM methods D240, D4294,) or equivalent methods as approved by the Director.

The permittee shall maintain records of the oil burned in this emissions unit in accordance with either Alternative 1 or Alternative 2 described below:

a. Alternative 1:

For each shipment of oil received for burning in this emissions unit, the permittee shall collect or require the oil supplier to collect a representative grab sample of oil and maintain records of the total quantity of oil received, the permittee's or oil supplier's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).] A shipment may be comprised of multiple tank truck loads from the same supplier's batch, and the quality of the oil for those loads may be represented by a single batch analysis from the supplier.

b. Alternative 2:

The permittee shall collect a representative grab sample of oil that is burned in this emissions unit for each day when the emission unit is in operation. If additional fuel oil is added to the tank serving this emissions unit on a day when the emissions unit is in operation, the permittee shall collect a sufficient number of grab samples to develop a composite sample representative of the fuel oil burned in this emissions unit.

A representative grab sample of oil does not need to be collected on days when this emissions unit is only operated for the purpose of "test-firing". The permittee shall maintain records of the total quantity of oil burned each day, except for the purpose of test-firing, the permittee's analyses for sulfur content and heat content, and the calculated sulfur dioxide emission rate (in lbs/MMBtu). [The sulfur dioxide emission rate shall be calculated in accordance with the formula specified in OAC rule 3745-18-04(F).]

2. The permittee shall record and maintain records of the amounts of each fuel combusted during each day.

D. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any record which shows a deviation of the No. 2 fuel oil sulfur content limitation or sulfur dioxide emissions limitation based upon the calculated sulfur dioxide emission rate from term C.1. above. The notification shall include a copy of such record and shall be sent to the Hamilton County

**Burr
PTI**

Emissions Unit ID: **B001**

Issued: To be entered upon final issuance

Department of Environmental Services within 45 days after the deviation occurs.

2. Pursuant to the NSPS, the source owner/operator is hereby advised of the requirement to report the following at the appropriate times:
 - a. Construction date (no later than 30 days after such date);
 - b. Anticipated start-up date (not more than 60 days or less than 30 days prior to such date);
 - c. Actual start-up date (within 15 days after such date); and
 - d. Date of performance testing (if required, at least 30 days prior to testing).

**Burr
PTI**

Emissions Unit ID: **B001**

Issued: To be entered upon final issuance

Reports are to be sent to:

Ohio Environmental Protection Agency
DAPC - Permit Management Unit
P. O. Box 163669
Columbus, Ohio 43216-3669

and

Hamilton County Department of Environmental Services
250 William Howard Taft Road
Cincinnati, Ohio 45219

3. The permittee shall also submit annual reports which specify the total NO_x emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

1. Emissions Limitations

0.2 percent sulfur by weight; 0.203 lb of SO₂/MMBtu of actual heat input from the combustion of No. 2 fuel oil

Applicable Compliance Method

Compliance with the fuel oil sulfur limit and the lb of SO₂/MMBtu limit shall consist of the analyses and certification from the permittee or the fuel supplier and the calculation of the actual sulfur dioxide emissions rate as described in term C.1. above.

2. Emissions Limitations

from the combustion of natural gas:

0.0006 lb of sulfur dioxide (SO₂)/MMBtu of actual heat input

0.0075 lb of PM₁₀/MMBtu of actual heat input

0.183 lb of nitrogen oxides (NO_x)/MMBtu of actual heat input

0.139 lb of carbon monoxide (CO)/MMBtu of actual heat input

0.011 lb of volatile organic compounds (VOC)/MMBtu of actual heat input

Applicable Compliance Methods

Compliance with the emissions limits from the combustion of natural gas in term A.1. shall be demonstrated by:

- a. for NO_x and CO, the emission factors as supplied by the permittee in PTI application 14-05444; and
- b. for SO₂, PM/PM₁₀ and VOC, the emission factors in AP-42, Fifth Edition, Table 1.4-2 revised 7/98.

