



State of Ohio Environmental Protection Agency

**RE: FINAL PERMIT TO INSTALL
CUYAHOGA COUNTY**

CERTIFIED MAIL

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: 13-04574

Fac ID: 1318558062

DATE: 1/9/2006

Avery Dennison Industrial Products Div
Carl Muehlman
17700 Foltz Industrial Parkway
Strongsville, OH 44149

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, Manager
Permit Issuance and Data Management Section
Division of Air Pollution Control

CC: USEPA

CLAA



**Permit To Install
Terms and Conditions**

**Issue Date: 1/9/2006
Effective Date: 1/9/2006**

FINAL PERMIT TO INSTALL 13-04574

Application Number: 13-04574
Facility ID: 1318558062
Permit Fee: **\$1600**
Name of Facility: Avery Dennison Industrial Products Div
Person to Contact: Carl Muehlman
Address: 17700 Foltz Industrial Parkway
Strongsville, OH 44149

Location of proposed air contaminant source(s) [emissions unit(s)]:
**17700 Foltz Industrial Parkway
Strongsville, Ohio**

Description of proposed emissions unit(s):
Relocation of 8 narrow web flexographic printing presses from Cleveland operation to Strongsville operation -- K201-K208.

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. State and Federally Enforceable Permit-To-Install General Terms and Conditions

1. Monitoring and Related Recordkeeping and Reporting Requirements

- a. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall maintain records that include the following, where applicable, for any required monitoring under this permit:
 - i. The date, place (as defined in the permit), and time of sampling or measurements.
 - ii. The date(s) analyses were performed.
 - iii. The company or entity that performed the analyses.
 - iv. The analytical techniques or methods used.
 - v. The results of such analyses.
 - vi. The operating conditions existing at the time of sampling or measurement.
- b. 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.
- c. Except as may otherwise be provided in the terms and conditions for a specific emissions unit, the permittee shall submit required reports in the following manner:
 - i. Reports of any required monitoring and/or recordkeeping of federally enforceable information shall be submitted to the appropriate Ohio EPA District Office or local air agency.
 - ii. Quarterly written reports of (i) any deviations from federally enforceable emission limitations, operational restrictions, and control device operating parameter limitations, excluding deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06, that have been detected by the testing, monitoring and recordkeeping requirements specified in this permit, (ii) the probable cause of such deviations, and (iii) any corrective actions or preventive measures taken, shall be made to

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the appropriate Ohio EPA District Office or local air agency. The written reports shall be submitted (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. See B.9 below if no deviations occurred during the quarter.

- iii. Written reports, which identify any deviations from the federally enforceable monitoring, recordkeeping, and reporting requirements contained in this permit shall be submitted (i.e., postmarked) to the appropriate Ohio EPA District Office or local air agency every six months, by January 31 and July 31 of each year for the previous six calendar months. If no deviations occurred during a six-month period, the permittee shall submit a semi-annual report, which states that no deviations occurred during that period.
 - iv. If this permit is for an emissions unit located at a Title V facility, then each written report shall be signed by a responsible official certifying that, based on information and belief formed after reasonable inquiry, the statements and information in the report are true, accurate, and complete.
- d. The permittee shall report actual emissions pursuant to OAC Chapter 3745-78 for the purpose of collecting Air Pollution Control Fees.

2. 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, i.e., upset, 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. (The definition of an upset condition shall be the same as that used in OAC rule 3745-15-06(B)(1) for a malfunction.) The verbal and written reports shall be submitted pursuant to 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 emission unit(s) that is (are) served by such control system(s).

3. Risk Management Plans

If the permittee is required to develop and register a risk management plan pursuant to section 112(r) of the Clean Air Act, as amended, 42 U.S.C. 7401 et seq. ("Act"), the permittee shall comply with the requirement to register such a plan.

4. Title IV Provisions

If the permittee is subject to the requirements of 40 CFR Part 72 concerning acid rain, the permittee shall ensure that any affected emissions unit complies with those requirements. Emissions exceeding any allowances that are lawfully held under Title IV of the Act, or any regulations adopted thereunder, are prohibited.

5. Severability Clause

A determination that any term or condition of this permit is invalid shall not invalidate the force or effect of any other term or condition thereof, except to the extent that any other term or condition depends in whole or in part for its operation or implementation upon the term or condition declared invalid.

6. General Requirements

- a. The permittee must comply with all terms and conditions of this permit. Any noncompliance with the federally enforceable terms and conditions of this permit constitutes a violation of the Act, and is grounds for enforcement action or for permit revocation, revocation and re-issuance, or modification
- b. It shall not be a defense for the permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the federally enforceable terms and conditions of this permit.
- c. This permit may be modified, revoked, or revoked and reissued, for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or revocation, or of a notification of planned changes or anticipated noncompliance does not stay any term and condition of this permit.
- d. This permit does not convey any property rights of any sort, or any exclusive privilege.
- e. 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 or revoking this permit or to determine compliance with this permit. Upon request, the permittee shall also furnish to the Director or an authorized representative of the Director, copies of records required to be kept by this permit. For information claimed to be confidential in the submittal to the Director, if the Administrator of the U.S. EPA requests such information, the permittee may furnish such records directly to the Administrator along with a claim of confidentiality.

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7. 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 any permit-to-install. The permittee shall pay all applicable permit-to-operate fees within thirty days of the issuance of the invoice.

8. Federal and State Enforceability

Only those terms and conditions designated in this permit as federally enforceable, that are required under the Act, or any its applicable requirements, including relevant provisions designed to limit the potential to emit of a source, are enforceable by the Administrator of the U.S. EPA and the State and by citizens (to the extent allowed by section 304 of the Act) under the Act. All other terms and conditions of this permit shall not be federally enforceable and shall be enforceable under State law only.

9. Compliance Requirements

- a. Any document (including reports) required to be submitted and required by a federally applicable requirement in this permit shall include a certification by a responsible official that, based on information and belief formed after reasonable inquiry, the statements in the document are true, accurate, and complete.
- b. Upon presentation of credentials and other documents as may be required by law, the permittee shall allow the Director of the Ohio EPA or an authorized representative of the Director to:
 - i. At reasonable times, enter upon the permittee's premises where a source is located or the emissions-related activity is conducted, or where records must be kept under the conditions of this permit.
 - ii. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit, subject to the protection from disclosure to the public of confidential information consistent with ORC section 3704.08.
 - iii. Inspect at reasonable times any facilities, equipment (including monitoring and air pollution control equipment), practices, or operations regulated or

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required under this permit.

- iv. As authorized by the Act, sample or monitor at reasonable times substances or parameters for the purpose of assuring compliance with the permit and applicable requirements.
- c. The permittee shall submit progress reports to the appropriate Ohio EPA District Office or local air agency concerning any schedule of compliance for meeting an applicable requirement. Progress reports shall be submitted semiannually, or more frequently if specified in the applicable requirement or by the Director of the Ohio EPA. Progress reports shall contain the following:
 - i. Dates for achieving the activities, milestones, or compliance required in any schedule of compliance, and dates when such activities, milestones, or compliance were achieved.
 - ii. An explanation of why any dates in any schedule of compliance were not or will not be met, and any preventive or corrective measures adopted.

10. Permit-To-Operate Application

- 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 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.

11. 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.

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12. 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.

13. Permit-To-Install

A permit-to-install must be obtained pursuant to OAC Chapter 3745-31 prior to "installation" of "any air contaminant source" as defined in OAC rule 3745-31-01, or "modification", as defined in OAC rule 3745-31-01, of any emissions unit included in this permit.

B. State Only Enforceable Permit-To-Install General Terms and Conditions

1. Compliance Requirements

The emissions unit(s) identified in this Permit 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 of state-only enforceable 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 state-only required 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 (i.e., postmarked) quarterly, by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters. (These

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quarterly reports shall exclude deviations resulting from malfunctions reported in accordance with OAC rule 3745-15-06.)

3. 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.

4. Authorization To Install or Modify

If applicable, authorization to install or modify any new or existing emissions unit included in this permit shall terminate within eighteen months of the effective date of the permit 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.

5. Construction of New Sources(s)

This permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. This permit does not constitute expressed or implied assurance that the proposed facility has been constructed in accordance with the application and terms and conditions of this permit. 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 this permit does not constitute an assurance that the proposed source will operate in compliance with all Ohio laws and regulations. Issuance of this permit 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.

6. 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

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OAC rule 3745-49-03.

7. Applicability

This Permit to Install is applicable only to the emissions unit(s) identified in the Permit To Install. Separate application must be made to the Director for the installation or modification of any other emissions unit(s).

8. Construction Compliance Certification

If applicable, the applicant shall provide Ohio EPA with a written certification (see enclosed form if applicable) 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.

9. Additional Reporting Requirements When There Are No Deviations of Federally Enforceable Emission Limitations, Operational Restrictions, or Control Device Operating Parameter Limitations (See Section A of This Permit)

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., postmarked), by January 31, April 30, July 31, and October 31 of each year and shall cover the previous calendar quarters.

C. 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>
OC	97.0

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Part II - FACILITY SPECIFIC TERMS AND CONDITIONS

A. State and Federally Enforceable Permit To Install Facility Specific Terms and Conditions

None.

B. State Only Enforceable Permit To Install Facility Specific Terms and Conditions

None.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>	
K201 - Webtron Press no. 644. Narrow web, less than 18 inches, printing operation utilizing flexographic and/or rotary screen transfer technology w/ 4 print station	OAC rule 3745-31-05(A)(3)	OAC rule 3745-31-05(C) Synthetic Minor to avoid Nonattainment NSR
	OAC rule 3745-21-09(Y)(2)(b)	

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Emissions Unit ID: K201

Applicable Emissions
Limitations/Control Measures

Volatile organic compound (VOC) emissions for this emissions unit shall not exceed 21.9 lbs VOC/hour and 17.86 tpy* from a combination of inks, coatings, adhesives, and clean-up material.

* as a 12-month rolling summation

See A.I.2.a.

The requirements of this rule also include compliance with the requirements of OAC rule(s) 3745-21-09(Y)(2)(b) and 3745-31-05(c).

The total maximum coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility shall be less than or equal to one hundred forty-eight tons per year.

Volatile organic compound (VOC) emissions from emissions units K201 - K208 shall not exceed 97.0 tons per rolling 12-month period.

See A.I.2.a and A.II.1.

2. Additional Terms and Conditions

- 2.a** The hourly and annual VOC emission limitations are based on the emissions unit's potential to emit*. As such, no specific emission unit emissions monitoring

and/or recordkeeping and reporting requirements are necessary in order to demonstrate compliance with these emissions limits.

* The potential to emit calculations, developed from a joint effort between the facility and the Cleveland Division of Air Quality (Cleveland DAQ), reflect the presumed inherent physical limitations through a press allocation of the material usage restriction (148 tons) as found in OAC Rule 3745-21-09(Y)(2)(b).

2.b The new emissions units specified in this permit are K201, K202, K203, K204, K205, K206, K207, and K208.

II. Operational Restrictions

1.

The maximum annual volatile organic material usage for all emissions units referenced in this permit (emissions units K201 - K208) shall not exceed 97.0 tons, based upon a rolling, 12-month summation of the volatile organic material usage figures.

