State of Ohio Environmental Protection Agency

RE: FINAL PERMIT TO INSTALL **CERTIFIED MAIL**
WARREN COUNTY

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

Application No: 14-05663
Fac ID: 1483090119
DATE: 3/3/2005

International Paper Company
Tony Ewing
990 Reading Road
Mason, OH 45040

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

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

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

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

Sincerely,

Michael W. Ahern

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

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

STATE OF OHIO ENVIRONMENTAL PROTECTION AGENCY

Permit To Install	**Issue Date: 3/3/2005**
Terms and Conditions	**Effective Date: 3/3/2005**

FINAL PERMIT TO INSTALL 14-05663

Application Number:	14-05663
Facility ID:	1483090119
Permit Fee:	**$200**
Name of Facility:	International Paper Company
Person to Contact:	Tony Ewing
Address:	990 Reading Road Mason, OH 45040

Location of proposed air contaminant source(s) [emissions unit(s)]:
990 Reading Road
Mason, **Ohio**

Description of proposed emissions unit(s):
4-color Flexographic printing and die cutter.

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

Joseph P. Koncelik

Director

Part I - GENERAL TERMS AND CONDITIONS

A. Permit to Install General Terms and Conditions

1. Compliance Requirements

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

2. Reporting Requirements

The permittee shall submit required reports in the following manner:

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

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

3. Records Retention Requirements

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

4. Inspections and Information Requests

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

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

5. Scheduled Maintenance/Malfunction Reporting

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

6. Permit Transfers

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

7. Air Pollution Nuisance

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

8. Termination of Permit to Install

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

9. Construction of New Sources(s)

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

Environmental Protection Agency if the proposed sources cannot meet the requirements of this permit or cannot meet applicable standards.

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

10. Public Disclosure

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

11. Applicability

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

12. Best Available Technology

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

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

This facility is permitted to operate each source described by this Permit to Install for a period of up to one year from the date the source commenced operation. This permission to operate is granted only if the facility complies with all requirements contained in this permit and all applicable air pollution laws, regulations, and policies. Pursuant to OAC Chapter 3745-35, the permittee shall submit a complete operating permit application within ninety (90) days after commencing operation of the emissions unit(s) covered by this permit.

14. Construction Compliance Certification

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

15. Fees

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

B. Permit to Install Summary of Allowable Emissions

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

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

Pollutant	Tons Per Year
VOC	5.07
Ammonia	1.69

Emissions Unit ID: **K010**

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

A. Applicable Emissions Limitations and/or Control Requirements

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

Operations, Property, and/or Equipment	Applicable Rules/Requirements	Applicable Emissions Limitations/Control Measures
K010 - 4-color Flexographic Printing and Die Cutter	OAC rule 3745-31-05(A)(3)	The Volatile Organic Compound (VOC) emissions shall not exceed 1.2 lbs VOC/hr and 5.07 TPY. The ammonia emissions shall not exceed 0.4 lb ammonia/hr and 1.69 TPY. See terms and conditions A.2.a. through A.2.b.
	OAC rule 3745-21-09(Y)(1)(a)	The emission limitation specified by this rule is less stringent than the emission limitation established pursuant to OAC rule 3745-31-05(A)(3).

2. Additional Terms and Conditions

2.a The VOC content as applied, of each ink employed in emissions unit K010 shall not exceed 0.21 lb VOC per gallon of ink.

2.b The ammonia content of each ink employed in emissions unit K010 shall not exceed 0.07 lb. ammonia per gallon of ink, as applied.

2.c The hourly emission limitations outlined in Section A.1. are based upon the emissions unit's Potential to Emit (PTE). Therefore, no hourly records are required to demonstrate

compliance with these limits.

2.d Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the VOC and ammonia emissions limitations and compliance with the VOC and ammonia content limitation.

B. Operational Restrictions

1. None

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for emissions unit K010:

   a. the name and identification number of each ink, as applied;

   b. the volume, in gallons, of each ink, as applied;

   c. the VOC content of each ink, as applied, in % VOC by volume of the total volatile matter in the ink;

   d. the VOC content of each ink, as applied, in pounds of VOC per gallon of ink;

   e. the ammonia content of each ink, as applied, in pounds of ammonia per gallon of ink;

   f. the total VOC emissions from all inks employed, in pounds [the sum of (b) times (d) for each ink]; and

   g. the total ammonia emissions from all inks employed, in pounds [the sum of (b) times (e) for each ink].

2. The permit to install for this emissions unit K010 was evaluated based on the actual materials and the design parameters of the emissions unit's exhaust system, as specified by the permittee in the permit to install application. The Ohio EPA's "Review of New Sources of Air Toxic Emissions" policy ("Air Toxic Policy") was applied for each pollutant emitted by this emissions unit using data from the permit to install application and the SCREEN 3.0 model (or other Ohio EPA approved model). The predicted 1-hour maximum ground-level concentration from the use of the SCREEN 3.0 model was compared to the Maximum Ground-Level Concentration (MAGLC).

