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Facility Name: **International Paper**

Application Number: **14-4646**

Date: **March 24, 1999**

GENERAL PERMIT CONDITIONS

TERMINATION OF PERMIT TO INSTALL

Substantial construction for installation must take place within 18 months of the effective date of this permit. 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.

NOTICE OF INSPECTION

The Director of the Ohio Environmental Protection Agency, or his authorized representatives, may enter upon the premises of the above-named applicant during construction and operation at any reasonable time for the purpose of making inspections, conducting tests, or to examine records or reports pertaining to the construction, modification or installation of the source(s) of environmental pollutants identified within this permit.

CONSTRUCTION OF NEW SOURCES

The proposed source(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 are inadequate or cannot meet applicable standards.

If the construction of the proposed source(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 Ohio Administrative Code (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

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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 applicable standards.

PERMIT TO INSTALL FEE

In accordance with Ohio Revised Code 3745.11, the specified Permit to Install fee must be remitted within 30 days of the effective date of this permit to install.

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.

APPLICABILITY

This Permit to Install is applicable only to the contaminant sources identified. Separate application must be made to the Director for the installation or modification of any other contaminant sources.

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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.

PERMIT TO OPERATE APPLICATION

A Permit to Operate application must be submitted to the appropriate field office for each air contaminant source in this Permit to Install. In accordance with OAC Rule 3745-35-02, the application shall be filed no later than thirty days after commencement of operation.

SOURCE OPERATION 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 and regulations.

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
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AIR EMISSION SUMMARY

The air contaminant emissions units listed below comprise the Permit to Install for **International Paper** located in **Hamilton** County. The emissions units listed below shall not exceed the emission limits/control requirements contained in the table. This condition in no way limits the applicability of any other state or federal regulations. Additionally, this condition does not limit the applicability of additional special terms and conditions of this permit.

<u>Ohio EPA Source Number</u>	<u>Source Identification</u>	<u>51" offset sheet-fed lithographic printing press</u>	<u>BAT Determination</u>
K006 Modi- fi- cation	K008 Modi- fi- cation K008 Cont'd Mod	51" offset sheet-fed lithographic printing press	Emissions limitations, VOC content limitations, dampening solution refrigeration and maintenance of dampening solution below 60 degrees Fahrenheit. Compliance with the Ohio EPA Air Toxics Policy.
K007 Modi- fi- cation		40" offset sheet-fed lithographic printing press	Emissions limitations, VOC content limitations,

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
dampening and solution refrigeration below 60 degrees Fahrenheit. Compliance with the Ohio EPA Air Toxics Policy.	refrigeration and maintenance of dampening solution below 60 degrees Fahrenheit. Compliance with the Ohio EPA Air Toxics Policy.	Applicable Federal & <u>OAC Rules</u>	3745-31-05	Permit Allowable Mass Emissions and/or Control/Usage Requirements
		3745-21-09 (II)	3745-15-07	See Additional Special Term and Condition A.2.-A.4., and B.1. 25.04 pounds/hour* 83.51 TPY VOC combined for emissions units K006, K007, and K008
		3745-15-07		See General Terms
		3745-21-09 (II)		See Additional Special Term and Condition A.2.-A.4., and B.1. 23.72 pounds/hour* 83.51 TPY VOC combined for emissions units K006, K007, and K008
		3745-31-05		See General Terms
Emissions limitations, VOC content limitations, dampening solution		3745-15-07		See Additional Special Term and Condition A.2.-A.4., and B.1. 23.72 pounds/hour* 83.51 TPY VOC combined for emissions units K006, K007, and K008
		3745-21-09 (II)		See General Terms
				See Additional

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<u>Ohio EPA Source Number</u>	<u>Source Identification Number</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
Special Term and Condition A.2.-A.4., and B.1. 23.51 pounds/hour* 83.51 TPY VOC combined for emissions units K006, K007, and K008 See General Terms				

* The hourly emission limitation is based upon the maximum hourly application rate at 24 hours/day. Therefore no hourly records are needed.