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

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Volatile Organic Material Usage (97.0 Tons)</u>
1	32.3
1-2	40.4
1-3	48.5
1-4	56.6
1-5	64.7
1-6	72.8
1-7	80.9
1-8	89.0
1-9	97.0
1-10	97.0
1-11	97.0
1-12	97.0

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual volatile organic material usage limitation shall be based upon a rolling, 97.0 tons summation of the volatile organic material usage figures.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility and the emissions units specified in Section A.I.2.b:
 - a. the name and identification number of each ink, coating, additive, adhesive, and cleanup material employed;
 - b. the weight, in pounds or tons per month, of each ink, coating, additive, adhesive, and cleanup material employed as applied;
 - c. the VOC content of each ink, coating, additive, adhesive, and cleanup material employed, as applied, in percent by weight;
 - d. the total volatile organic material usage and VOC emissions from all ink, additive, adhesive, and cleanup materials employed calculated by summing the records of [(1.b) x (1.c)] for each ink, coating, additive, adhesive, and cleanup material, and subtracting any recovered material* in pounds or tons per month;
 - e. the rolling, 12-month summation of volatile organic material usage and VOC emissions from all ink, coating, additive, adhesive, and cleanup material employed, in pounds or tons;
 - f. the rolling, 12-month summation of ink, coating, additive, adhesive, and cleanup material employed, in pounds or tons.
- * if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports; records of the total amount (gallons or pounds) of the cleanup/purge material collected and added to the recovery tank/drum (for recycle, recovery, and/or disposal at an outside facility) shall be maintained as required in Section A.III.3.
2. The permittee shall collect and record the following information for this emission unit

Emissions Unit ID: K201

each month:

- a. the actual monthly press operation hours, in hours per month; and
- b. the rolling, 12-month summation of the operational press hours.

The permittee shall use this data to verify, upon request by the Cleveland DAQ, that the annual press allocation of material usage and emissions is valid.

3. If a credit for recovered materials is used to demonstrate compliance with all of the flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility and the emissions units specified in Section A.I.2.b and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup/purge materials and the recovery drum, or tank, serving this emissions unit:
 - a. the date the materials from the recovery drum or tank were shipped off site;
 - b. the amount of cleanup/purge material, in gallons or pounds, from the recovery drum or tank shipped off site;
 - c. the average density of the cleanup/purge material, in pounds per gallon, from the recovery drum or tank (if the amount is recorded in gallons);
 - d. the average VOC content for the recovered cleanup/purge material, in percent by weight; and
 - e. the average VOC emissions from the recovered cleanup/purge materials [(3.b.) x (3.d.)], in pounds. Note the average VOC emissions, in pounds, from the recovered cleanup/purge material is calculated as [(3.b.) x (3.c.) x (3.d.)] if the material amount is recorded in gallons.

IV. Reporting Requirements

1. The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) in writing of any monthly record showing that the rolling, 12-month summation of coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility exceeded one hundred forty-eight tons. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified.
2. The permittee shall submit deviation (excursion) reports which include the following information for the emissions units specified in Section A.I.2.b:

- a. an identification of each month during which the rolling, 12-month volatile organic material usage and VOC emissions exceed 97.0 tons/yr based on a rolling, 12-month summation;

The deviation (excursion) report shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

V. Testing Requirements

1. Compliance with the emission limitation(s) and operational restriction specified in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:

21.9 lbs VOC/hour from a combination of ink, coating, additive, adhesive, and cleanup material.

Applicable Compliance Method:

This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

$$\text{Press Allocation} = (\text{Annual Press Hours, based on CY-2003 data}) / (\text{Total Press Hours for K201 -K208, based on CY-2003 data})$$

$$\text{Annual VOC Emissions By Press} = (\text{Emissions units specified in Section A.I.2.b Material Restriction}) * (\text{Press Allocation}) * (\text{Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data})$$

$$\text{Short Term VOC Emissions (average lb/hr)} = (\text{Annual VOC Emissions By Press}) / (\text{Annual Mean Press Hours})$$

$$\text{PTI Limit Annual VOC Emissions By Press w/ SF \# 1} = (\text{Emissions units specified in Section A.I.2.b Material Restriction}) * (\text{Press Allocation, based on CY-2003 data}) * (\text{Average VOC Content of all Materials from the emissions units})$$

Emissions Unit ID: K201

specified in Section A.I.2.b, based on CY-2003 data) * (SF #1)

PTI Limit Short Term VOC Emissions w/ SF # 2 = [(CY 2003 VOC Emissions by Press) / (CY2003 Mean Press Hours)] * (SF # 2)

Safety Factor # 1 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) = 143 %; Therefore, SF # 1 = 1.43 was applied to the annual limit to determine worst case emissions.

Safety Factor # 2 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press AND the error associated with the VOC content of the coatings applied on a specific press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) + (141 %, based on possible range of VOC content per individual coating) = 284 %; Therefore, SF # 2 = 2.84 was applied to the short term limit to determine worst case emissions.

b. Emission Limitation:

17.86 tons VOC/year for K001 from a combination of inks, coatings and adhesives, as a 12-month rolling summation.

Applicable Compliance Method:

This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Press Allocation = (Annual Press Hours, based on CY-2003 data) / (Total Press Hours for K201 -K208, based on CY-2003 data)

Annual VOC Emissions By Press = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data)

PTI Limit Annual VOC Emissions By Press w/ SF # 1 = (Emissions units

specified in Section A.I.2.b Material Restriction) * (Press Allocation, based on CY-2003 data) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data) * (SF #1)

Safety Factor # 1 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) = 143 %; Therefore, SF # 1 = 1.43 was applied to the annual limit to determine worst case emissions.

Safety Factor # 2 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press AND the error associated with the VOC content of the coatings applied on a specific press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) + (141 %, based on possible range of VOC content per individual coating) = 284 %; Therefore, SF # 2 = 2.84 was applied to the short term limit to determine worst case emissions.

- c. Emission Limitation:
97.0 tons (for K201 -K208), VOC per year from a combination of inks, coatings, additives, adhesives, and cleanup materials, as a 12-month rolling summation.

Applicable Compliance Method:
Compliance shall be determined based upon the record keeping specified in Section A.III.1.

- d. Operational Limitation:
The total maximum coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility shall be less than or equal to one hundred forty-eight tons per year.

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in

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Section A.III.1.

VI. Miscellaneous Requirements

1. The following terms and conditions are federally enforceable: I, II, III, IV, and V.

B. State Only Enforceable Section

I. 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>	<u>Applicable Emissions Limitations/Control Measures</u>
K201 - Webtron Press no. 644. Narrow web, less than 18 inches, printing operation utilizing flexographic and/or rotary screen transfer technology w/ 4 print station	None.	None.

2. Additional Terms and Conditions

- 2.a None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit 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 Acceptable Ground-Level Concentration (MAGLC). The following

summarizes the results of the modeling for the "worst case" pollutant:

- a. Pollutant: Ethanol
TLV (mg/m³): 1,884.25
Maximum Hourly Emission Rate (lbs/hr): 21.9
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 44,863.18
 - b. Pollutant: N-Propyl Alcohol
TLV (mg/m³): 491.53
Maximum Hourly Emission Rate (lbs/hr): 21.9
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 11,703.18
 - c. Pollutant: Isopropyl Alcohol
TLV (mg/m³): 983.07
Maximum Hourly Emission Rate (lbs/hr): 21.9
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 23,406.37
 - d. Pollutant: n-Propyl Acetate
TLV (mg/m³): 835.42
Maximum Hourly Emission Rate (lbs/hr): 21.9
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 19,890.93
 - e. Pollutant: Ethyl Acetate
TLV (mg/m³): 1,441.31
Maximum Hourly Emission Rate (lbs/hr): 6.35
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 81.62 ug/m³
MAGLC (ug/m³): 34,316.88
2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that

Emissions Unit ID: K201

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 applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (inks, coatings, adhesives, 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.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where 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.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>	Synthetic Minor to avoid Nonattainment NSR
K202 - Webtron Press #640, continuous narrow web, less than 18 inches, printing operation utilizing flexographic and/or rotary screen transfer technology w/ 5 print station	OAC rule 3745-31-05(A)(3)	
	OAC rule 3745-21-09(Y)(2)(b)	
	OAC rule 3745-31-05(C)	

Applicable Emissions
Limitations/Control
Measures

See A.I.2.a and A.II.1.

Volatile organic compound (VOC) emissions for this emissions unit shall not exceed 25.23 lbs VOC/hour and 20.57 tpy* from a combination of inks, coatings, adhesives, and clean-up material.

* as a 12-month rolling summation

See A.I.2.a.

The requirements of this rule also include compliance with the requirements of OAC rule(s) 3745-21-09(Y)(2)(b) and 3745-31-05(c).

The total maximum coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility shall be less than or equal to one hundred forty-eight tons per year.

Volatile organic compound (VOC) emissions from emissions units K201 - K208 shall not exceed 97.0 tons per rolling 12-month period.

2. Additional Terms and Conditions

2.a The hourly and annual VOC emission limitations are based on the emissions unit's potential to emit*. As such, no specific emission unit emissions monitoring and/or recordkeeping and reporting requirements are necessary in order to demonstrate compliance with these emissions limits.

* The potential to emit calculations, developed from a joint effort between the facility and the Cleveland Division of Air Quality (Cleveland DAQ), reflect the presumed inherent physical limitations through a press allocation of the material usage restriction (148 tons) as found in OAC Rule 3745-21-09(Y)(2)(b).

2.b The new emissions units specified in this permit are K201, K202, K203, K204, K205, K206, K207, and K208.

II. Operational Restrictions

1.

The maximum annual volatile organic material usage for all emissions units referenced in this permit (emissions units K201 - K208) shall not exceed 97.0 tons, based upon a rolling, 12-month summation of the volatile organic material usage figures.

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

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Volatile Organic Material Usage (97.0 Tons)</u>
1	32.3
1-2	40.4
1-3	48.5
1-4	56.6
1-5	64.7
1-6	72.8
1-7	80.9

1-8	89.0
1-9	97.0
1-10	97.0
1-11	97.0
1-12	97.0

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual volatile organic material usage limitation shall be based upon a rolling, 97.0 tons summation of the volatile organic material usage figures.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility and the emissions units specified in Section A.1.2.b:
 - a. the name and identification number of each ink, coating, additive, adhesive, and cleanup material employed;
 - b. the weight, in pounds or tons per month, of each ink, coating, additive, adhesive, and cleanup material employed as applied;
 - c. the VOC content of each ink, coating, additive, adhesive, and cleanup material employed, as applied, in percent by weight;
 - d. the total volatile organic material usage and VOC emissions from all ink, additive, adhesive, and cleanup materials employed calculated by summing the records of [(1.b) x (1.c)] for each ink, coating, additive, adhesive, and cleanup material, and subtracting any recovered material* in pounds or tons per month;
 - e. the rolling, 12-month summation of volatile organic material usage and VOC emissions from all ink, coating, additive, adhesive, and cleanup material employed, in pounds or tons;
 - f. the rolling, 12-month summation of ink, coating, additive, adhesive, and cleanup material employed, in pounds or tons.
- * if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports; records of the total

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amount (gallons or pounds) of the cleanup/purge material collected and added to the recovery tank/drum (for recycle, recovery, and/or disposal at an outside facility) shall be maintained as required in Section A.III.3.

