

Additional 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%
Water Based Inks	58.9%

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
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.

5. The emissions of VOC from this emissions unit shall not exceed 23.4 tons per year, based upon a rolling, 12-month summation of the monthly emissions.

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 VOC (Tons)</u>
1-2	11.70
1-3	11.70
1-4	11.70
1-5	11.70
1-6	11.70
1-7	13.65
1-8	15.60
1-9	17.55
1-10	19.50
1-11	21.45
1-12	23.40

After the first 12 calendar months of operation following the issuance of this permit, compliance with the annual emission limitations for VOC 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/yr.

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;
 - 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];

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- 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

1. 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 Ohio EPA field office or local air agency 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 following information:
 - a. The total VOC emissions;
 - b. Beginning after the first 12 calendar months of operation following issuance of the permit, the rolling 12-month summation of the VOC emissions.

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Also, during the first 12 calendar months of operation following issuance of this permit, the permittee shall record the cumulative monthly VOC emissions for each calendar month.

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 appropriate Ohio EPA District Office or local air agency; 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 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.

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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 appropriate Ohio EPA District Office or local air agency) 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.
5. The permittee shall submit deviation (excursion) reports which identify all exceedances of the rolling, 12 month emission limitation for VOC 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:
 - a. $\text{VOC content (\% by weight)} \times \text{Coatings usage (pounds/day)} = \text{lbs VOC/day ; and}$

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- b. $\text{VOC content (\% by weight)} \times \text{Coatings usage (pounds/yr)} \times \text{ton/2000 lbs} = \text{tons VOC/yr ;}$
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. $\text{NH}_3 \text{ content (percent by weight)} \times \text{Coatings usage (pounds/day)} = \text{lbs NH}_3/\text{day};$
 - b. $\text{NH}_3 \text{ content (\% by weight)} \times \text{Coatings usage (pounds/yr)} \times \text{ton/2000 lbs} = \text{tons NH}_3/\text{yr}.$
3. Compliance with the HAPs limitations in section A.4.

shall be demonstrated by the record keeping 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

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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
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 appropriate Ohio EPA District Office or local air agency are required, including the possible issuance of modifications to PTI number 14-4636 and the operating permit:

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- 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 3745-21-01(B)(6)].

- 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.

Permit Review Narrative

PTI 14-4636

International Paper
6283 Tri-Ridge Blvd.
Loveland, Ohio 45140

PN: 1413070417

This Permit to Install is a modification to a previously issued Permit to Install for a rotogravure printing press at their facility in Clermont County. The rotogravure press utilizes water based and solvent based inks for research and development. The BAT analysis demonstrated that VOC emissions control devices are not cost effective to install.

This modification comes as a result of a violation of their VOC content limitation as outlined in PTI 14-4429.

OAC 3745-15-07, 21-09(Y)(2), 31-05 (BAT) and 40 CFR 63 Subpart KK apply to this emissions unit. BAT for emissions unit K001 requires compliance with emissions, VOC content, and usage

restrictions.

Allowable emissions for K001 are 442.9 pounds per day and 23.4 tons per year of VOC; 9.12 pounds per day and 0.96 ton per year of ammonia. HAP emissions are limited to under 10 tons per year of an individual HAP and under 25 tons per year of combined HAP's. This PTI requires daily recordkeeping to ensure compliance with these limits.

Permit Fee: K001 - \$200

Prepared by: Thomas P. Wittekind
Date prepared: September 16, 1998

Synthetic Minor Determination

International Paper (1413070417 K001)
PTI 14-4636

A. Source Description

This Permit to Install is a modification to a previously issued Permit to Install (14-4429) for a rotogravure printing press at their facility in Clermont County. The rotogravure press utilizes water based and solvent based inks for research and development.

B. Facility Emissions and Attainment Status

International Paper is located in Clermont County which is designated primary nonattainment for ozone. International Paper is designated a minor source for Title 5 applicability.

C. Source Emissions

Potential HAP emissions from the facility are 46.2 TPY of

toluene which is greater than the major HAP threshold (10 TPY). Therefore, this PTI includes a rolling 12-month annual emission restrictions for individual and total HAPs for the facility. Allowable HAP emissions are 9.9 TPY for individual HAPs and 24.9 TPY for total HAPs.

The permittee will maintain records of individual and total HAPs emissions and submit exceedance reports, documenting compliance status.

D. Conclusion

The allowable HAP emissions will not exceed the major source threshold for HAPs. Issuing this PTI as a synthetic minor will make it federally enforceable. Therefore, International Paper will not have to obtain a Title V operating permit.

Prepared by: Thomas P. Wittekind

Date Prepared: 09/16/98