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Organic Compound	83.51

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REPORTING REQUIREMENTS

Unless otherwise specified, reports required by the Permit to Install need only be submitted to **Hamilton County Dept. of Env. Services, 1632 Central Parkway, Cincinnati, OH 45210.**

WASTE DISPOSAL

The owner/operator shall comply with any applicable state and federal requirements governing the storage, treatment, transport and disposal of any waste material generated by the operation of the sources.

MAINTENANCE OF EQUIPMENT

This source and its associated air pollution control system(s) shall be maintained regularly in accordance with good engineering practices and the recommendations of the respective manufacturers in order to minimize air contaminant emissions.

MALFUNCTION/ABATEMENT

In accordance with OAC RULE 3745-15-06, any malfunction of the source(s) or associated air pollution control system(s) shall be reported immediately to the **Hamilton County Dept. of Env. Services, 1632 Central Parkway, Cincinnati, OH 45210.**

Except as provided by OAC Rule 3745-15-06(A)(3), scheduled maintenance of air pollution control equipment that requires the shutdown or bypassing of air pollution control system(s) must be accompanied by the shutdown of the associated air pollution

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sources.

AIR POLLUTION NUISANCES PROHIBITED

The air contaminant source(s) identified in this permit may not cause a public nuisance in violation of OAC Rule 3745-15-07.

ADDITIONAL SPECIAL TERMS AND CONDITIONS

A. Applicable Emission Limitations and/or Control Requirements

1. The permittee shall not employ more than 83.51 tons of VOC per year based upon the monthly VOC input rates* to emissions units K006, K007, and K008. The tons per year limitation shall be based upon a rolling, twelve-month summation.

* Monthly VOC input rates = (C X D X 1- ink retention) where C = the number of gallons of each surface coating, ink, dampening solution and cleanup material employed per month (excluding water and exempt solvents) and D = the VOC content of each surface coating, ink, dampening solution and cleanup material employed per month in pounds of VOC per gallon (excluding water and exempt solvents).

2. The permittee shall not exceed the following VOC content limitations, as applied, excluding water and exempt solvents, for emissions units K006, K007, and K008:

Varnish Coating	2.8 lbs VOC/gal of coating
Aqueous Coating	3.0 lbs VOC/gal of coating
Inks (except metallic)	1.2 lbs VOC/gal of coating
Metallic Inks	2.5 lbs VOC/gal of coating
Dampening Solution	0.33 lb VOC/gal of coating
Cleanup Material	6.56 lbs VOC/gal of coating

3. The fountain solution employed in any sheet-fed offset lithographic printing press shall have a VOC content

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not greater than ten percent VOC (alcohol) by volume at each cooling unit.

4. The total VOC emissions from the metallic inks employed in all sheet-fed offset lithographic printing presses shall not exceed 0.258 ton during any calendar month and 2.32 tons during any period of twelve consecutive months.

B. Operational Restrictions

1. The fountain solution employed in any sheet-fed offset lithographic printing press shall be refrigerated at each cooling unit to a temperature not to exceed sixty degrees Fahrenheit.

C. Monitoring and Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for emissions units K006, K007, and K008:
 - a. the name and identification of each surface coating, ink, dampening solution and cleanup material employed;
 - b. the amount in gallons of each surface coating, ink, dampening solution and cleanup material, employed, excluding water and exempt solvents;
 - c. the VOC content of each surface coating, ink, dampening solution and cleanup material, in pounds VOC per gallon, excluding water and exempt solvents;
 - d. the total VOC emissions [the summation of line (b) multiplied by line (c)] from all surface coatings, inks, dampening solutions and cleanup materials employed, in pounds or tons; and,
 - e. the updated rolling, twelve-month summation of VOC emissions for emissions units K006, K007 and K008, combined (the summation of the current calendar months emission total and the previous eleven calendar months emissions total).

The permittee already has records to demonstrate compliance with the rolling, twelve-month VOC emission limitation upon issuance of the permit

2. The owner or operator shall measure and record the

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temperature and VOC content, in percent by volume, of the fountain solution in each cooling unit on a daily basis. The VOC content of the fountain solution shall be measured using a hydrometer.

3. The owner or operator shall calculate and record the calendar month and rolling, twelve-month VOC emissions from the metallic inks employed in all of the sheet-fed offset lithographic printing presses.
4. Each record of any monitoring data, testing data, and support information required pursuant to this permit shall be retained for a period of at least 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.