2. The permittee shall collect and record the following information for this emission unit each month:
 - a. the actual monthly press operation hours, in hours per month; and
 - b. the rolling, 12-month summation of the operational press hours.

The permittee shall use this data to verify, upon request by the Cleveland DAQ, that the annual press allocation of material usage and emissions is valid.

3. If a credit for recovered materials is used to demonstrate compliance with all of the flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility and the emissions units specified in Section A.I.2.b and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup/purge materials and the recovery drum, or tank, serving this emissions unit:
 - a. the date the materials from the recovery drum or tank were shipped off site;
 - b. the amount of cleanup/purge material, in gallons or pounds, from the recovery drum or tank shipped off site;
 - c. the average density of the cleanup/purge material, in pounds per gallon, from the recovery drum or tank (if the amount is recorded in gallons);
 - d. the average VOC content for the recovered cleanup/purge material, in percent by weight; and
 - e. the average VOC emissions from the recovered cleanup/purge materials $[(3.b.) \times (3.d.)]$, in pounds. Note the average VOC emissions, in pounds, from the recovered cleanup/purge material is calculated as $[(3.b.) \times (3.c.) \times (3.d.)]$ if the material amount is recorded in gallons.

IV. Reporting Requirements

1. The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) in writing of any monthly record showing that the rolling, 12-month summation of coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility exceeded one hundred forty-eight tons. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ

within 30 days following the end of the calendar month during which they were identified.

2. The permittee shall submit deviation (excursion) reports which include the following information for the emissions units specified in Section A.I.2.b:
 - a. an identification of each month during which the rolling, 12-month volatile organic material usage and VOC emissions exceed 97.0 tons/yr based on a rolling, 12-month summation;

The deviation (excursion) report shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

V. Testing Requirements

1. Compliance with the emission limitation(s) and operational restriction specified in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:

25.23 lbs VOC/hour from a combination of ink, coating, additive, adhesive, and cleanup material.

Applicable Compliance Method:

This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

$$\text{Press Allocation} = (\text{Annual Press Hours, based on CY-2003 data}) / (\text{Total Press Hours for K201 -K208, based on CY-2003 data})$$

$$\text{Annual VOC Emissions By Press} = (\text{Emissions units specified in Section A.I.2.b Material Restriction}) * (\text{Press Allocation}) * (\text{Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data})$$

$$\text{Short Term VOC Emissions (average lb/hr)} = (\text{Annual VOC Emissions By Press})$$

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/ (Annual Mean Press Hours)

PTI Limit Annual VOC Emissions By Press w/ SF # 1 = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation, based on CY-2003 data) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data) * (SF #1)

PTI Limit Short Term VOC Emissions w/ SF # 2 = [(CY 2003 VOC Emissions by Press) / (CY2003 Mean Press Hours)] * (SF # 2)

Safety Factor # 1 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) = 143 %; Therefore, SF # 1 = 1.43 was applied to the annual limit to determine worst case emissions.

Safety Factor # 2 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press AND the error associated with the VOC content of the coatings applied on a specific press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) + (141 %, based on possible range of VOC content per individual coating) = 284 %; Therefore, SF # 2 = 2.84 was applied to the short term limit to determine worst case emissions.

b. Emission Limitation:

20.57 tons VOC/year for K202 from a combination of inks, coatings and adhesives, as a 12-month rolling summation.

Applicable Compliance Method:

This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Press Allocation = (Annual Press Hours, based on CY-2003 data) / (Total Press Hours for K201 -K208, based on CY-2003 data)

Annual VOC Emissions By Press = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data)

PTI Limit Annual VOC Emissions By Press w/ SF # 1 = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation, based on CY-2003 data) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data) * (SF #1)

Safety Factor # 1 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) = 143 %; Therefore, SF # 1 = 1.43 was applied to the annual limit to determine worst case emissions.

Safety Factor # 2 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press AND the error associated with the VOC content of the coatings applied on a specific press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) + (141 %, based on possible range of VOC content per individual coating) = 284 %; Therefore, SF # 2 = 2.84 was applied to the short term limit to determine worst case emissions.

c. Emission Limitation:

97.0 tons (for K201 -K208), VOC per year from a combination of inks, coatings, additives, adhesives, and cleanup materials, as a 12-month rolling summation.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping specified in Section A.III.1.

d. Operational Limitation:

The total maximum coating and ink usage in all flexographic, packaging

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rotogravure, and publication rotogravure printing lines located at this facility shall be less than or equal to one hundred forty-eight tons per year.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section A.III.1.

VI. Miscellaneous Requirements

1. The following terms and conditions are federally enforceable: I, II, III, IV, and V.

B. State Only Enforceable Section

I. 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>	<u>Applicable Emissions Limitations/Control Measures</u>
K202 - Webtron Press #640, continuous narrow web, less than 18 inches, printing operation utilizing flexographic and/or rotary screen transfer technology w/ 5 print stations	None.	None.

2. Additional Terms and Conditions

None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant:

- a. Pollutant: Ethanol
TLV (mg/m³): 1,884.25
Maximum Hourly Emission Rate (lbs/hr): 25.23
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 44,863.18

- b. Pollutant: N-Propyl Alcohol
TLV (mg/m³): 491.53
Maximum Hourly Emission Rate (lbs/hr): 25.23
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 11,703.18

- c. Pollutant: Isopropyl Alcohol
TLV (mg/m³): 983.07
Maximum Hourly Emission Rate (lbs/hr): 25.23
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 23,406.37

- d. Pollutant: n-Propyl Acetate
TLV (mg/m³): 835.42
Maximum Hourly Emission Rate (lbs/hr): 25.23
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 19,890.93

- e. Pollutant: Ethyl Acetate
TLV (mg/m³): 1,441.31
Maximum Hourly Emission Rate (lbs/hr): 7.32
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 81.62 ug/m³
MAGLC (ug/m³): 34,316.88

2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying the "Air Toxic Policy" include the following:
 - a. changes in the composition of the materials used (inks, coatings, adhesives, 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.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still satisfy the "Air Toxic Policy:"
 - a. a description of the parameters changed (composition of materials, new pollutants emitted, change in stack/exhaust parameters, etc.);

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- b. documentation of its evaluation and determination that the changed emissions unit still satisfies the "Air Toxic Policy"; and,
- c. where 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.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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PTI A
Issued: 1/9/2006

Emissions Unit ID: K203

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>	Synthetic Minor to avoid Nonattainment NSR
K203 - Webtron/Duraflex Press #643, continuous narrow web, less than 18 inches, printing operation utilizing flexographic and/or rotary screen transfer technology w/ 5 print stations	OAC rule 3745-31-05(A)(3)	
	OAC rule 3745-21-09(Y)(2)(b)	
	OAC rule 3745-31-05(C)	

Avery
PTI A
Issued: 1/9/2006

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Applicable Emissions
Limitations/Control
Measures

Volatile organic compound (VOC) emissions for this emissions unit shall not exceed 21.11 lbs VOC/hour and 17.21 tpy* from a combination of inks, coatings, adhesives, and clean-up material.

* as a 12-month rolling summation

See A.I.2.a.

The requirements of this rule also include compliance with the requirements of OAC rule(s) 3745-21-09(Y)(2)(b) and 3745-31-05(c).

The total maximum coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility shall be less than or equal to one hundred forty-eight tons per year.

Volatile organic compound (VOC)

emissions from emissions units K201 - K208 shall not exceed 97.0 tons per rolling 12-month period.

See A.I.2.a and A.II.1.

2. Additional Terms and Conditions

2.a The hourly and annual VOC emission limitations are based on the emissions unit's potential to emit*. As such, no specific emission unit emissions monitoring and/or recordkeeping and reporting requirements are necessary in order to demonstrate compliance with these emissions limits.

* The potential to emit calculations, developed from a joint effort between the facility and the Cleveland Division of Air Quality (Cleveland DAQ), reflect the presumed inherent physical limitations through a press allocation of the material usage restriction (148 tons) as found in OAC Rule 3745-21-09(Y)(2)(b).

2.b The new emissions units specified in this permit are K201, K202, K203, K204, K205, K206, K207, and K208.

II. Operational Restrictions

1.

The maximum annual volatile organic material usage for all emissions units referenced in this permit (emissions units K201 - K208) shall not exceed 97.0 tons, based upon a rolling, 12-month summation of the volatile organic material usage figures.

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

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Volatile Organic Material Usage (97.0 Tons)</u>
1	32.3
1-2	40.4
1-3	48.5
1-4	56.6
1-5	64.7
1-6	72.8
1-7	80.9

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1-8	89.0
1-9	97.0
1-10	97.0
1-11	97.0
1-12	97.0

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual volatile organic material usage limitation shall be based upon a rolling, 97.0 tons summation of the volatile organic material usage figures.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility and the emissions units specified in Section A.I.2.b:
 - a. the name and identification number of each ink, coating, additive, adhesive, and cleanup material employed;
 - b. the weight, in pounds or tons per month, of each ink, coating, additive, adhesive, and cleanup material employed as applied;
 - c. the VOC content of each ink, coating, additive, adhesive, and cleanup material employed, as applied, in percent by weight;
 - d. the total volatile organic material usage and VOC emissions from all ink, additive, adhesive, and cleanup materials employed calculated by summing the records of [(1.b) x (1.c)] for each ink, coating, additive, adhesive, and cleanup material, and subtracting any recovered material* in pounds or tons per month;
 - e. the rolling, 12-month summation of volatile organic material usage and VOC emissions from all ink, coating, additive, adhesive, and cleanup material employed, in pounds or tons;
 - f. the rolling, 12-month summation of ink, coating, additive, adhesive, and cleanup material employed, in pounds or tons.
- * if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports; records of the total amount (gallons or pounds) of the cleanup/purge material collected and added to the recovery tank/drum (for recycle, recovery, and/or disposal at an outside facility) shall be maintained as required in Section A.III.3.

2. The permittee shall collect and record the following information for this emission unit each month:
 - a. the actual monthly press operation hours, in hours per month; and
 - b. the rolling, 12-month summation of the operational press hours.

The permittee shall use this data to verify, upon request by the Cleveland DAQ, that the annual press allocation of material usage and emissions is valid.

3. If a credit for recovered materials is used to demonstrate compliance with all of the flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility and the emissions units specified in Section A.I.2.b and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup/purge materials and the recovery drum, or tank, serving this emissions unit:
 - a. the date the materials from the recovery drum or tank were shipped off site;
 - b. the amount of cleanup/purge material, in gallons or pounds, from the recovery drum or tank shipped off site;
 - c. the average density of the cleanup/purge material, in pounds per gallon, from the recovery drum or tank (if the amount is recorded in gallons);
 - d. the average VOC content for the recovered cleanup/purge material, in percent by weight; and
 - e. the average VOC emissions from the recovered cleanup/purge materials $[(3.b.) \times (3.d.)]$, in pounds. Note the average VOC emissions, in pounds, from the recovered cleanup/purge material is calculated as $[(3.b.) \times (3.c.) \times (3.d.)]$ if the material amount is recorded in gallons.