3. Emissions Limitations

from the combustion of No. 2 fuel oil:

- 0.203 lb of SO₂/mmBtu of actual heat input
- 0.020 lb of PM/PM₁₀/mmBtu of actual heat input
- 0.31 lb of NO_x/mmBtu of actual heat input
- 0.139 lb of CO mmBtu of actual heat input
- 0.004 lb of VOC/mmBtu of actual heat input

Applicable Compliance Methods

Compliance with the emissions limits from the combustion of No. 2 fuel oil in term A.1. shall be demonstrated by:

- a. for NO_x and CO, the emission factors as supplied by the permittee in PTI application 14-05444;
- b. for SO₂ and VOC, the emission factors in AP-42, Fifth Edition, Tables 1.3-1 and 1.3-3 revised 9/98; and
- c. for PM/PM₁₀, the emissions limit is equivalent to the rule-based requirement in OAC rule 3745-17-10(B)(1).

4. Emissions Limitations

- 19.10 TPY SO₂
- 1.88 TPY PM/PM₁₀
- 28.78 TPY NO_x
- 13.1 TPY CO

Burr

PTI /

Issued: To be entered upon final issuance

Emissions Unit ID: **B001**

1.01 TPY VOC

Applicable Compliance Methods

Compliance with the annual emissions limitations in term A.1. shall be demonstrated by multiplying the actual annual heat input rate (MMBtu/yr) for each type of fuel (natural gas and No. 2 fuel oil) by the appropriate emission factors as supplied by the permittee in PTI application 14-05444 (lbs

Burr

PTI

Emissions Unit ID: **B001**

Issued: To be entered upon final issuance

pollutant/MMBtu), from AP-42, Fifth Edition (lbs pollutant/MMBtu), or by the rule-based requirement for PM/PM10 from the combustion of No. 2 fuel oil (lbs pollutant/MMBtu) and multiplying by 1 ton/2000 lbs. The TPY emissions figures from each fuel type shall then be summed for each pollutant.

5. Emissions Limitation

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

Applicable Compliance Method

Compliance shall be determined in accordance with Test Method 9 as set forth in "Appendix on Test Methods" in 40 CFR, Part 60 ("Standards of Performance for New Stationary Sources"), as such Appendix existed on July 1, 1996.

F. Miscellaneous Requirements

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

Issued: To be entered upon final issuance

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	
K001 - Fischer and Krecke 8-color station flexographic printing press with drying oven	OAC rule 3745-31-05(A)(3)	OAC rule 3745-31-05(D)
		OAC rule 3745-21-09(Y)(1)(a)(ii)
		40 CFR 63 Subpart KK

Issued: To be entered upon final issuance

Applicable Emissions
Limitations/Control Measures

21.7 lbs VOC emissions/hr from the evaporation of solvents from coatings.

from the combustion of natural gas in the drying oven:

0.0033 lb SO₂ emissions/hr
 0.04 lb PM/PM₁₀ emissions/hr
 0.55 lb NO_x emissions/hr
 0.46 lb CO emissions/hr
 0.03 lb VOC emissions/hr; and

0.01 TPY SO₂
 0.18 TPY PM/PM₁₀
 2.42 TPY NO_x
 2.03 TPY CO
 0.13 TPY VOC

See terms A.2.a., A.2.c., and B.2.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and 40 CFR Part 63 Subpart KK.

25.0 TPY VOC emissions from the evaporation of solvents from coatings based on a rolling, 12-month summation.

See Terms A.2.b., A.2.e and B.1.

The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

See terms A.2.e, C.2. and D.4.

Emissions Unit ID: **K001**

2. Additional Terms and Conditions

- 2.a** The maximum VOC content of coatings employed in this emissions unit shall not exceed 0.201 lb VOC per gallon of coating, as applied.
- 2.b** The maximum VOC content of coatings employed in this emissions unit shall not exceed 0.10 lb VOC per gallon of coatings, as applied, based on a monthly volume weighted average of all coatings employed.
- 2.c** In order to maintain compliance with the Ohio EPA Air Toxics policy, the emissions of monoethanolamine shall not exceed 8.2 lbs monoethanolamine/hr from the evaporation of solvent from coatings from emissions units K001 and K002, combined.
- 2.d** The hourly VOC emissions limitation of 21.7 lbs VOC/hr is based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limit.
- 2.e** The total allowable usage of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall not exceed 9.9* TPY for any single HAP and 24.9* TPY for any combination of HAPs. Compliance with the above limitations shall be based on rolling, 12-month summations.

* This assumes the HAP's emitted are the same as the amount of HAP's used, since all HAP's used evaporates.