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

Pollutant: ammonia

TLV (ug/m3): 17,410

Maximum Hourly Emission Rate (lb/hr): 0.38

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 82.88

MAGLC (ug/m3): 414.5

Pollutant: monoethanolamine

TLV (ug/m3): 7,500

Maximum Hourly Emission Rate (lb/hr): 0.75

Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 164.2

MAGLC (ug/m3): 178

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

a. changes in the composition of the materials used (typically for coatings or cleanup materials), or the use of new materials, that would result in the emission of a compound with a lower Threshold Limit Value (TLV), as indicated in the most recent version of the handbook entitled "American Conference of Governmental Industrial Hygienists (ACGIH)," than the lowest TLV value previously modeled;

b. changes in the composition of the materials, or use of new materials, that would result in an increase in emissions of any pollutant with a listed TLV that was proposed in the application and modeled; and

c. physical changes to the emissions unit or its exhaust parameters (e.g., increased/decreased exhaust flow, changes in stack height, changes in stack diameter, etc.).

If the permittee determines that the "Air Toxic Policy" will be satisfied for the above changes, the Ohio EPA will not consider the change(s) to be a "modification" under OAC rule 3745-31-01 solely due to the emissions of any type of toxic air contaminant not previously emitted, and a modification of the existing permit to install will not be required, even if the toxic air contaminant emissions are greater than the de minimis level in OAC rule 3745-15-05. If the change(s) is (are) defined as a modification under other provisions of the modification definition, then the permittee shall obtain a final permit to install prior to the change.

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

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

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

c. when the computer modeling is performed, a copy of the resulting computer model runs that show the results of the application of the "Air Toxic Policy" for the change.

D. Reporting Requirements

1. The permittee shall notify the Hamilton County Department of Environmental Services in writing of any monthly record showing the use of noncomplying inks (see terms A.2.a. and A.2.b.). 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 in which the noncomplying inks were first employed.

2. The permittee shall submit annual reports to the Hamilton County Department of Environmental Services which specify the total VOC and ammonia emissions from emissions unit K010 for the previous calendar year. These reports shall be submitted by January 31 of each year to the Hamilton County Department of Environmental Services.

E. Testing Requirements

1. Emissions Limitations

   1.2 lbs VOC/hr

0.4 lb ammonia/hr

Compliance Method

Compliance with the lbs VOC/hr emissions limitation shall be demonstrated by multiplying the maximum ink usage rate (gallons of ink per hour) by the actual ink VOC content, as applied (lbs VOC per gallon of ink). Compliance with the lb ammonia/hr emissions limitation shall be demonstrated by multiplying the maximum ink usage rate (gallons of ink per hour) by the actual ammonia content, as applied (lbs ammonia per gallon of ink).

2. Emissions Limitations

5.07 TPY VOC
1.69 TPY ammonia

Compliance Method

Compliance with the TPY VOC emissions limitation shall be demonstrated by an annual summation of the monthly VOC emissions as calculated in Term and Condition C.1.f. Compliance with the TPY ammonia emissions limitation shall be demonstrated by an annual summation of the monthly ammonia emissions as calculated in Term and Condition C.1.g.

3. USEPA methods 24 and 24A shall be used to determine the VOC content for flexographic printing lines and related coatings. 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 ink, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that ink to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

F. Miscellaneous Requirements

1. None

International Paper Company **Facility ID: 1483090119**
PTI Application: 14-05663
Issued: 3/3/2005

Emissions Unit ID: **K010**

SIC CODE 2653 SCC CODE 4-05-003-12 EMISSIONS UNIT ID K010
EMISSIONS UNIT DESCRIPTION 4-color Flexographic Printing and Die Cutter
DATE INSTALLED Upon PTI receipt
EMISSIONS: (Click on bubble help for Air Quality Descriptions)

Pollutants	Air Quality Description	Actual Emissions Rate		PTI Allowable	
		Short Term Rate	Tons Per Year	Short Term Rate	Tons Per Year
Particulate Matter					
PM_{10}					
Sulfur Dioxide					
Organic Compounds	Non-attainment	1.2 lbs/hr	5.07	1.2 lbs/hr	5.07
Nitrogen Oxides					
Carbon Monoxide					
Lead					
Other: Air Toxics	Ammonia	0.4 lb/hr	1.69	0.4 lb/hr	1.69

APPLICABLE FEDERAL RULES:

NSPS? NESHAP? PSD? OFFSET POLICY?