IV. Reporting Requirements

1. The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) in writing of any monthly record showing that the rolling, 12-month summation of coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility exceeded one hundred forty-eight tons. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ

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within 30 days following the end of the calendar month during which they were identified.

2. The permittee shall submit deviation (excursion) reports which include the following information for the emissions units specified in Section A.I.2.b:
 - a. an identification of each month during which the rolling, 12-month volatile organic material usage and VOC emissions exceed 97.0 tons/yr based on a rolling, 12-month summation;

The deviation (excursion) report shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

V. Testing Requirements

1. Compliance with the emission limitation(s) and operational restriction specified in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:

21.11 lbs VOC/hour from a combination of ink, coating, additive, adhesive, and cleanup material.

Applicable Compliance Method:

This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

$$\text{Press Allocation} = (\text{Annual Press Hours, based on CY-2003 data}) / (\text{Total Press Hours for K201 -K208, based on CY-2003 data})$$

$$\text{Annual VOC Emissions By Press} = (\text{Emissions units specified in Section A.I.2.b Material Restriction}) * (\text{Press Allocation}) * (\text{Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data})$$

$$\text{Short Term VOC Emissions (average lb/hr)} = (\text{Annual VOC Emissions By Press}) / (\text{Annual Mean Press Hours})$$

$$\text{PTI Limit Annual VOC Emissions By Press w/ SF \# 1} = (\text{Emissions units specified in Section A.I.2.b Material Restriction}) * (\text{Press Allocation, based on})$$

CY-2003 data) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data) * (SF #1)

PTI Limit Short Term VOC Emissions w/ SF # 2 = [(CY 2003 VOC Emissions by Press) / (CY2003 Mean Press Hours)] * (SF # 2)

Safety Factor # 1 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) = 143 %; Therefore, SF # 1 = 1.43 was applied to the annual limit to determine worst case emissions.

Safety Factor # 2 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press AND the error associated with the VOC content of the coatings applied on a specific press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) + (141 %, based on possible range of VOC content per individual coating) = 284 %; Therefore, SF # 2 = 2.84 was applied to the short term limit to determine worst case emissions.

b. Emission Limitation:

17.21 tons VOC/year for K203 from a combination of inks, coatings and adhesives, as a 12-month rolling summation.

Applicable Compliance Method:

This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Press Allocation = (Annual Press Hours, based on CY-2003 data) / (Total Press Hours for K201 -K208, based on CY-2003 data)

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Annual VOC Emissions By Press = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data)

PTI Limit Annual VOC Emissions By Press w/ SF # 1 = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation, based on CY-2003 data) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data) * (SF #1)

Safety Factor # 1 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) = 143 %; Therefore, SF # 1 = 1.43 was applied to the annual limit to determine worst case emissions.

Safety Factor # 2 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press AND the error associated with the VOC content of the coatings applied on a specific press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) + (141 %, based on possible range of VOC content per individual coating) = 284 %; Therefore, SF # 2 = 2.84 was applied to the short term limit to determine worst case emissions.

- c. Emission Limitation:
97.0 tons (for K201 -K208), VOC per year from a combination of inks, coatings, additives, adhesives, and cleanup materials, as a 12-month rolling summation.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping specified in Section A.III.1.

- d. Operational Limitation:
The total maximum coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility shall be less than or equal to one hundred forty-eight tons per year.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section A.III.1.

VI. Miscellaneous Requirements

1. The following terms and conditions are federally enforceable: I, II, III, IV, and V.

B. State Only Enforceable Section

I. 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>	<u>Applicable Emissions Limitations/Control Measures</u>
K203 - Webtron/Duraflex Press #643, continuous narrow web, less than 18 inches, printing operation utilizing flexographic and/or rotary screen transfer technology w/ 5 print stations	None.	None.

2. Additional Terms and Conditions

None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit 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 Acceptable Ground-Level Concentration (MAGLC). The following

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summarizes the results of the modeling for the "worst case" pollutant:

- a. Pollutant: Ethanol
TLV (mg/m3): 1,884.25
Maximum Hourly Emission Rate (lbs/hr): 21.11
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 281.2 ug/m3
MAGLC (ug/m3): 44,863.18
 - b. Pollutant: N-Propyl Alcohol
TLV (mg/m3): 491.53
Maximum Hourly Emission Rate (lbs/hr): 21.11
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 281.2 ug/m3
MAGLC (ug/m3): 11,703.18
 - c. Pollutant: Isopropyl Alcohol
TLV (mg/m3): 983.07
Maximum Hourly Emission Rate (lbs/hr): 21.11
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 281.2 ug/m3
MAGLC (ug/m3): 23,406.37
 - d. Pollutant: n-Propyl Acetate
TLV (mg/m3): 835.42
Maximum Hourly Emission Rate (lbs/hr): 21.11
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 281.2 ug/m3
MAGLC (ug/m3): 19,890.93
 - e. Pollutant: Ethyl Acetate
TLV (mg/m3): 1,441.31
Maximum Hourly Emission Rate (lbs/hr): 6.12
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 81.62 ug/m3
MAGLC (ug/m3): 34,316.88
2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying the "Air Toxic

Policy" include the following:

- a. changes in the composition of the materials used (inks, coatings, adhesives, 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.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where 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.

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IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>	Synthetic Minor to avoid Nonattainment NSR
K204 - M. Andy Press #667, continuous narrow web, less than 18 inches, printing operation utilizing flexographic and/or rotary screen transfer technology w/ 6 print stations	OAC rule 3745-31-05(A)(3)	
	OAC rule 3745-21-09(Y)(2)(b)	
	OAC rule 3745-31-05(C)	

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Applicable Emissions
Limitations/Control
Measures

Volatile organic compound (VOC) emissions for this emissions unit shall not exceed 22.96 lbs VOC/hour and 18.72 tpy* from a combination of inks, coatings, adhesives, and clean-up material.

* as a 12-month rolling summation

See A.I.2.a.

The requirements of this rule also include compliance with the requirements of OAC rule(s) 3745-21-09(Y)(2)(b) and 3745-31-05(c).

The total maximum coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility shall be less than or equal to one hundred forty-eight tons per year.

Volatile organic compound (VOC)

emissions from emissions units K201 - K208 shall not exceed 97.0 tons per rolling 12-month period.

See A.I.2.a and A.II.1.

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2. Additional Terms and Conditions

2.a The hourly and annual VOC emission limitations are based on the emissions unit's potential to emit*. As such, no specific emission unit emissions monitoring and/or recordkeeping and reporting requirements are necessary in order to demonstrate compliance with these emissions limits.

* The potential to emit calculations, developed from a joint effort between the facility and the Cleveland Division of Air Quality (Cleveland DAQ), reflect the presumed inherent physical limitations through a press allocation of the material usage restriction (148 tons) as found in OAC Rule 3745-21-09(Y)(2)(b).

2.b The new emissions units specified in this permit are K201, K202, K203, K204, K205, K206, K207, and K208.

II. Operational Restrictions

1.

The maximum annual volatile organic material usage for all emissions units referenced in this permit (emissions units K201 - K208) shall not exceed 97.0 tons, based upon a rolling, 12-month summation of the volatile organic material usage figures.

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

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Volatile Organic Material Usage (97.0 Tons)</u>
1	32.3
1-2	40.4
1-3	48.5
1-4	56.6
1-5	64.7
1-6	72.8
1-7	80.9
1-8	89.0

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1-9	97.0
1-10	97.0
1-11	97.0
1-12	97.0

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual volatile organic material usage limitation shall be based upon a rolling, 97.0 tons summation of the volatile organic material usage figures.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility and the emissions units specified in Section A.I.2.b:
 - a. the name and identification number of each ink, coating, additive, adhesive, and cleanup material employed;
 - b. the weight, in pounds or tons per month, of each ink, coating, additive, adhesive, and cleanup material employed as applied;
 - c. the VOC content of each ink, coating, additive, adhesive, and cleanup material employed, as applied, in percent by weight;
 - d. the total volatile organic material usage and VOC emissions from all ink, additive, adhesive, and cleanup materials employed calculated by summing the records of [(1.b) x (1.c)] for each ink, coating, additive, adhesive, and cleanup material, and subtracting any recovered material* in pounds or tons per month;
 - e. the rolling, 12-month summation of volatile organic material usage and VOC emissions from all ink, coating, additive, adhesive, and cleanup material employed, in pounds or tons;
 - f. the rolling, 12-month summation of ink, coating, additive, adhesive, and cleanup material employed, in pounds or tons.
- * if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports; records of the total amount (gallons or pounds) of the cleanup/purge material collected and added

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to the recovery tank/drum (for recycle, recovery, and/or disposal at an outside facility) shall be maintained as required in Section A.III.3.

2. The permittee shall collect and record the following information for this emission unit each month:
 - a. the actual monthly press operation hours, in hours per month; and
 - b. the rolling, 12-month summation of the operational press hours.

The permittee shall use this data to verify, upon request by the Cleveland DAQ, that the annual press allocation of material usage and emissions is valid.

3. If a credit for recovered materials is used to demonstrate compliance with all of the flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility and the emissions units specified in Section A.I.2.b and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup/purge materials and the recovery drum, or tank, serving this emissions unit:
 - a. the date the materials from the recovery drum or tank were shipped off site;
 - b. the amount of cleanup/purge material, in gallons or pounds, from the recovery drum or tank shipped off site;
 - c. the average density of the cleanup/purge material, in pounds per gallon, from the recovery drum or tank (if the amount is recorded in gallons);
 - d. the average VOC content for the recovered cleanup/purge material, in percent by weight; and
 - e. the average VOC emissions from the recovered cleanup/purge materials $[(3.b.) \times (3.d.)]$, in pounds. Note the average VOC emissions, in pounds, from the recovered cleanup/purge material is calculated as $[(3.b.) \times (3.c.) \times (3.d.)]$ if the material amount is recorded in gallons.

IV. Reporting Requirements

1. The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) in writing of any monthly record showing that the rolling, 12-month summation of coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility exceeded one hundred forty-eight tons. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified.

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2. The permittee shall submit deviation (excursion) reports which include the following information for the emissions units specified in Section A.I.2.b:
 - a. an identification of each month during which the rolling, 12-month volatile organic material usage and VOC emissions exceed 97.0 tons/yr based on a rolling, 12-month summation;

The deviation (excursion) report shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

V. Testing Requirements

1. Compliance with the emission limitation(s) and operational restriction specified in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:

22.96 lbs VOC/hour from a combination of ink, coating, additive, adhesive, and cleanup material.