To ensure federal enforceability during the first 12 calendar months of operation following the issuance of this permit to install, the permittee shall not exceed the HAPs emission limits specified in the following table:

Issued: To be entered upon final issuance

<u>Month(s)</u>	<u>Maximum Allowable Single HAP Emissions In Tons</u>	<u>Maximum Allowable Combined HAP Emissions In Tons</u>
1	0.8	2.1
1-2	1.7	4.2
1-3	2.5	6.2
1-4	3.3	8.3
1-5	4.2	10.4
1-6	5.0	12.5
1-7	5.8	14.6
1-8	6.6	16.6
1-9	7.5	18.7
1-10	8.3	20.8
1-11	9.1	22.9
1-12	9.9	24.9

After the first 12 calendar months of operation following the issuance of this permit to install, compliance with the annual HAPs emission limits shall be based upon a rolling, 12-month summation of the HAP(s) emission figures.

- 2.f** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the applicable lbs/hr and TPY emissions rates, compliance with the rolling, 12-month coating usage, VOC emissions and HAPs emissions limitations, compliance with the VOC content limitations and compliance with the Ohio EPA Air Toxics Policy.

B. Operational Restrictions

- The maximum annual coating usage for this emissions unit shall not exceed 500,000 gallons per year, based upon a rolling, 12-month summation of the coating usage figures.

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

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Coating Usage</u>
1	41,667
1-2	83,333
1-3	125,000

Issued: To be entered upon final issuance

1-4	166,667
1-5	208,333
1-6	250,000
1-7	291,667
1-8	333,333
1-9	375,000
1-10	416,667
1-11	458,333
1-12	500,000

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

2. The permittee shall not employ cleanup materials in this emissions units which contain "organic compounds" as defined by OAC rule 3745-21-01(B)(4).

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information on a monthly basis for emissions unit K001:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content, in pounds per gallon of coating, for each coating employed;
 - c. the number of gallons of each coating employed;
 - d. the monthly volume-weighted average VOC content, as applied, for all coatings. The monthly volume weighted average shall be calculated by multiplying the VOC content in line b. by the usage amount contained in line c. for all coatings employed during that month. The summation of these values should then be divided by the total gallons of coatings employed during that month;
 - e. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative coating usage for each calendar month;
 - f. beginning after the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the rolling, 12-month summation of the coating usage figures;

Emissions Unit ID: K001

- g. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall calculate and record the cumulative VOC emissions, in tons, from the evaporation of solvent from coatings for each calendar month (e. multiplied by the volume weighted average VOC content as calculated for that month in d. multiplied by 1 ton/2000 lbs); and
- h. beginning after the first 12 calendar months of operation following the issuance of this permit, the permittee shall calculate and record the rolling, 12-month summation of the VOC

Issued: To be entered upon final issuance

emissions, in tons, from the evaporation of solvent from coatings for each calendar month (f. multiplied by the volume weighted average VOC content as calculated for that month in d. multiplied by 1 ton/2000 lbs).

2. The permittee shall collect and record the following information each month for the entire facility:
 - a. the name and identification number of each coating employed;
 - b. the individual Hazardous Air Pollutant (HAP) content for each HAP of each coating in pounds of individual HAP per gallon of coating, as applied;
 - c. the total combined HAP content of each coating in pounds of combined HAPs per gallon of coating, as applied (sum all the individual HAP contents from b.);
 - d. the number of gallons of each coating employed;
 - e. the name and identification of each cleanup material employed;
 - f. the individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
 - g. the total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from f.);
 - h. the number of gallons of each cleanup material employed;
 - i. the total individual HAP usage for each HAP from all coatings and cleanup materials employed, in pounds or tons per month (for each HAP the sum of b. times d. for each coating plus the sum of f. times h. for each cleanup material);
 - j. the total combined HAP usage from all coatings and cleanup materials employed, in pounds or tons per month (the sum of c. times d. for each coating plus the sum of g. times h. for each cleanup material);
 - k. the updated rolling, 12-month summation of usage for each individual HAP emissions**, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months. The following shall be included when the facility has yet to record a full year of records: for the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI; and

Issued: To be entered upon final issuance

1. the updated rolling, 12-month summation of usage for total combined HAP emissions**, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months. The following shall be included when the facility has yet to record a full year of records: for the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI.