D. Reporting Requirements

1. The permittee shall submit an annual report which specifies for the previous year the total combined VOC emissions from emissions units K006, K007, and K008. This report shall be submitted by January 30 of each year.
2. The owner or operator shall notify the director of any temperature measurement of the fountain solution that exceeds sixty degrees Fahrenheit, any VOC content measurement of the fountain solution that exceeds ten percent, by volume, and any monthly and rolling twelve-month VOC emissions from the use of metallic inks that exceeds 0.258 ton and 2.32 tons, respectively. A copy of

the record showing the exceedance shall be submitted to the director within forty-five days after the exceedance occurs.

3. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, twelve-month emission limitation for VOC.

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4. The permittee shall notify the Director (the Hamilton County Dept. of Env. Services) in writing of any monthly record showing the use of noncomplying coatings. The notification shall include a copy of such record and shall be sent to the Director (the Hamilton County Dept. of Env. Services) within 30 days following the end of the calendar month.
5. The permittee shall submit required reports in the following manner:
 - a. reports of any required monitoring and/or record keeping information shall be submitted to the Hamilton County Department of Environmental Services; and,
 - 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 Hamilton County Department of Environmental Services. 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 30, April 30, July 30, and October 30 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).

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E. Compliance Methods/Testing Requirements

1. Compliance with the emission limits in Additional Special Term and Condition A.1 shall be demonstrated by the record keeping in Additional Special Term and Condition C.1. The hourly emission limitation is based on the potential to emit. Therefore, no hourly records are required to demonstrate compliance with these limits.
2. USEPA methods 24 and 24A shall be used to determine the VOC content for (a) coatings and (b) flexographic and rotogravure printing lines and related coatings, respectively. If, pursuant to section 4.3 of Method 24, 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.
3. Compliance with the VOC content limitations shall be determined by the record keeping required in Additional Special Terms and Condition C.1.
4. Compliance with the VOC content and temperature limitation for the fountain solution shall be demonstrated by the monitoring required in Additional Special Term and Condition C.2.
5. Compliance with the emission limits in Additional Special Term and Condition A.4. shall be demonstrated by the recordkeeping in Additional Special Term and Conditions C.1. and C.3.

F. Miscellaneous Requirements

1. This permit to install supersedes PTI 14-3516, PTI 14-3587 and PTI 14-3814 for emissions unit K006, K007 and K008.
2. This permit allows the use of the coatings and cleanup materials specified by the permittee in the application

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for PTI number 14-4646. In conjunction with the best available technology requirements of OAC rule 3745-31-05, the VOC emission limitation(s) specified in this permit was (were) established in accordance with the Ohio EPA's "Air Toxics Policy" and is (are) based on both the coating and cleanup material formulation data and the design parameters of the emissions unit's exhaust system, as specified in the application. Compliance with the Ohio EPA's "Air Toxics Policy" was demonstrated for each pollutant based on the Screen 3 model and a comparison of the predicted 1 hour maximum ground-level concentration to the MAGLC.

The following summarizes the results of the modeling for each pollutant:

Pollutant: Isopropyl Alcohol

TLV (ug/m3): 983,000

Maximum Hourly Emission Rate (lbs/hr): 27.44

Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 3809

Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 23,405

Any of the following changes may be deemed a "modification" to the emissions unit and, as such, prior notification to and approval from the Hamilton County Dept. of Env. Services are required, including the possible issuance of modifications to PTI number 14-4646 and the operating permit:

- a. any changes in the composition of the coatings or cleanup materials, or the use of new coatings or cleanup 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 specified in the above table;
- b. any change to the emissions unit or its exhaust parameters (e.g., increased emission rate, reduction of exhaust gas flow rate, and decreased

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stack height) that would result in an exceedance of any MAGLC specified in the above table;

- c. any change to the emissions unit or its method of operation that would either require an increase in the emission limitation(s) established by this permit or would otherwise be considered a "modification" as defined in OAC rule 3745-31-01; and,

- d. any change in the composition of the coatings or cleanup materials, or use of new coatings or cleanup materials, that would result in the emission of any of the exempted organic compounds included in the definition of "VOC" [OAC rule 3745-21-01(B)(6)].