Applicable Compliance Method:

This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Press Allocation = (Annual Press Hours, based on CY-2003 data) / (Total Press Hours for K201 -K208, based on CY-2003 data)

Annual VOC Emissions By Press = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data)

Short Term VOC Emissions (average lb/hr) = (Annual VOC Emissions By Press) / (Annual Mean Press Hours)

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PTI Limit Annual VOC Emissions By Press w/ SF # 1 = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation, based on CY-2003 data) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data) * (SF #1)

PTI Limit Short Term VOC Emissions w/ SF # 2 = [(CY 2003 VOC Emissions by Press) / (CY2003 Mean Press Hours)] * (SF # 2)

Safety Factor # 1 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) = 143 %; Therefore, SF # 1 = 1.43 was applied to the annual limit to determine worst case emissions.

Safety Factor # 2 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press AND the error associated with the VOC content of the coatings applied on a specific press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) + (141 %, based on possible range of VOC content per individual coating) = 284 %; Therefore, SF # 2 = 2.84 was applied to the short term limit to determine worst case emissions.

b. Emission Limitation:

18.72 tons VOC/year for K204 from a combination of inks, coatings and adhesives, as a 12-month rolling summation.

Applicable Compliance Method:

This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Press Allocation = (Annual Press Hours, based on CY-2003 data) / (Total Press Hours for K201 -K208, based on CY-2003 data)

Annual VOC Emissions By Press = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data)

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PTI Limit Annual VOC Emissions By Press w/ SF # 1 = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation, based on CY-2003 data) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data) * (SF #1)

Safety Factor # 1 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) = 143 %; Therefore, SF # 1 = 1.43 was applied to the annual limit to determine worst case emissions.

Safety Factor # 2 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press AND the error associated with the VOC content of the coatings applied on a specific press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) + (141 %, based on possible range of VOC content per individual coating) = 284 %; Therefore, SF # 2 = 2.84 was applied to the short term limit to determine worst case emissions.

- c. Emission Limitation:
 97.0 tons (for K201 -K208), VOC per year from a combination of inks, coatings, additives, adhesives, and cleanup materials, as a 12-month rolling summation.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping specified in Section A.III.1.

- d. Operational Limitation:
 The total maximum coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility shall be less than or equal to one hundred forty-eight tons per year.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section A.III.1.

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VI. Miscellaneous Requirements

1. The following terms and conditions are federally enforceable: I, II, III, IV, and V.

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B. State Only Enforceable Section

I. 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>	<u>Applicable Emissions Limitations/Control Measures</u>
K204 - M. Andy Press #667, continuous narrow web, less than 18 inches, printing operation utilizing flexographic and/or rotary screen transfer technology w/ 6 print stations	None.	None.

2. **Additional Terms and Conditions**

None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit 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

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Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant:

- a. Pollutant: Ethanol
TLV (mg/m³): 1,884.25
Maximum Hourly Emission Rate (lbs/hr): 22.96
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 44,863.18
 - b. Pollutant: N-Propyl Alcohol
TLV (mg/m³): 491.53
Maximum Hourly Emission Rate (lbs/hr): 22.96
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 11,703.18
 - c. Pollutant: Isopropyl Alcohol
TLV (mg/m³): 983.07
Maximum Hourly Emission Rate (lbs/hr): 22.96
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 23,406.37
 - d. Pollutant: n-Propyl Acetate
TLV (mg/m³): 835.42
Maximum Hourly Emission Rate (lbs/hr): 22.96
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 19,890.93
 - e. Pollutant: Ethyl Acetate
TLV (mg/m³): 1,441.31
Maximum Hourly Emission Rate (lbs/hr): 6.70
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 81.62 ug/m³
MAGLC (ug/m³): 34,316.88
2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether

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or not the "Air Toxic 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 applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (inks, coatings, adhesives, 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.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where 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.

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IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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 Emissions Unit ID: K205

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>	Synthetic Minor to avoid Nonattainment NSR
K205 - M. Andy Press #669, continuous narrow web, less than 18 inches, printing operation utilizing flexographic and/or rotary screen transfer technology w/ 6 print stations	OAC rule 3745-31-05(A)(3)	
	OAC rule 3745-21-09(Y)(2)(b)	
	OAC rule 3745-31-05(C)	

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Applicable Emissions
Limitations/Control
Measures

See A.I.2.a and A.II.1.

Volatile organic compound (VOC) emissions for this emissions unit shall not exceed 24.56 lbs VOC/hour and 20.02 tpy* from a combination of inks, coatings, adhesives, and clean-up material.

* as a 12-month rolling summation

See A.I.2.a.

The requirements of this rule also include compliance with the requirements of OAC rule(s) 3745-21-09(Y)(2)(b) and 3745-31-05(c).

The total maximum coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility shall be less than or equal to one hundred forty-eight tons per year.

Volatile organic compound (VOC) emissions from emissions units K201 - K208 shall not exceed 97.0 tons per rolling 12-month period.

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2. Additional Terms and Conditions

2.a The hourly and annual VOC emission limitations are based on the emissions unit's potential to emit*. As such, no specific emission unit emissions monitoring and/or recordkeeping and reporting requirements are necessary in order to demonstrate compliance with these emissions limits.

* The potential to emit calculations, developed from a joint effort between the facility and the Cleveland Division of Air Quality (Cleveland DAQ), reflect the presumed inherent physical limitations through a press allocation of the material usage restriction (148 tons) as found in OAC Rule 3745-21-09(Y)(2)(b).

2.b The new emissions units specified in this permit are K201, K202, K203, K204, K205, K206, K207, and K208.

II. Operational Restrictions

1.

The maximum annual volatile organic material usage for all emissions units referenced in this permit (emissions units K201 - K208) shall not exceed 97.0 tons, based upon a rolling, 12-month summation of the volatile organic material usage figures.

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

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Volatile Organic Material Usage (97.0 Tons)</u>
1	32.3
1-2	40.4
1-3	48.5
1-4	56.6
1-5	64.7
1-6	72.8
1-7	80.9
1-8	89.0

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1-9	97.0
1-10	97.0
1-11	97.0
1-12	97.0

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual volatile organic material usage limitation shall be based upon a rolling, 97.0 tons summation of the volatile organic material usage figures.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility and the emissions units specified in Section A.I.2.b:
 - a. the name and identification number of each ink, coating, additive, adhesive, and cleanup material employed;
 - b. the weight, in pounds or tons per month, of each ink, coating, additive, adhesive, and cleanup material employed as applied;
 - c. the VOC content of each ink, coating, additive, adhesive, and cleanup material employed, as applied, in percent by weight;
 - d. the total volatile organic material usage and VOC emissions from all ink, additive, adhesive, and cleanup materials employed calculated by summing the records of [(1.b) x (1.c)] for each ink, coating, additive, adhesive, and cleanup material, and subtracting any recovered material* in pounds or tons per month;
 - e. the rolling, 12-month summation of volatile organic material usage and VOC emissions from all ink, coating, additive, adhesive, and cleanup material employed, in pounds or tons;
 - f. the rolling, 12-month summation of ink, coating, additive, adhesive, and cleanup material employed, in pounds or tons.
- * if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports; records of the total amount (gallons or pounds) of the cleanup/purge material collected and added

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to the recovery tank/drum (for recycle, recovery, and/or disposal at an outside facility) shall be maintained as required in Section A.III.3.

2. The permittee shall collect and record the following information for this emission unit each month:
 - a. the actual monthly press operation hours, in hours per month; and
 - b. the rolling, 12-month summation of the operational press hours.

The permittee shall use this data to verify, upon request by the Cleveland DAQ, that the annual press allocation of material usage and emissions is valid.

3. If a credit for recovered materials is used to demonstrate compliance with all of the flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility and the emissions units specified in Section A.I.2.b and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup/purge materials and the recovery drum, or tank, serving this emissions unit:
 - a. the date the materials from the recovery drum or tank were shipped off site;
 - b. the amount of cleanup/purge material, in gallons or pounds, from the recovery drum or tank shipped off site;
 - c. the average density of the cleanup/purge material, in pounds per gallon, from the recovery drum or tank (if the amount is recorded in gallons);
 - d. the average VOC content for the recovered cleanup/purge material, in percent by weight; and
 - e. the average VOC emissions from the recovered cleanup/purge materials $[(3.b.) \times (3.d.)]$, in pounds. Note the average VOC emissions, in pounds, from the recovered cleanup/purge material is calculated as $[(3.b.) \times (3.c.) \times (3.d.)]$ if the material amount is recorded in gallons.

IV. Reporting Requirements

1. The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) in writing of any monthly record showing that the rolling, 12-month summation of coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility exceeded one hundred forty-eight tons. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified.

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2. The permittee shall submit deviation (excursion) reports which include the following information for the emissions units specified in Section A.I.2.b:
 - a. an identification of each month during which the rolling, 12-month volatile organic material usage and VOC emissions exceed 97.0 tons/yr based on a rolling, 12-month summation;

The deviation (excursion) report shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

V. Testing Requirements

1. Compliance with the emission limitation(s) and operational restriction specified in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:

24.56 lbs VOC/hour from a combination of ink, coating, additive, adhesive, and cleanup material.

Applicable Compliance Method:

This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Press Allocation = (Annual Press Hours, based on CY-2003 data) / (Total Press Hours for K201 -K208, based on CY-2003 data)

Annual VOC Emissions By Press = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data)

Short Term VOC Emissions (average lb/hr) = (Annual VOC Emissions By Press) / (Annual Mean Press Hours)

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PTI Limit Annual VOC Emissions By Press w/ SF # 1 = (Emissions units specified in Section A.1.2.b Material Restriction) * (Press Allocation, based on CY-2003 data) * (Average VOC Content of all Materials from the emissions units specified in Section A.1.2.b, based on CY-2003 data) * (SF #1)

PTI Limit Short Term VOC Emissions w/ SF # 2 = [(CY 2003 VOC Emissions by Press) / (CY2003 Mean Press Hours)] * (SF # 2)

Safety Factor # 1 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.1.2.b ink usage by individual press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) = 143 %; Therefore, SF # 1 = 1.43 was applied to the annual limit to determine worst case emissions.

Safety Factor # 2 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.1.2.b ink usage by individual press AND the error associated with the VOC content of the coatings applied on a specific press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) + (141 %, based on possible range of VOC content per individual coating) = 284 %; Therefore, SF # 2 = 2.84 was applied to the short term limit to determine worst case emissions.

b. Emission Limitation:

20.02 tons VOC/year for K205 from a combination of inks, coatings and adhesives, as a 12-month rolling summation.

Applicable Compliance Method:

This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Press Allocation = (Annual Press Hours, based on CY-2003 data) / (Total Press Hours for K201 -K208, based on CY-2003 data)

Annual VOC Emissions By Press = (Emissions units specified in Section A.1.2.b Material Restriction) * (Press Allocation) * (Average VOC Content of all Materials from the emissions units specified in Section A.1.2.b, based on CY-2003 data)

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PTI Limit Annual VOC Emissions By Press w/ SF # 1 = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation, based on CY-2003 data) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data) * (SF #1)

Safety Factor # 1 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) = 143 %; Therefore, SF # 1 = 1.43 was applied to the annual limit to determine worst case emissions.

Safety Factor # 2 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press AND the error associated with the VOC content of the coatings applied on a specific press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) + (141 %, based on possible range of VOC content per individual coating) = 284 %; Therefore, SF # 2 = 2.84 was applied to the short term limit to determine worst case emissions.