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

** This assumes the HAP(s) emitted are the same as the amounts of HAP(s) used since all HAP(s) used evaporated.

3. The permit to install for emissions units K001 and K002 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust systems, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: monoethanolamine (CAS 141-43-5)

TLV (ug/m³):7490

Maximum Hourly Emission Rate (lbs/hr): 8.2 lbs monoethanolamine/hr, K001 and K002, combined

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 178.11, K001 and K002, combined

MAGLC (ug/m³): 178.3

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the

Emissions Unit ID: **K001**

permittee will not make the change. Changes that can affect the parameters used in the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied with the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is(are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
4. For each day that a coating which contains monoethanolamine is applied, the permittee shall collect and record the following information for emissions unit K001 and K002, combined:
- a. the company identification for each coating which contains monoethanolamine;
 - b. the number of gallons of each coating, which contains monoethanolamine, employed;

Issued: To be entered upon final issuance

- c. for each day during which a coating which contains monoethanolamine is employed, the number of gallons of each coating which contains monoethanolamine employed each hour of the day;
- d. the monoethanolamine content of each coating which contains monoethanolamine, in pounds per gallon;
- e. for each day during which a coating which contains monoethanolamine is employed, the total monoethanolamine emission rate for all coatings which contain monoethanolamine, in pounds per day; and
- f. for each day during which a coating which contains monoethanolamine is employed, the total monoethanolamine emission rate for all coatings which contain monoethanolamine, in pounds per hour for each hour of the day.

Emissions Unit ID: **K001**

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services which identify all exceedances of the rolling, 12-month coating usage limitation and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative coating usage levels. If exceedances occurred, the permittee shall also note if exceedances of the rolling, 12-month VOC emissions limit occurred. If no deviations occurred during the reporting period, the permittee shall state so in the report. The permittee shall submit the reports by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively).
2. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services which identifies each hour during which the monoethanolamine emissions from emissions units K001 and K002, combined, exceeded 8.2 pounds per hour, and the actual monoethanolamine emissions for each such hour. If no deviations occurred during the reporting period, the permittee shall state so in the report. The permittee shall submit the reports by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively).
3. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services which identify all exceedances of the cumulative HAPs emissions during the first 12 calendar months of operation and the rolling, 12-month HAPs emissions limitations after the first 12 calendar months of operation. If no deviations occurred during the reporting period, the permittee shall state so in the report. The permittee shall submit the reports by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively).
4. The permittee shall submit an Initial Notification Report which certifies whether or not the permittee is subject to the standards promulgated in 40 CFR 63 Subpart KK, National Emissions Standards for the Printing and Publishing Industry. If the permittee is subject to the final standard, the following information shall also be included in the Initial Notification Report:
 - a. the name and mailing address of the permittee;
 - b. the physical location of the source if it is different from the mailing address;
 - c. identification of the relevant MACT standard and the permittee's compliance date;

Issued: To be entered upon final issuance

- d. a brief description of the nature, design, size, and method of operation of the source, including the operating design capacity and an identification of each emission point of each hazardous air pollutant; and

Issued: To be entered upon final issuance

- e. a statement of whether or not the permittee is a major source or an area source according to the promulgated MACT.

The report shall be submitted within 120 days of start-up of the emissions unit.

- 5. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing the use of noncomplying coatings (i.e., for VOC contents), including the monthly volume weighted average VOC content limit in this emissions unit. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.
- 6. The permittee shall also submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

- 1. Emissions Limitation

21.7 lbs VOC emissions/hr from the evaporation of solvents from coatings

Applicable Compliance Method

Compliance with the hourly VOC emissions limitation shall be demonstrated by multiplying the actual hourly coating usage rates for the 8-color station press, as applied (gallons/hr) by the actual VOC content of the coatings, as applied (lbs VOC/gallon) such that the sum equals lbs VOC/hr from the 8-color station press.

- 2. Emissions Limitations

from the combustion of natural gas in the drying oven:

0.0033 lb SO₂ emissions/hr, 0.01 TPY SO₂
 0.04 lb PM/PM₁₀ emissions/hr, 0.18 TPY PM/PM₁₀
 0.55 lb NO_x emissions/hr, 2.42 TPY NO_x
 0.46 lb CO emissions/hr, 2.03 TPY CO
 0.03 lb VOC emissions/hr, 0.13 TPY VOC

Applicable Compliance Methods

Emissions Unit ID: **K001**

Compliance with the emissions limitations shall be demonstrated by multiplying the actual drying oven natural gas usage rates (MMBtu/hr; MMBtu/yr) by the emission factors in AP-42, Fifth Edition, Table 1.4-2 revised 7/98 (lbs pollutant/MMBtu) such that the products equal lbs pollutant/hr; and multiplied by 1 ton/2000 lbs such that the products equal TPY pollutant.

