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Facility Name: **International Paper**

Application Number: **14-4636**

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 **Clermont** 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 Description</u>	<u>BAT Determination</u>	<u>Applicable Federal & OAC Rules</u>	<u>Permit Allowable Mass Emissions and/or Control/Usage Requirements</u>
K001 (Mod)	Rotogravure printing press	Compliance with emissions, VOC content, and coating usage restrictions. Compliance with the Ohio EPA Air Toxics Policy.	3745-15-07 3745-21-09 (Y) (2) * 40 CFR 63 Subpart KK 3745-31-05	See General Terms. Less stringent than OAC rule 3745-31-05. See Additional Special Term and Condition C.1. VOC emissions including cleanup shall not exceed 443 pounds/day and 23.4 TPY Ammonia emissions shall not exceed 9.1

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pounds/
day and
0.97
TPY

* The emission limitations established by this rule are less stringent than the limitations established by OAC rule 3745-31-05.

SUMMARY
TOTAL PERMIT TO INSTALL ALLOWABLE EMISSIONS

<u>Pollutant</u>	<u>Tons/Year</u>
Organic Compound	23.4
NH3 (Ammonia)	0.97

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.

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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 sources.

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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 Emissions Limitations and/or Control Requirements

1. For pounds/day emission limitations for emissions unit K001 see the Air Emissions Summary page of this permit.
2. The permittee shall not employ coatings in emissions unit K001 with a VOC content greater than the following, as applied:

<u>Coating</u>	<u>VOC Content (Percent by weight)</u>
Solvent Based Inks	100 percent
Water Based Inks	58.9 percent

3. The permittee shall not employ cleanup materials in emissions unit K001 with a VOC content greater than 7.4 pounds VOC/gallon, as applied.
4. The emissions 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 determined on a rolling, 12-month summation.

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

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Emissions of Individual HAPs (Tons)</u>	<u>Maximum Allowable Cumulative Emissions of Total HAPs (Tons)</u>
1-2	5.0	12.5
1-3	5.0	12.5
1-4	5.0	12.5

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1-5	5.0	12.5
1-6	5.0	12.5
1-7	5.8	14.6
1-8	6.7	16.6
1-9	7.5	18.7
1-10	8.3	20.8
1-11	9.2	22.9
1-12	9.9	24.9

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual emission limitations for HAPs shall be based upon a rolling, 12-month summation of the monthly emissions.

B. Operational Restrictions

1. The permittee shall not employ coatings in excess of the following number of pounds for emissions unit K001:
 - a. for solvent based inks, 253.2 pounds per day and 10,323 pounds per year; and,
 - b. for water based inks, 297 pounds per day and 60,000 pounds per year.
2. The use of cleanup materials for emissions unit K001 shall not exceed 2 gallon/day and 150 gallon/year.*

* Note Terms B.1.a., b. and B.2. are to restrict VOC emissions to qualify for exemption pursuant to OAC rule 3745-21-09(Y) (2).

C. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for the entire facility:
 - a. the name and identification number of each coating, as applied;
 - b. the individual Hazardous Air Pollutant (HAP) content for each HAP of each coating in percent by weight of individual HAP, as applied;
 - c. the total combined HAP content of each coating in percent by weight of combined HAPs, as applied [sum all the individual HAP contents from (b)];
 - d. the number of pounds of each coating employed;

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- e. the name and identification of each cleanup material employed;
- f. the individual HAP content for each HAP of each cleanup material in percent by weight of individual HAP, as applied;
- g. the total combined HAP content of each cleanup material in percent by weight of combined HAPs, as applied [sum all the individual HAP contents from (f)];
- h. the number of pounds of each cleanup material employed;
- i. the total individual HAP emissions 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 and the sum of (f) times (h) for each cleanup material];
- j. the total combined HAP emissions 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 cumulative monthly total for the first twelve months following the issuance of this permit to install and the updated rolling twelve month total thereafter of the total individual HAP emissions for each HAP from all coating and cleanup material employed, in pounds or tons; and,
- l. the cumulative monthly total for the first twelve months following the issuance of this permit to install and the updated rolling twelve month total thereafter of the total combined HAPs from all coating and cleanup material employed, in pounds or tons.