- c. Emission Limitation:
 97.0 tons (for K201 -K208), VOC per year from a combination of inks, coatings, additives, adhesives, and cleanup materials, as a 12-month rolling summation.

Applicable Compliance Method:
 Compliance shall be determined based upon the record keeping specified in Section A.III.1.

- d. Operational Limitation:
 The total maximum coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility shall be less than or equal to one hundred forty-eight tons per year.

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Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in
Section A.III.1.

VI. Miscellaneous Requirements

1. The following terms and conditions are federally enforceable: I, II, III, IV, and V.

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B. State Only Enforceable Section

I. 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>	<u>Applicable Emissions Limitations/Control Measures</u>
K205 - M. Andy Press #669, continuous narrow web, less than 18 inches, printing operation utilizing flexographic and/or rotary screen transfer technology w/ 6 print stations	None.	None.

2. Additional Terms and Conditions

None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

1. The permit to install for this emissions unit 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant:

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- a. Pollutant: Ethanol
TLV (mg/m³): 1,884.25
Maximum Hourly Emission Rate (lbs/hr): 24.56
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 44,863.18
 - b. Pollutant: N-Propyl Alcohol
TLV (mg/m³): 491.53
Maximum Hourly Emission Rate (lbs/hr): 24.56
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 11,703.18
 - c. Pollutant: Isopropyl Alcohol
TLV (mg/m³): 983.07
Maximum Hourly Emission Rate (lbs/hr): 24.56
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 23,406.37
 - d. Pollutant: n-Propyl Acetate
TLV (mg/m³): 835.42
Maximum Hourly Emission Rate (lbs/hr): 24.56
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 19,890.93
 - e. Pollutant: Ethyl Acetate
TLV (mg/m³): 1,441.31
Maximum Hourly Emission Rate (lbs/hr): 7.12
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 81.62 ug/m³
MAGLC (ug/m³): 34,316.88
2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine

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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 applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (inks, coatings, adhesives, 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.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where 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.

IV. Reporting Requirements

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None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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Emissions Unit ID: K206

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>	Synthetic Minor to avoid Nonattainment NSR
K206 - Arsoma Press 680, continuous narrow web, less than 18 inches, printing operation utilizing flexographic and/or rotary screen transfer technology w/ 6 print stations (AKA Press # 340 and formerly 13.18.00.1435 EU K002).	OAC rule 3745-31-05(A)(3)	
	OAC rule 3745-21-09(Y)(2)(b)	
	OAC rule 3745-31-05(C)	

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Emissions Unit ID: K206

Applicable Emissions
Limitations/Control
Measures

See A.I.2.a and A.II.1.

Volatile organic compound (VOC) emissions for this emissions unit shall not exceed 18.84 lbs VOC/hour and 15.36 tpy* from a combination of inks, coatings, adhesives, and clean-up material.

* as a 12-month rolling summation

See A.I.2.a.

The requirements of this rule also include compliance with the requirements of OAC rule(s) 3745-21-09(Y)(2)(b) and 3745-31-05(c).

The total maximum coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility shall be less than or equal to one hundred forty-eight tons per year.

Volatile organic compound (VOC) emissions from emissions units K201 - K208 shall not exceed 97.0 tons per rolling 12-month period.

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Emissions Unit ID: K206

2. Additional Terms and Conditions

2.a The hourly and annual VOC emission limitations are based on the emissions unit's potential to emit*. As such, no specific emission unit emissions monitoring and/or recordkeeping and reporting requirements are necessary in order to demonstrate compliance with these emissions limits.

* The potential to emit calculations, developed from a joint effort between the facility and the Cleveland Division of Air Quality (Cleveland DAQ), reflect the presumed inherent physical limitations through a press allocation of the material usage restriction (148 tons) as found in OAC Rule 3745-21-09(Y)(2)(b).

2.b The new emissions units specified in this permit are K201, K202, K203, K204, K205, K206, K207, and K208.

II. Operational Restrictions

1.

The maximum annual volatile organic material usage for all emissions units referenced in this permit (emissions units K201 - K208) shall not exceed 97.0 tons, based upon a rolling, 12-month summation of the volatile organic material usage figures.

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

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Volatile Organic Material Usage (97.0 Tons)</u>
1	32.3
1-2	40.4
1-3	48.5
1-4	56.6
1-5	64.7
1-6	72.8
1-7	80.9
1-8	89.0

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1-9	97.0
1-10	97.0
1-11	97.0
1-12	97.0

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual volatile organic material usage limitation shall be based upon a rolling, 97.0 tons summation of the volatile organic material usage figures.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility and the emissions units specified in Section A.I.2.b:
 - a. the name and identification number of each ink, coating, additive, adhesive, and cleanup material employed;
 - b. the weight, in pounds or tons per month, of each ink, coating, additive, adhesive, and cleanup material employed as applied;
 - c. the VOC content of each ink, coating, additive, adhesive, and cleanup material employed, as applied, in percent by weight;
 - d. the total volatile organic material usage and VOC emissions from all ink, additive, adhesive, and cleanup materials employed calculated by summing the records of [(1.b) x (1.c)] for each ink, coating, additive, adhesive, and cleanup material, and subtracting any recovered material* in pounds or tons per month;
 - e. the rolling, 12-month summation of volatile organic material usage and VOC emissions from all ink, coating, additive, adhesive, and cleanup material employed, in pounds or tons;
 - f. the rolling, 12-month summation of ink, coating, additive, adhesive, and cleanup material employed, in pounds or tons.
- * if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports; records of the total amount (gallons or pounds) of the cleanup/purge material collected and added

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to the recovery tank/drum (for recycle, recovery, and/or disposal at an outside facility) shall be maintained as required in Section A.III.3.

2. The permittee shall collect and record the following information for this emission unit each month:
 - a. the actual monthly press operation hours, in hours per month; and
 - b. the rolling, 12-month summation of the operational press hours.

The permittee shall use this data to verify, upon request by the Cleveland DAQ, that the annual press allocation of material usage and emissions is valid.

3. If a credit for recovered materials is used to demonstrate compliance with all of the flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility and the emissions units specified in Section A.I.2.b and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup/purge materials and the recovery drum, or tank, serving this emissions unit:
 - a. the date the materials from the recovery drum or tank were shipped off site;
 - b. the amount of cleanup/purge material, in gallons or pounds, from the recovery drum or tank shipped off site;
 - c. the average density of the cleanup/purge material, in pounds per gallon, from the recovery drum or tank (if the amount is recorded in gallons);
 - d. the average VOC content for the recovered cleanup/purge material, in percent by weight; and
 - e. the average VOC emissions from the recovered cleanup/purge materials $[(3.b.) \times (3.d.)]$, in pounds. Note the average VOC emissions, in pounds, from the recovered cleanup/purge material is calculated as $[(3.b.) \times (3.c.) \times (3.d.)]$ if the material amount is recorded in gallons.

IV. Reporting Requirements

1. The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) in writing of any monthly record showing that the rolling, 12-month summation of coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility exceeded one hundred forty-eight tons. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified.

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2. The permittee shall submit deviation (excursion) reports which include the following information for the emissions units specified in Section A.I.2.b:
 - a. an identification of each month during which the rolling, 12-month volatile organic material usage and VOC emissions exceed 97.0 tons/yr based on a rolling, 12-month summation;

The deviation (excursion) report shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

V. Testing Requirements

1. Compliance with the emission limitation(s) and operational restriction specified in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):

- a. Emission Limitation:

18.84 lbs VOC/hour from a combination of ink, coating, additive, adhesive, and cleanup material.

Applicable Compliance Method:

This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Press Allocation = (Annual Press Hours, based on CY-2003 data) / (Total Press Hours for K201 -K208, based on CY-2003 data)

Annual VOC Emissions By Press = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data)

Short Term VOC Emissions (average lb/hr) = (Annual VOC Emissions By Press) / (Annual Mean Press Hours)

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PTI Limit Annual VOC Emissions By Press w/ SF # 1 = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation, based on CY-2003 data) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data) * (SF #1)

PTI Limit Short Term VOC Emissions w/ SF # 2 = [(CY 2003 VOC Emissions by Press) / (CY2003 Mean Press Hours)] * (SF # 2)

Safety Factor # 1 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) = 143 %; Therefore, SF # 1 = 1.43 was applied to the annual limit to determine worst case emissions.

Safety Factor # 2 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press AND the error associated with the VOC content of the coatings applied on a specific press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) + (141 %, based on possible range of VOC content per individual coating) = 284 %; Therefore, SF # 2 = 2.84 was applied to the short term limit to determine worst case emissions.

b. Emission Limitation:

15.36 tons VOC/year for K206 from a combination of inks, coatings and adhesives, as a 12-month rolling summation.

Applicable Compliance Method:

This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Press Allocation = (Annual Press Hours, based on CY-2003 data) / (Total Press Hours for K201 -K208, based on CY-2003 data)

Annual VOC Emissions By Press = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data)

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PTI Limit Annual VOC Emissions By Press w/ SF # 1 = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation, based on CY-2003 data) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data) * (SF #1)

Safety Factor # 1 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) = 143 %; Therefore, SF # 1 = 1.43 was applied to the annual limit to determine worst case emissions.

Safety Factor # 2 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press AND the error associated with the VOC content of the coatings applied on a specific press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) + (141 %, based on possible range of VOC content per individual coating) = 284 %; Therefore, SF # 2 = 2.84 was applied to the short term limit to determine worst case emissions.

- c. Emission Limitation:
97.0 tons (for K201 -K208), VOC per year from a combination of inks, coatings, additives, adhesives, and cleanup materials, as a 12-month rolling summation.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping specified in Section A.III.1.

- d. Operational Limitation:
The total maximum coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility shall be less than or equal to one hundred forty-eight tons per year.

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Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in
Section A.III.1.

VI. Miscellaneous Requirements

1. The following terms and conditions are federally enforceable: I, II, III, IV, and V.

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B. State Only Enforceable Section

- I. 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>	<u>Applicable Emissions Limitations/Control Measures</u>
K206 - Arsoma Press 680, continuous narrow web, less than 18 inches, printing operation utilizing flexographic and/or rotary screen transfer technology w/ 6 print stations (AKA Press # 340)	None.	None.

2. Additional Terms and Conditions

None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

- 1. The permit to install for this emissions unit 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant:

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- a. Pollutant: Ethanol
TLV (mg/m3): 1,884.25
Maximum Hourly Emission Rate (lbs/hr): 18.84
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 281.2 ug/m3
MAGLC (ug/m3): 44,863.18
 - b. Pollutant: N-Propyl Alcohol
TLV (mg/m3): 491.53
Maximum Hourly Emission Rate (lbs/hr): 18.84
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 281.2 ug/m3
MAGLC (ug/m3): 11,703.18
 - c. Pollutant: Isopropyl Alcohol
TLV (mg/m3): 983.07
Maximum Hourly Emission Rate (lbs/hr): 18.84
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 281.2 ug/m3
MAGLC (ug/m3): 23,406.37
 - d. Pollutant: n-Propyl Acetate
TLV (mg/m3): 835.42
Maximum Hourly Emission Rate (lbs/hr): 18.84
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 281.2 ug/m3
MAGLC (ug/m3): 19,890.93
 - e. Pollutant: Ethyl Acetate
TLV (mg/m3): 1,441.31
Maximum Hourly Emission Rate (lbs/hr): 5.46
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m3): 81.62 ug/m3
MAGLC (ug/m3): 34,316.88
2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic Policy" is satisfied. Consequently, prior to making a change that could impact such parameters, the permittee shall conduct an evaluation to determine

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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 applying the "Air Toxic Policy" include the following:

- a. changes in the composition of the materials used (inks, coatings, adhesives, 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.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where computer modeling is performed, a copy of the resulting computer model

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runs that show the results of the application of the "Air Toxic Policy" for the change.

IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

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Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>	Synthetic Minor to avoid Nonattainment NSR
K207 - Arsoma Press 681, continuous narrow web, less than 18 inches, printing operation utilizing flexographic and/or rotary screen transfer technology w/ 6 print stations (AKA: Press # 341 and formerly 13.18.00.1435 EU K003)	OAC rule 3745-31-05(A)(3)	
	OAC rule 3745-21-09(Y)(2)(b)	
	OAC rule 3745-31-05(C)	

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Applicable Emissions
Limitations/Control
Measures

Volatile organic compound (VOC) emissions for this emissions unit shall not exceed 22.13 lbs VOC/hour and 18.04 tpy* from a combination of inks, coatings, adhesives, and clean-up material.

* as a 12-month rolling summation

See A.I.2.a.

The requirements of this rule also include compliance with the requirements of OAC rule(s) 3745-21-09(Y)(2)(b) and 3745-31-05(c).

The total maximum coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility shall be less than or equal to one hundred forty-eight tons per year.

Volatile organic compound (VOC)

emissions from emissions units K201 - K208 shall not exceed 97.0 tons per rolling 12-month period.

See A.I.2.a and A.II.1.

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2. Additional Terms and Conditions

2.a The hourly and annual VOC emission limitations are based on the emissions unit's potential to emit*. As such, no specific emission unit emissions monitoring and/or recordkeeping and reporting requirements are necessary in order to demonstrate compliance with these emissions limits.

* The potential to emit calculations, developed from a joint effort between the facility and the Cleveland Division of Air Quality (Cleveland DAQ), reflect the presumed inherent physical limitations through a press allocation of the material usage restriction (148 tons) as found in OAC Rule 3745-21-09(Y)(2)(b).

2.b The new emissions units specified in this permit are K201, K202, K203, K204, K205, K206, K207, and K208.

II. Operational Restrictions

1.

The maximum annual volatile organic material usage for all emissions units referenced in this permit (emissions units K201 - K208) shall not exceed 97.0 tons, based upon a rolling, 12-month summation of the volatile organic material usage figures.

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

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Volatile Organic Material Usage (97.0 Tons)</u>
1	32.3
1-2	40.4
1-3	48.5
1-4	56.6
1-5	64.7
1-6	72.8
1-7	80.9
1-8	89.0

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1-9	97.0
1-10	97.0
1-11	97.0
1-12	97.0

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual volatile organic material usage limitation shall be based upon a rolling, 97.0 tons summation of the volatile organic material usage figures.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility and the emissions units specified in Section A.I.2.b:
 - a. the name and identification number of each ink, coating, additive, adhesive, and cleanup material employed;
 - b. the weight, in pounds or tons per month, of each ink, coating, additive, adhesive, and cleanup material employed as applied;
 - c. the VOC content of each ink, coating, additive, adhesive, and cleanup material employed, as applied, in percent by weight;
 - d. the total volatile organic material usage and VOC emissions from all ink, additive, adhesive, and cleanup materials employed calculated by summing the records of [(1.b) x (1.c)] for each ink, coating, additive, adhesive, and cleanup material, and subtracting any recovered material* in pounds or tons per month;
 - e. the rolling, 12-month summation of volatile organic material usage and VOC emissions from all ink, coating, additive, adhesive, and cleanup material employed, in pounds or tons;
 - f. the rolling, 12-month summation of ink, coating, additive, adhesive, and cleanup material employed, in pounds or tons.

* if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports; records of the total amount (gallons or pounds) of the cleanup/purge material collected and added to the recovery tank/drum (for recycle, recovery, and/or disposal at an outside facility) shall be maintained as required in Section A.III.3.
2. The permittee shall collect and record the following information for this emission unit each month:

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- a. the actual monthly press operation hours, in hours per month; and
- b. the rolling, 12-month summation of the operational press hours.

The permittee shall use this data to verify, upon request by the Cleveland DAQ, that the annual press allocation of material usage and emissions is valid.

3. If a credit for recovered materials is used to demonstrate compliance with all of the flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility and the emissions units specified in Section A.I.2.b and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup/purge materials and the recovery drum, or tank, serving this emissions unit:
 - a. the date the materials from the recovery drum or tank were shipped off site;
 - b. the amount of cleanup/purge material, in gallons or pounds, from the recovery drum or tank shipped off site;
 - c. the average density of the cleanup/purge material, in pounds per gallon, from the recovery drum or tank (if the amount is recorded in gallons);
 - d. the average VOC content for the recovered cleanup/purge material, in percent by weight; and
 - e. the average VOC emissions from the recovered cleanup/purge materials [(3.b.) x (3.d.)], in pounds. Note the average VOC emissions, in pounds, from the recovered cleanup/purge material is calculated as [(3.b.) x (3.c.) x (3.d.)] if the material amount is recorded in gallons.

IV. Reporting Requirements

1. The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) in writing of any monthly record showing that the rolling, 12-month summation of coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility exceeded one hundred forty-eight tons. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified.

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2. The permittee shall submit deviation (excursion) reports which include the following information for the emissions units specified in Section A.I.2.b:
 - a. an identification of each month during which the rolling, 12-month volatile organic material usage and VOC emissions exceed 97.0 tons/yr based on a rolling, 12-month summation;

The deviation (excursion) report shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

V. Testing Requirements

1. Compliance with the emission limitation(s) and operational restriction specified in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation:

22.13 lbs VOC/hour from a combination of ink, coating, additive, adhesive, and cleanup material.

Applicable Compliance Method:

This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Press Allocation = (Annual Press Hours, based on CY-2003 data) / (Total Press Hours for K201 -K208, based on CY-2003 data)

Annual VOC Emissions By Press = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data)

Short Term VOC Emissions (average lb/hr) = (Annual VOC Emissions By Press) / (Annual Mean Press Hours)

PTI Limit Annual VOC Emissions By Press w/ SF # 1 = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation, based on CY-2003 data) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data) * (SF #1)

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PTI Limit Short Term VOC Emissions w/ SF # 2 = [(CY 2003 VOC Emissions by Press) / (CY2003 Mean Press Hours)] * (SF # 2)

Safety Factor # 1 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) = 143 %; Therefore, SF # 1 = 1.43 was applied to the annual limit to determine worst case emissions.

Safety Factor # 2 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press AND the error associated with the VOC content of the coatings applied on a specific press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) + (141 %, based on possible range of VOC content per individual coating) = 284 %; Therefore, SF # 2 = 2.84 was applied to the short term limit to determine worst case emissions.

b. Emission Limitation:

18.04 tons VOC/year for K207 from a combination of inks, coatings and adhesives, as a 12-month rolling summation.

Applicable Compliance Method:

This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Press Allocation = (Annual Press Hours, based on CY-2003 data) / (Total Press Hours for K201 -K208, based on CY-2003 data)

Annual VOC Emissions By Press = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation) * (Average VOC Content of all Materials

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from the emissions units specified in Section A.I.2.b, based on CY-2003 data)

PTI Limit Annual VOC Emissions By Press w/ SF # 1 = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation, based on CY-2003 data) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data) * (SF #1)

Safety Factor # 1 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) = 143 %; Therefore, SF # 1 = 1.43 was applied to the annual limit to determine worst case emissions.

Safety Factor # 2 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press AND the error associated with the VOC content of the coatings applied on a specific press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) + (141 %, based on possible range of VOC content per individual coating) = 284 %; Therefore, SF # 2 = 2.84 was applied to the short term limit to determine worst case emissions.

- c. Emission Limitation:
 97.0 tons (for K201 -K208), VOC per year from a combination of inks, coatings, additives, adhesives, and cleanup materials, as a 12-month rolling summation.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping specified in Section A.III.1.

- d. Operational Limitation:
 The total maximum coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility shall be less than or equal to one hundred forty-eight tons per year.

Applicable Compliance Method:

Compliance shall be based upon the record keeping requirements specified in Section A.III.1.

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VI. Miscellaneous Requirements

1. The following terms and conditions are federally enforceable: I, II, III, IV, and V.

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

B. State Only Enforceable Section

- I. 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>	<u>Applicable Emissions Limitations/Control Measures</u>
K207 - Arsoma Press 681, continuous narrow web, less than 18 inches, printing operation utilizing flexographic and/or rotary screen transfer technology w/ 6 print stations (AKA: Press # 341)	None.	None.

2. Additional Terms and Conditions

None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

- 1. The permit to install for this emissions unit 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

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Maximum Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant:

- a. Pollutant: Ethanol
TLV (mg/m³): 1,884.25
Maximum Hourly Emission Rate (lbs/hr): 22.13
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 44,863.18
 - b. Pollutant: N-Propyl Alcohol
TLV (mg/m³): 491.53
Maximum Hourly Emission Rate (lbs/hr): 22.13
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 11,703.18
 - c. Pollutant: Isopropyl Alcohol
TLV (mg/m³): 983.07
Maximum Hourly Emission Rate (lbs/hr): 22.13
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 23,406.37
 - d. Pollutant: n-Propyl Acetate
TLV (mg/m³): 835.42
Maximum Hourly Emission Rate (lbs/hr): 22.13
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 19,890.93
 - e. Pollutant: Ethyl Acetate
TLV (mg/m³): 1,441.31
Maximum Hourly Emission Rate (lbs/hr): 6.42
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 81.62 ug/m³
MAGLC (ug/m³): 34,316.88
2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying the "Air Toxic

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Policy" include the following:

- a. changes in the composition of the materials used (inks, coatings, adhesives, 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.

3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where 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.

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IV. Reporting Requirements

None.

V. Testing Requirements

None.

VI. Miscellaneous Requirements

None.

Part III - SPECIAL TERMS AND CONDITIONS FOR SPECIFIC EMISSIONS UNIT(S)

A. State and Federally Enforceable Section

I. 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>	
K208 - Arsoma Press #674, continuous narrow web, less than 18 inches, printing operation utilizing flexographic and/or rotary screen transfer technology w/ 6 print stations	OAC rule 3745-31-05(A)(3)	OAC rule 3745-21-09(Y)(2)(b)
		OAC rule 3745-31-05(C) Synthetic Minor to avoid

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Nonattainment NSR

Applicable Emissions
Limitations/Control Measures

Volatile organic compound (VOC) emissions for this emissions unit shall not exceed 18.50 lbs VOC/hour and 15.08 tpy* from a combination of inks, coatings, adhesives, and clean-up material.

* as a 12-month rolling summation

See A.I.2.a.