3. Emissions Limitation

25.0 TPY VOC emissions from the evaporation of solvents from coatings based on a rolling, 12-month summation

Applicable Compliance Method

Compliance with the rolling, 12-month VOC emissions limitation shall be demonstrated by the recordkeeping requirement in term C.1.h.

4. Emissions Limitation

9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs based on rolling, 12-month summations

Applicable Compliance Method

Compliance with the rolling, 12-month HAPs emissions limitations shall be demonstrated by the recordkeeping requirement in term C.2.

5. Emissions Limitations

VOC content of coatings shall not exceed 0.201 lb VOC per gallon of coating, as applied

VOC content of coatings employed shall not exceed 0.10 lb VOC per gallon of coatings, as applied, based on a monthly volume weighted average of all coatings employed

Applicable Compliance Methods

Compliance with the VOC content limitations shall be demonstrated by the following:

- a. for the maximum VOC content limit, USEPA methods 24 and 24A shall be used to determine the VOC content for flexographic and rotogravure printing lines and related coatings, respectively. If, pursuant to 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for

Issued: To be entered upon final issuance

that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A; and

- b. for the volume weighted average VOC content limit, compliance shall be demonstrated by the recordkeeping requirement in term C.1.d.

Issued: To be entered upon final issuance

6. Emissions Limitation

8.2 lbs monoethanolamine/hr from the evaporation of solvent from coatings from emissions units K001 and K002, combined

Applicable Compliance Method

Compliance with the hourly monoethanolamine (Ohio EPA Air Toxic) emissions limitation shall be demonstrated by the recordkeeping requirement in term C.4.

7. Emissions Limitation

500,00 gallons per year based upon a rolling, 12-month summation

Applicable Compliance Method

Compliance shall be determined based on the record keeping in term C.1.

F. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A..2.a, A.2.b, A.2.d - A.2.f, B., C.1, C.2, D.1, D.3 - D.6, E.1 - E.5 and E.7.

Issued: To be entered upon final issuance

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.

<u>Operations, Property, and/or Equipment</u>	<u>Applicable Rules/Requirements</u>	40 CFR 63 Subpart KK
K002 - Bobst/Martin 4-color station flexographic printing press with dye cutter	OAC rule 3745-31-05(A)(3)	
	OAC rule 3745-31-05(D)	
	OAC rule 3745-21-09(Y)(1)(a)(ii)	

Emissions Unit ID: **K002**

Applicable Emissions
Limitations/Control Measures

7.6 lbs VOC emissions/hr from the evaporation of solvents from coatings.

See terms A.2.a., A.2.c., and B.2.

The requirements of this rule also include compliance with the requirements of OAC rule 3745-31-05(D) and 40 CFR Part 63 Subpart KK.

12.5 TPY VOC emissions from the evaporation of solvents from coatings based on a rolling, 12-month summation.

See terms A.2.b., A.2.e and B.1.

The emissions limitation specified by this rule is less stringent than the emissions limitation established pursuant to OAC rule 3745-31-05(A)(3).

See Terms A.2.e, C.2. and D.4.

Issued: To be entered upon final issuance**2. Additional Terms and Conditions**

- 2.a** The maximum VOC content of coatings employed in this emissions unit shall not exceed 0.201 lb VOC per gallon of coating, as applied.
- 2.b** The maximum VOC content of coatings employed in this emissions unit shall not exceed 0.10 lb VOC per gallon of coatings, as applied, based on a monthly volume weighted average of all coatings employed.
- 2.c** In order to maintain compliance with the Ohio EPA Air Toxics policy, the emissions of monoethanolamine shall not exceed 8.2 lbs monoethanolamine/hr from the evaporation of solvent from coatings from emissions units K001 and K002, combined.
- 2.d** The hourly VOC emissions limitation of 7.6 lbs VOC/hr is based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate compliance with this limit.
- 2.e** The total allowable usage of Hazardous Air Pollutants (HAPs), as identified in Section 112(b) of Title III of the Clean Air Act, from this facility shall not exceed 9.9* TPY for any single HAP and 24.9* TPY for any combination of HAPs. Compliance with the above limitations shall be based on rolling, 12-month summations.