WHAT IS THE BAT DETERMINATION, AND WHAT IS THE BASIS FOR THE DETERMINATION?
Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the VOC and ammonia emissions limitations, compliance with the VOC and ammonia content limitations.

IS THIS SOURCE SUBJECT TO THE AIR TOXICS POLICY? Yes
OPTIONAL: WHAT IS THE CAPITAL COST OF CONTROL EQUIPMENT? $

TOXIC AIR CONTAMINANTS

Ohio EPA's air toxics policy applies to contaminants for which the American Conference of Governmental Industrial Hygienists (ACGIH) has a listed threshold limit value.

AIR TOXICS MODELING PERFORMED*? X YES ____ NO

IDENTIFY THE AIR CONTAMINANTS: Ammonia, monoethanolamine

International Paper Company **Facility ID: 1483090119**
PTI Application: 14-05663
Issued: 3/3/2005

Emissions Unit ID: **K010**

Ohio EPA Permit to Install Information Form Please describe below any documentation which is being submitted with this recommendation (must be sent the same day). Electronic items should be submitted with the e-mail transmitting the PTI terms, and in software that CO can utilize. If mailing any hard copy, this section must be printed as a cover page. All items must be clearly labeled indicating the PTI name and number. Submit hard copy items to **Pam McGraner**, AQM&P, DAPC, Central Office, and electronic files to **airpti@epa.state.oh.us**

Please fill out the following. If the checkbox does not work, replace it with an 'X'	Electronic	**Additional information** File Name Convention (your PTI # plus this letter)	Hard Copy	None
Calculations (required)	☐	0000000**c**.wpd	☒	
Modeling form/results	☐	0000000**s**.wpd	☐	☒
PTI Application (complete or partial)*	☐	0000000**a**.wpd	☒	☐
BAT Study	☐	0000000**b.**wpd	☐	☒
Other/misc.	☐	0000000**t**.wpd	☐	☒

* Mandatory for netting, PSD, nonattainment NSR, 112(g), 21-07(G)(9)(g) and 21-09(U)(2)(f) - 2 complete copies.

Please complete (see comment bubble to the left for additional instructions):

NSR Discussion

PTI 14-05663

International Paper Company
Cincinnati Container Division
990 Reading Road
Mason, Ohio 45040

Ohio EPA Air Facility ID# 1483090119

This permit allows International Paper Company to install 1 new 66" x 110" 4-color flexographic printer and die cutter.

This press does not operate with an oven or dryer and the VOC emissions are fugitive in nature. The inks used are typically low VOC, soy and water-based inks. The hourly and annual emissions limitations outlined are based upon the emission unit's Potential to Emit (PTE) at 8760 hours per year. Therefore, no records are required to demonstrate compliance with this limit.

Applicable Regulations: OAC rule 3745-21-09(Y)(1)(a)(ii) and OAC rule 3745-31-05(A)(3)

Emissions: 1.2 lb/hr VOC, 5.07 TPY VOC potential emissions; 0.4 lbs/hr ammonia, 1.69 TPY ammonia potential emissions; 0.75 lbs/hr monoethanolamine, 3.27 TPY monoethanolamine potential emissions

BAT Requirement: Compliance with OAC rule 3745-31-05(A)(3) shall be demonstrated by compliance with the

International Paper Company **Facility ID: 1483090119**
PTI Application: 14-05663
Issued: 3/3/2005

Emissions Unit ID: **K010**

emissions limitations and coating VOC and ammonia content restrictions.

International Paper Company submitted an Initial MACT Notification in May 1998 for the Mason Container Facility indicating that the facility would comply with the "Incidental Printing Exemption" due to facility-wide HAP emissions of less than 1 TPY. This permit does not require a Synthetic Minor for HAPs limitations nor "Area Source" recordkeeping requirements. The Air Toxics analysis indicates that Potential emissions exceed the 1 TPY "deminimis" level for each air toxic considered. Therefore, Air Toxics modeling was performed for ammonia and monoethanolamine. Air emissions for ammonia and monoethanolamine are as follows: 0.4 lbs/hr, 1.69 TPY ammonia potential emissions; 0.75 lbs/hr, 3.27 TPY monoethanolamine potential emissions.

Permit Fee: PWR 0-1000 lbs/hr $200

Prepared By: Chad Powell
Date Prepared: February 11, 2005

Please complete for these type permits (For PSD/NSR Permit, place mouse over this text):

☐ **Synthetic Minor Determination and/or** ☐ **Netting Determination**
Permit To Install **ENTER PTI NUMBER HERE**

A. Source Description

B. Facility Emissions and Attainment Status

C. Source Emissions

D. Conclusion

PLEASE PROVIDE ADDITIONAL NOTES OR COMMENTS AS NECESSARY:
NONE

Please complete:

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

Pollutant	Tons Per Year
VOC	5.07
Ammonia	1.69