A listing of the HAPs can be found in Section 112(b) of the Clean Air Act or can be obtained by contacting your

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Hamilton County Dept. of Env. Services contact. This information does not have to be kept on a line-by-line basis.

2. The permittee shall collect and record the following information each day for emissions unit K001:
 - a. the name and identification number of each coating and cleanup material, as applied;
 - b. the VOC content of each coating in percent by weight, as applied;
 - c. the VOC content of each cleanup material in pounds per gallon, as applied;
 - d. the NH₃ (ammonia) content of each coating in percent by weight, as applied; and,
 - e. the amount of each coating and cleanup material employed, in pounds, as applied.
3. The permittee shall maintain monthly records of the total VOC emissions.
4. 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 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.

D. Reporting Requirements

1. 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 Hamilton County Dept. of Env. Services; and,
 - b. except as otherwise may be provided in the terms

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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 Dept. of Env. 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).

2. The permittee shall notify the Director (the Hamilton County Dept. of Env. Services) in writing of any daily record showing any exceedance of the daily coating usage or VOC content limitations or any exceedance of the annual coating or cleanup material usage limitations.
3. The permittee shall also submit annual reports which specify the total VOC emissions from this emissions unit and the individual and combined rolling, 12-month total HAP emissions from the facility for the previous calendar year. These reports shall be submitted by January 31 of each year.
4. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12-month emission limitation for individual HAPs and total HAPs and, for the first 12 calendar months of operation following the issuance of this permit, all exceedances of the maximum allowable cumulative emission levels.

E. Testing Requirements

1. Compliance with the VOC emission limitations on the Air Emissions Summary page of this permit for emissions unit K001 shall be demonstrated using the following equations:

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- a. $\text{VOC content (percent by weight)} \times \text{Coatings usage (pounds/day)} = \text{lbs VOC/day; and,}$
 - b. $\text{VOC content (percent by weight)} \times \text{Coatings usage (pounds/yr)} \times \text{ton/2000 lbs} = \text{tons VOC/yr}$
2. Compliance with the NH₃ emission limitations on the Air Emissions Summary page of this permit, for K001, shall be demonstrated using the following equations:
- a. $\text{NH}_3 \text{ content (percent by weight)} \times \text{Coatings usage (pounds/day)} = \text{lbs NH}_3/\text{day; and,}$
 - b. $\text{NH}_3 \text{ content (percent by weight)} \times \text{Coatings usage (pounds/yr)} \times \text{ton/2000 lbs} = \text{tons NH}_3/\text{yr.}$

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3. Compliance with the HAPs limitations in section A.4. shall be demonstrated by the recordkeeping requirements in section C.1.
4. Compliance with the operational restrictions in Sections B.1. and B.2. of these terms and conditions shall be demonstrated by the recordkeeping requirements in Section C.2. of these terms and conditions.
5. 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 and cleanup materials, 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, ink or cleanup material, the permittee shall so notify the Administrator of the USEPA and shall use formulation data for that coating, ink or cleanup material to demonstrate compliance until the USEPA provides alternative analytical procedures or alternative precision statements for Method 24 or 24A.

F. Miscellaneous Requirements

1. This permit allows the use of the coatings and cleanup materials specified by the permittee in the application for PTI number 14-4636. 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: Toluene
TLV (ug/m3): 188,000

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Maximum Hourly Emission Rate (lbs/hr): 71.4
Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 3046
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 4476

Pollutant: Ammonia
TLV (ug/m3): 17,000
Maximum Hourly Emission Rate (lbs/hr): 1.46
Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 64.5
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 405

Pollutant: Ethanolamine
TLV (ug/m3): 7500
Maximum Hourly Emission Rate (lbs/hr): 0.12
Predicted 1 Hour Maximum Ground-Level Concentration at the Fenceline (ug/m3): 50.8
Maximum Acceptable Ground-Level Concentration (MAGLC) (ug/m3): 179

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 14-4636 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 stack height) that would result in an exceedance of any MAGLC specified in the above table;
- c. 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

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3745-21-01(B)(6)]; 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 an increase in emissions of any "Hazardous Air Pollutants" (HAPS) as defined in OAC rule 3745-77-01(V).
2. The Additional Special Terms and Conditions of this Permit to Install (PTI) shall supersede the Additional Special Terms and Conditions of PTI 14-4429.