* This assumes the HAP's emitted are the same as the amount of HAP's used, since all HAP's used evaporates.

To ensure federal enforceability during the first 12 calendar months of operation following the issuance of this permit to install, the permittee shall not exceed the HAPs emission limits specified in the following table:

<u>Month(s)</u>	<u>Maximum Allowable Single HAP Emissions In Tons</u>	<u>Maximum Allowable Combined HAP Emissions In Tons</u>
1	0.8	2.1
1-2	1.7	4.2
1-3	2.5	6.2
1-4	3.3	8.3
1-5	4.2	10.4
1-6	5.0	12.5
1-7	5.8	14.6

Issued: To be entered upon final issuance

1-8	6.6	16.6
1-9	7.5	18.7
1-10	8.3	20.8
1-11	9.1	22.9
1-12	9.9	24.9

After the first 12 calendar months of operation following the issuance of this permit to install, compliance with the annual HAPs emission limits shall be based upon a rolling, 12-month summation of the HAP(s) emission figures.

- 2.f** Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the applicable lbs/hr emissions rate, compliance with the rolling, 12-month coating usage, VOC emissions and HAPs emissions limitations, compliance with the VOC content limitations and compliance with the Ohio EPA Air Toxics Policy.

B. Operational Restrictions

1. The maximum annual coating usage for this emissions unit shall not exceed 250,000 gallons per year, based upon a rolling, 12-month summation of the coating usage figures.

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

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Coating Usage</u>
1	20,833
1-2	41,667
1-3	62,500
1-4	83,333
1-5	104,167
1-6	125,000
1-7	145,833
1-8	166,667
1-9	187,500
1-10	208,333
1-11	229,167
1-12	250,000

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

Issued: To be entered upon final issuance

with the annual coating usage limitation shall be based upon a rolling, 12-month summation of the coating usage figures.

2. The permittee shall not employ cleanup materials in this emissions units which contain "organic compounds" as defined by OAC rule 3745-21-01(B)(4).

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information on a monthly basis for emissions unit K002:
 - a. the name and identification number of each coating, as applied;
 - b. the VOC content, in pounds per gallon of coating, for each coating employed;
 - c. the number of gallons of each coating, as applied; and
 - d. the monthly volume-weighted average VOC content, as applied, for all coatings. The monthly volume weighted average shall be calculated by multiplying the VOC content in line b. by the usage amount contained in line c. for all coatings employed during that month. The summation of these values should then be divided by the total gallons of coatings employed during that month.
 - e. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the cumulative coating usage for each calendar month;
 - f. beginning after the first 12 calendar months of operation following the issuance of this permit, the permittee shall record the rolling, 12-month summation of the coating usage figures;
 - g. during the first 12 calendar months of operation following the issuance of this permit, the permittee shall calculate and record the cumulative VOC emissions, in tons, from the evaporation of solvent from coatings for each calendar month (e. multiplied by the volume weighted average VOC content as calculated for that month in d. multiplied by 1 ton/2000 lbs); and
 - h. beginning after the first 12 calendar months of operation following the issuance of this permit, the permittee shall calculate and record the rolling, 12-month summation of the VOC emissions, in tons, from the evaporation of solvent from coatings for each calendar month (f. multiplied by the volume weighted average VOC content as calculated for that

Emissions Unit ID: K002

month in d. multiplied by 1 ton/2000 lbs).

2. The permittee shall collect and record the following information each month for the entire facility:
 - a. the name and identification number of each coating employed;
 - b. the individual Hazardous Air Pollutant (HAP) content for each HAP of each coating in pounds of individual HAP per gallon of coating, as applied;
 - c. the total combined HAP content of each coating in pounds of combined HAPs per gallon of coating, as applied (sum all the individual HAP contents from b.);
 - d. the number of gallons of each coating employed;
 - e. the name and identification of each cleanup material employed;