The requirements of this rule also include compliance with the requirements of OAC rule(s) 3745-21-09(Y)(2)(b) and 3745-31-05(c).

The total maximum coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility shall be less than or equal to one hundred forty-eight tons per year.

Volatile organic compound (VOC) emissions from emissions units K201 - K208 shall not exceed 97.0 tons per rolling 12-month period.

See A.I.2.a and A.II.1.

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2. Additional Terms and Conditions

2.a The hourly and annual VOC emission limitations are based on the emissions unit's potential to emit*. As such, no specific emission unit emissions monitoring and/or recordkeeping and reporting requirements are necessary in order to demonstrate compliance with these emissions limits.

* The potential to emit calculations, developed from a joint effort between the facility and the Cleveland Division of Air Quality (Cleveland DAQ), reflect the presumed inherent physical limitations through a press allocation of the material usage restriction (148 tons) as found in OAC Rule 3745-21-09(Y)(2)(b).

2.b The new emissions units specified in this permit are K201, K202, K203, K204, K205, K206, K207, and K208.

II. Operational Restrictions

1.

The maximum annual volatile organic material usage for all emissions units referenced in this permit (emissions units K201 - K208) shall not exceed 97.0 tons, based upon a rolling, 12-month summation of the volatile organic material usage figures.

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

<u>Month(s)</u>	<u>Maximum Allowable Cumulative Volatile Organic Material Usage (97.0 Tons)</u>
1	32.3
1-2	40.4
1-3	48.5
1-4	56.6
1-5	64.7
1-6	72.8
1-7	80.9
1-8	89.0

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1-9	97.0
1-10	97.0
1-11	97.0
1-12	97.0

After the first 12 calendar months of operation or the first 12 calendar months following the issuance of this permit, compliance with the annual volatile organic material usage limitation shall be based upon a rolling, 97.0 tons summation of the volatile organic material usage figures.

III. Monitoring and/or Recordkeeping Requirements

1. The permittee shall collect and record the following information each month for all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility and the emissions units specified in Section A.1.2.b:
 - a. the name and identification number of each ink, coating, additive, adhesive, and cleanup material employed;
 - b. the weight, in pounds or tons per month, of each ink, coating, additive, adhesive, and cleanup material employed as applied;
 - c. the VOC content of each ink, coating, additive, adhesive, and cleanup material employed, as applied, in percent by weight;
 - d. the total volatile organic material usage and VOC emissions from all ink, additive, adhesive, and cleanup materials employed calculated by summing the records of [(1.b) x (1.c)] for each ink, coating, additive, adhesive, and cleanup material, and subtracting any recovered material* in pounds or tons per month;
 - e. the rolling, 12-month summation of volatile organic material usage and VOC emissions from all ink, coating, additive, adhesive, and cleanup material employed, in pounds or tons;
 - f. the rolling, 12-month summation of ink, coating, additive, adhesive, and cleanup material employed, in pounds or tons.
- * if a credit for recovered cleanup/purge materials is to be used to demonstrate compliance and/or used in calculations for emission reports; records of the total amount (gallons or pounds) of the cleanup/purge material collected and added

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to the recovery tank/drum (for recycle, recovery, and/or disposal at an outside facility) shall be maintained as required in Section A.III.3.

2. The permittee shall collect and record the following information for this emission unit each month:
 - a. the actual monthly press operation hours, in hours per month; and
 - b. the rolling, 12-month summation of the operational press hours.

The permittee shall use this data to verify, upon request by the Cleveland DAQ, that the annual press allocation of material usage and emissions is valid.

3. If a credit for recovered materials is used to demonstrate compliance with all of the flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility and the emissions units specified in Section A.I.2.b and/or used in calculations for emission reports, the permittee shall maintain the following records for the recovered cleanup/purge materials and the recovery drum, or tank, serving this emissions unit:
 - a. the date the materials from the recovery drum or tank were shipped off site;
 - b. the amount of cleanup/purge material, in gallons or pounds, from the recovery drum or tank shipped off site;
 - c. the average density of the cleanup/purge material, in pounds per gallon, from the recovery drum or tank (if the amount is recorded in gallons);
 - d. the average VOC content for the recovered cleanup/purge material, in percent by weight; and
 - e. the average VOC emissions from the recovered cleanup/purge materials [(3.b.) x (3.d.)], in pounds. Note the average VOC emissions, in pounds, from the recovered cleanup/purge material is calculated as [(3.b.) x (3.c.) x (3.d.)] if the material amount is recorded in gallons.

IV. Reporting Requirements

1. The permittee shall notify the Cleveland Division of Air Quality (Cleveland DAQ) in writing of any monthly record showing that the rolling, 12-month summation of coating and ink usage in all flexographic, packaging rotogravure, and publication rotogravure printing lines located at this facility exceeded one hundred forty-eight tons. The notification shall include a copy of such record and shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified.

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2. The permittee shall submit deviation (excursion) reports which include the following information for the emissions units specified in Section A.I.2.b:
 - a. an identification of each month during which the rolling, 12-month volatile organic material usage and VOC emissions exceed 97.0 tons/yr based on a rolling, 12-month summation;

The deviation (excursion) report shall be sent to the Cleveland DAQ within 30 days following the end of the calendar month during which they were identified and shall include a copy of any such record; an identification of the probable cause for such deviation; and any corrective actions or preventative measures which have been, or will be taken, to correct the situation.

V. Testing Requirements

1. Compliance with the emission limitation(s) and operational restriction specified in Section A.I.1 of these terms and conditions shall be determined in accordance with the following method(s):
 - a. Emission Limitation:

18.50 lbs VOC/hour from a combination of ink, coating, additive, adhesive, and cleanup material.

Applicable Compliance Method:

This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Press Allocation = (Annual Press Hours, based on CY-2003 data) / (Total Press Hours for K201 -K208, based on CY-2003 data)

Annual VOC Emissions By Press = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data)

Short Term VOC Emissions (average lb/hr) = (Annual VOC Emissions By Press) / (Annual Mean Press Hours)

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PTI Limit Annual VOC Emissions By Press w/ SF # 1 = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation, based on CY-2003 data) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data) * (SF #1)

PTI Limit Short Term VOC Emissions w/ SF # 2 = [(CY 2003 VOC Emissions by Press) / (CY2003 Mean Press Hours)] * (SF # 2)

Safety Factor # 1 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) = 143 %; Therefore, SF # 1 = 1.43 was applied to the annual limit to determine worst case emissions.

Safety Factor # 2 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press AND the error associated with the VOC content of the coatings applied on a specific press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) + (141%, based on possible range of VOC content per individual coating) = 284 %; Therefore, SF # 2 = 2.84 was applied to the short term limit to determine worst case emissions.

b. Emission Limitation:

15.08 tons VOC/year for K208 from a combination of inks, coatings and adhesives, as a 12-month rolling summation.

Applicable Compliance Method:

This emission limitation is based upon the unit's potential to emit. The potential to emit calculations, as shown in the following equations, were derived using company-specified process data.

Press Allocation = (Annual Press Hours, based on CY-2003 data) / (Total Press Hours for K201 -K208, based on CY-2003 data)

Annual VOC Emissions By Press = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation) * (Average VOC Content of all

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Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data)

PTI Limit Annual VOC Emissions By Press w/ SF # 1 = (Emissions units specified in Section A.I.2.b Material Restriction) * (Press Allocation, based on CY-2003 data) * (Average VOC Content of all Materials from the emissions units specified in Section A.I.2.b, based on CY-2003 data) * (SF #1)

Safety Factor # 1 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) = 143%; Therefore, SF # 1 = 1.43 was applied to the annual limit to determine worst case emissions.

Safety Factor # 2 considers the error associated with the presumed physical limitations in regards to the allocation of the emissions units specified in Section A.I.2.b ink usage by individual press AND the error associated with the VOC content of the coatings applied on a specific press. Propagation of error associated with the physical limitations determined from a historical review of the press allocation = (12%, based on historical fluctuation in operational hours) + (101%, based on the # of possible print stations used during operation) + (30%, based on variation in product coverage over all product lines) + (141 %, based on possible range of VOC content per individual coating) = 284 %; Therefore, SF # 2 = 2.84 was applied to the short term limit to determine worst case emissions.

c. Emission Limitation:

97.0 tons (for K201 -K208), VOC per year from a combination of inks, coatings, additives, adhesives, and cleanup materials, as a 12-month rolling summation.

Applicable Compliance Method:

Compliance shall be determined based upon the record keeping specified in Section A.III.1.

d. Operational Limitation:

The total maximum coating and ink usage in all flexographic, packaging

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rotogravure, and publication rotogravure printing lines located at this facility shall be less than or equal to one hundred forty-eight tons per year.

Applicable Compliance Method:
Compliance shall be based upon the record keeping requirements specified in Section A.III.1.

VI. Miscellaneous Requirements

1. The following terms and conditions are federally enforceable: I, II, III, IV, and V.

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B. State Only Enforceable Section

- I. 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>	<u>Applicable Emissions Limitations/Control Measures</u>
K208 - Arsona Press #674, continuous narrow web, less than 18 inches, printing operation utilizing flexographic and/or rotary screen transfer technology w/ 6 print stations	None.	None.

2. Additional Terms and Conditions

None.

II. Operational Restrictions

None.

III. Monitoring and/or Recordkeeping Requirements

- 1. The permit to install for this emissions unit 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 Acceptable Ground-Level Concentration (MAGLC). The following summarizes the results of the modeling for the "worst case" pollutant:

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- a. Pollutant: Ethanol
TLV (mg/m³): 1,884.25
Maximum Hourly Emission Rate (lbs/hr): 18.50
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 44,863.18
 - b. Pollutant: N-Propyl Alcohol
TLV (mg/m³): 491.53
Maximum Hourly Emission Rate (lbs/hr): 18.50
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 11,703.18
 - c. Pollutant: Isopropyl Alcohol
TLV (mg/m³): 983.07
Maximum Hourly Emission Rate (lbs/hr): 18.50
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 23,406.37
 - d. Pollutant: n-Propyl Acetate
TLV (mg/m³): 835.42
Maximum Hourly Emission Rate (lbs/hr): 18.50
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 281.2 ug/m³
MAGLC (ug/m³): 19,890.93
 - e. Pollutant: Ethyl Acetate
TLV (mg/m³): 1,441.31
Maximum Hourly Emission Rate (lbs/hr): 5.37
Maximum Hourly Emission Rate (lbs/hr) for K201-K208: 175.23
Predicted 1-Hour Maximum Ground-Level Concentration (ug/m³): 81.62 ug/m³
MAGLC (ug/m³): 34,316.88
2. Physical changes to or changes in the method of operation of the emissions unit after its installation or modification could affect the parameters used to determine whether or not the "Air Toxic 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 applying the "Air Toxic Policy" include the following:
- a. changes in the composition of the materials used (inks, coatings, adhesives, or

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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.

- 3. The permittee shall collect, record, and retain the following information when it conducts evaluations to determine that the changed emissions unit will still 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. where 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.

IV. Reporting Requirements

None.

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Emissions Unit ID: K208

V. Testing Requirements
None.

VI. Miscellaneous Requirements
None.