Issued: To be entered upon final issuance

- f. the individual HAP content for each HAP of each cleanup material, in pounds of individual HAP per gallon of cleanup material, as applied;
- g. the total combined HAP content of each cleanup material, in pounds of combined HAPs per gallon of cleanup material, as applied (sum all the individual HAP contents from f.);
- h. the number of gallons of each cleanup material employed;
- i. the total individual HAP usage for each HAP from all coatings and cleanup materials employed, in pounds or tons per month (for each HAP the sum of b. times d. for each coating plus the sum of f. times h. for each cleanup material);
- j. the total combined HAP usage from all coatings and cleanup materials employed, in pounds or tons per month (the sum of c. times d. for each coating plus the sum of g. times h. for each cleanup material);
- k. the updated rolling, 12-month summation of usage for each individual HAP emissions**, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months. The following shall be included when the facility has yet to record a full year of records: for the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI; and
- l. the updated rolling, 12-month summation of usage for total combined HAP emissions**, in pounds or tons. This shall include the information for the current month and the preceding eleven calendar months. The following shall be included when the facility has yet to record a full year of records: for the first twelve months following the issuance of the permit, this shall be a cumulative total for all months since the issuance of the PTI.

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

** This assumes the HAP(s) emitted are the same as the amounts of HAP(s) used since all HAP(s) used evaporated.

- 3. The permit to install for emissions units K001 and K002 was evaluated based on the actual materials (typically coatings and cleanup materials) and the design parameters of the emissions unit's exhaust systems, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and

Burrows Paper Corporation

PERMITS FACILITY ID: 1483040446

Facility ID: 1483040446

Emissions Unit ID: **K002**

the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

Issued: To be entered upon final issuance

The following summarizes the results of the modeling for the "worst case" pollutant(s):

Pollutant: monoethanolamine (CAS 141-43-5)

TLV (ug/m³):7490

Maximum Hourly Emission Rate (lbs/hr): 8.2 lbs monoethanolamine/hr, K001 and K002, combined

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 178.11, K001 and K002, combined

MAGLC (ug/m³): 178.33

Physical changes to or in the method of operation of the emissions unit after it's installation or modification could affect the parameters used to determine whether or not the "Air Toxics Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine that the "Air Toxic Policy" will still be satisfied. If, upon evaluation, the permittee determines that the "Air Toxic Policy" will not be satisfied, the permittee will not make the change. Changes that can affect the parameters used in the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;
- b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and
- c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied with the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01(VV)(1)(a)(ii), and a modification of the existing permit to install will not be required. If the change(s) is(are) defined as a modification under other provisions of the modification definition [other than (VV)(1)(a)(ii)], then the permittee shall obtain a final permit to install prior to the change.

Issued: To be entered upon final issuance

The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will satisfy the Air Toxic Policy:"

- a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);
 - b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and
 - c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.
4. For each day that a coating which contains monoethanolamine is applied, the permittee shall collect and record the following information for emissions units K001 and K002, combined:
- a. the company identification for each coating which contains monoethanolamine;
 - b. the number of gallons of each coating, which contains monoethanolamine, employed;
 - c. for each day during which a coating which contains monoethanolamine is employed, the number of gallons of each coating which contains monoethanolamine employed each hour of the day;
 - d. the monoethanolamine content of each coating which contains monoethanolamine, in pounds per gallon;
 - e. for each day during which a coating which contains monoethanolamine is employed, the total monoethanolamine emission rate for all coatings which contain monoethanolamine, in pounds per day; and
 - f. for each day during which a coating which contains monoethanolamine is employed, the total monoethanolamine emission rate for all coatings which contain monoethanolamine, in pounds per hour for each hour of the day.

D. Reporting Requirements

1. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services which identify all exceedances of the rolling, 12-month coating usage limitation and, for the first 12 calendar months of operation following the issuance of

Emissions Unit ID: K002

this permit, all exceedances of the maximum allowable cumulative coating usage levels. If exceedances occurred, the permittee shall also note if exceedances of the rolling, 12-month VOC emissions limit occurred. If no deviations occurred during the reporting period, the permittee shall state so in the report. The permittee shall submit the reports by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively).

2. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services which identifies each hour during which the monoethanolamine emissions from emissions units K001 and K002, combined, exceeded 8.2 pounds per hour, and the actual monoethanolamine emissions for each such hour. If no deviations occurred during the reporting period, the permittee shall state so in the report. The permittee shall submit the reports by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively).
3. The permittee shall submit quarterly deviation (excursion) reports to the Hamilton County Department of Environmental Services which identify all exceedances of the cumulative HAPs emissions during the first 12 calendar months of operation and the rolling, 12-month HAPs emissions limitations after the first 12 calendar months of operation. If no deviations occurred during the reporting period, the permittee shall state so in the report. The permittee shall submit the reports by January 31, April 30, July 31 and October 31 of each year and shall cover the previous calendar quarters (October through December, January through March, April through June and July through September, respectively).
4. The permittee shall submit an Initial Notification Report which certifies whether or not the permittee is subject to the standards promulgated in 40 CFR 63 Subpart KK, National Emissions Standards for the Printing and Publishing Industry. If the permittee is subject to the final standard, the following information shall also be included in the Initial Notification Report:
 - a. the name and mailing address of the permittee;
 - b. the physical location of the source if it is different from the mailing address;
 - c. identification of the relevant MACT standard and the permittee's compliance date;
 - d. a brief description of the nature, design, size, and method of operation of the source, including the operating design capacity and an identification of each emission point of each hazardous air pollutant; and
 - e. a statement of whether or not the permittee is a major source or an area source according to

Issued: To be entered upon final issuance

the promulgated MACT.

5. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing the use of noncomplying coatings (i.e., for VOC contents), including the monthly volume weighted average VOC content limit in this emissions unit. The notification shall include a copy of such record and shall be sent to the Hamilton County Department of Environmental Services within 30 days following the end of the calendar month.
6. The permittee shall also submit annual reports which specify the total VOC emissions from this emissions unit for the previous calendar year. These reports shall be submitted by January 31 of each year.

E. Testing Requirements

1. Emissions Limitation

7.6 lbs VOC emissions/hr from the evaporation of solvents from coatings

Applicable Compliance Method

Compliance with the hourly VOC emissions limitation shall be demonstrated by multiplying the actual hourly coating usage rates for the 4-color station press, as applied (gallons/hr) by the actual VOC content of the coatings, as applied (lbs VOC/gallon) such that the sum equals lbs VOC/hr from the 4-color station press.

2. Emissions Limitation

12.5 TPY VOC emissions from the evaporation of solvents from coatings based on a rolling, 12-month summation

Applicable Compliance Method

Compliance with the rolling, 12-month VOC emissions limitation shall be demonstrated by the recordkeeping requirement in term C.1.h.

3. Emissions Limitation

9.9 TPY for any single HAP and 24.9 TPY for any combination of HAPs based on rolling, 12-month summations

Emissions Unit ID: **K002**

Applicable Compliance Method

Compliance with the rolling, 12-month HAPs emissions limitations shall be demonstrated by the recordkeeping requirement in term C.2.

4. Emissions Limitations

VOC content of coatings shall not exceed 0.201 lb VOC per gallon of coating, as applied

VOC content of coatings employed shall not exceed 0.10 lb VOC per gallon of coating, as applied, based on a monthly volume weighted average of all coatings employed

Applicable Compliance Methods

Compliance with the VOC content limitations shall be demonstrated by the following:

- a. for the maximum VOC content limit, USEPA methods 24 and 24A shall be used to determine the VOC content for flexographic and rotogravure printing lines and related coatings, respectively. If, pursuant to 40 CFR Part 60, Appendix A, an owner or operator determines that Method 24 or 24A cannot be used for a particular coating or ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating or ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A; and
- b. for the volume weighted average VOC content limit, compliance shall be demonstrated by the recordkeeping requirement in term C.1.d.

5. Emissions Limitation

8.2 lbs monoethanolamine/hr from the evaporation of solvent from coatings from emissions units K001 and K002, combined

Applicable Compliance Method

Compliance with the hourly monoethanolamine (Ohio EPA Air Toxic) emissions limitation shall be demonstrated by the recordkeeping requirement in term C.4.

6. Emissions Limitation

250,000 gallons per year based upon a rolling, 12-month summation

Issued: To be entered upon final issuance

Applicable Compliance Method

Compliance shall be determined based on the record keeping in term C.1.

F. Miscellaneous Requirements

1. The following terms and conditions of this permit are federally enforceable: A.2.a, A.2.b, A.2.d - A.2.f, B., C.1, C.2, D.1, D.3 - D.6, E.1 - E.4 and E.6.